Enclisis at the syntax-PF interface

This paper discusses the proclisis-enclisis alternation of object clitics in finiteness sensitive and Tobler-Mussafia languages. I argue that proclisis/enclisis can be derived via the interaction of syntactic and PF operations, at least in a number of environments, although purely syntactic or PF derivations are also possible, although rare. I present an outline of how certain proclitic and enclitic structures are derived, using a grammatical model in which syntax feeds PF, and I try to show how much of the alternation is syntactic and how much PF. The implications for head movement are also discussed.

Marios Mavrogiorgos

University of Ulster

(m.mavrogiorgos@ulster.ac.uk)

1. The proclisis-enclisis alternation

1.1 Introduction

Cliticization and the proclisis-enclisis alternation of adverbal object clitics in Indo-European languages is a highly researched and debated issue. Most accounts that have been proposed for different types of clitic languages tend to attribute the alternation primarily to syntax or to PF. They typically postulate the same derivation for enclisis/proclisis across structures or across languages, which appears to be quite a strong claim. In this paper I will propose that an approach that combines syntax and PF is preferable to a purely syntactic/PF account. However, I will argue that more than one PF or syntactic factors may be involved, that syntax may restrict the application of an independent PF operation, and that purely syntactic and PF derivations are also a possibility in certain few contexts. According to this analysis, both proclisis and enclisis can be the result of different operations/requirements, even if these structures appear identical on the surface across structures and across languages. The implications for head movement will also be discussed.

1.2 Proclisis and enclisis in finiteness sensitive and Tobler-Mussafia languages

1.2.1. Overview of the data

Adverbal object clitic pronouns (henceforth, clitics) may precede or follow their verbal host in a number of languages, a phenomenon known as the 'proclisis-enclisis alternation'. The following example from Modern Greek illustrates the alternation (= shows directionality of phonogical cliticization in this and following examples).

(1) a. **Ton**= idha. [proclisis] [M. Greek]

Him.cl saw.1sg

'I saw him.'

b. Dhes = **ton**! [enclisis]

See.2sg.imp him.cl

'Look at him!'

In M. Greek (as in other clitic languages), the verb is both the morpho-syntactic and the phonological host of the clitic. (2) shows that this is not the only possibility found (see Klavans 1985):

(2) a. …ke póte =**to** ethkiavasen? [Cypriot Greek]

and when it.cl read.3sg

'And when did s/he read it?'

b. Ne= **go** viždam. [Bulgarian]

not him see.1sg

'I do not see him.'

Here, both clitics are proclitics, in that they linearly precede the verbal host, but they are phonologically attached to a head preceding them.[1]

In this paper, the notions of proclisis and enclisis refer specifically to the linear position of clitics in relation to their verbal host, with no implications regarding phonological directionality. Where directionality is relevant to the discussion, the necessary information will be provided as part of the linguistic data. The discussion will be restricted to finiteness sensitive and Tobler-Mussafia languages, only. Nevertheless, my view is that the same approach as the one proposed in this paper could be extended also to Second Position languages (see Halpern 1995, Halpern & Zwicky 1996, Franks 1998), independently of whether they have inherently enclitic clitics (e.g. Serbo-Croatian) or not (e.g. Slovene).[2]

Two sets of languages can be distinguished descriptively, depending on the factors 'regulating' the proclisis-enclisis alternation: (a) finiteness sensitive languages, and (b) Tobler-Mussafia languages.

[1] The same phenomenon can be found in Second Position languages, like Serbo-Croatian and Ancient Grek (see Halpern & Zwicky 1996).

[2] I would like to thank an anonymous reviewer for pointing out to me that there are Second Position languages (like Slovene, for example), which may allow both enclitics and proclitics.

Finiteness sensitive languages include, among others, Standard Modern Greek, Standard French, Standard Italian, Catalan, Peninsular Spanish, Romanian, Macedonian, and Albanian. In this language group, the proclisis-enclisis alternation is typically linked to morpho-syntactic properties of the verbal host (tense, mood and/or subject agreement). In particular, enclisis is found when the verbal host lacks tense, mood and/or subject agreement specifications/marking, while the opposite holds for proclisis. This is illustrated below with a subjunctive (marked) and an infinitival (unmarked) verbal host respectively:[3]

(3) Vreau să **mă** asculte. (*asculte **mă**) [Romanian]
Want.1sg subj me.cl hears.3sg.subj
'I want that h/she listens to me.'

(4) Voglio telefonar**gli**. (* **gli** telefonare) [Standard Italian]
Want.1sg call.inf.-him.cl
'I want to call him.'

Tobler-Mussafia languages do not allow clitics at the very beginning of the utterance (like second position languages), but clitics are grammatical in any other clausal position as long as they are adjacent to the verb (like finiteness sensitive languages).[4] As a result, clitics in these languages may be preceded by one or more constituents (XPs and/or Xs). This language group is

[3] There seem to be a few cases where this descriptive generalization does not hold (e.g. French infinitives), however they can be accounted for independently (see e.g. Mavrogiorgos 2010).
[4] Some Tobler-Mussafia languages (e.g. European Portuguese or Old Spanish) allow clitics to be separated from the verbal host by certain constituents (e.g. adverbs, negation, subjects or other preverbal DPs), a phenomenon known as *interpolation*. Even in these cases, clitics must be as close as possible to the verb (although languages differ in this respect).

not entirely homogeneous, in that different Tobler-Mussafia languages may display properties that make them more akin to second position or to finiteness sensitive languages, although all of them share the prohibition against 'first position' clitics, at least in most, if not all, contexts. Examples of Tobler- Mussafia languages are Old Romance, Medieval Greek, Modern Cypriot Greek, Western Iberian languages, and Bulgarian. An example of a Tobler-Mussafia language and of the proclisis-enclisis alternation is given below from Bulgarian:

(5) a. * **Mi** **go** *dade* Vera včera. [Bulgarian]
me.dat it.acc gave.3sg Vera yesterday
b. Vera **mi go** *dade* včera.
c. Včera Vera **mi go** *dade*.
d. *Dade* **mi go**
e. * Včera **mi go** Vera *dade*.
'(Vera) gave it to me (yesterday).'

(5a-b) show the ban against first position clitics, whereas (5c-d) illustrate the fact that one or more XPs, or a head X, may precede the clitic cluster. Finally, (5e) illustrates the adjacency requirement in Bulgarian.

In these languages, proclisis/enclisis correlates mainly with properties of the left periphery of the clause, such as focus, wh, neg and topic (see examples in (6-10)), and in particular with the presence/absence of an XP/X immediately c-commanding the cliticization site (normally these constituents are CP related) (for a more detailed exposition of the relevant data, see Dimitrova-Vulchanova 1995; Uriagereka 1995a,b; Halpern & Zwicky 1996; Terzi 1999b; Raposo &

Uriagereka 2005, among many others). Typically, proclisis obtains if some head or XP is overtly realized in the CP domain. Otherwise, enclisis obtains, where the verb serves as the phonological clitic host. In some languages only certain heads or XPs can trigger proclisis (e.g. Western Iberian and Cypriot Greek), while in other languages any head or XP within the CP can have this property (e.g. Bulgarian and early stages of Old French). Still both language types can accept an [X Y clitic] construction (where X and Y can be phrases, heads or a combination thereof).

(6) a. I Maria emilisen **tu**. (***tu** emilisen) [Cypriot Greek]

The Mary talked.3sg him.dat.cl

'Mary talked to him.'

b. Ivan **go** vižda. (***go** vižda) [Bulgarian]

Ivan him.cl sees

'Ivan sees him.'

c. Pjos **to** ethkjavasen? (* ethkjavasen **to**) [Cypriot Greek]

who it.cl read.3sg

'Who read it?'

d. Quem **a** viu ontem? (* viu-**a**) [European Portuguese]

Who her.cl saw.3sg yesterday

'Who saw her yesterday?' (example from Raposo & Uriagereka 2005)

In (6) we see that whereas in Cypriot Greek a c-commanding/preverbal subject topic triggers enclisis, in Bulgarian the opposite happens. Moreover, a c-commanding wh-word triggers proclisis in both Cypriot Greek and European Portuguese. This illustrates the fact that different types of c-commanding XPs may give rise to either proclisis or enclisis depending on the language. (7) illustrates cases of proclisis with a preverbal X and XP (7a; 7d), two preverbal Xs (7b; 7e), and three preverbal XPs (7c; 7f).

(7) a. …če Ivan **go** vižda. (*vižda **go**) [Bulgarian]

that Ivan him.cl sees

'That Ivan sees him.'

b. … če ne **go** vižda. (*vižda **go**) [Bulgarian]

that not him.cl sees

'That he does not see him.'

c. Na Ivan knigata az **mu** **ja** dadox. (* dadox **mu ja**) [Bulgarian]

To Ivan book-the I him.cl it.cl gave

'To Ivan, the book, I gave it to him.'

d. …que ele **a** vise. (*vise-**a**) [European Portuguese]

That he her.cl saw.subj

'that he saw her.'

e. …que ñao **a** viu. (*viu-**a**) [European Portuguese]

That not her.cl saw.3sg

'that he did not see her.'

f. Esses libros, só o Pedro **os** dei a Maria. (*dei-**os**) [European Portuguese]

These books only the Peter them.cl gives to Mary

'The books only Peter gives them to Mary.'

In some Tobler-Mussafia languages the presence of multiple XPs may trigger enclisis, as the following example shows (in this case two topic phrases precede the clitic-verb cluster):

(8) Tu Petru, ta vivlia edhokan **tu** **ta**. (***tu ta** edhokan) [Cypriot Greek]

The Peter.dat the books.acc gave,3pl him.cl them.cl

'To Peter, the books, they gave them to him.'

This is expected, if preverbal topics in Cypriot Greek give rise to enclisis. However, in the same example, if a head precedes the clitic-verb cluster, proclisis is obligatory. This is illustrated in (9), where the subjunctive head *na* precedes the cluster (see Terzi 1999b):[5]

(9) Tu Petru, ta vivlia na **tu** **ta** dhokis. (*dhokis **tu ta**) [Cypriot Greek]

The Peter.dat, the books.acc SUBJ him.cl them.cl give.2sg

[5] Note that the presence of a c-commanding head does not always trigger proclisis. For example, the complementizer *oti* ('that') may trigger both proclisis and enclisis, with distinct phonological phrasing for each case (see Revithiadou 2006).

'To Peter, the books, you should give them to him.'

If two or more *distinct* constituents c-command the cluster, typically the one that is closest (in terms of c-command) to the cluster will decide whether proclisis or enclisis obtains. For example, in the following two examples from Cypriot Greek a wh-phrase triggers proclisis because it is closer to the cluster than the c-commanding topic phrase (10a), while a topic phrase triggers enclisis because it is closer to the cluster than the c-commanding complementizer (10b)[6]:

(10) a. Ta vivlia pjos **ta** edhoken? (* edhoken **ta**) [Cypriot Greek]

The books who them.cl gave.3sg

'The books, who gave them?'

b. …an i Maria edhoken **tu** **ta**. (***tu ta** edhoken) [Cypriot Greek]

whether the Mary gave.3sg him.cl them.cl

'…whether Mary gave them to him.'

On the other hand, in languages like Bulgarian or early stages of Old French, where any constituent may trigger proclisis, either a single (preceding) head or XP are sufficient to block enclisis. This is shown below with data from Bulgarian (see e.g. Dimitrova-Vulchanova 1995; Dimitrova-Vulchanova & Hellan 1999):

(11) a. Ne **go** viždam. (* viždam **go**) [Bulgarian]

Neg him.cl saw.1sg

[6] This would not apply to European Portuguese, where the presence of a complentizer always triggers proclisis (see example (7d)).

b. Az **go** viždam. (* viždam **go**)

I him.cl saw.1sg

c. Viždam **go**. (***go** viždam)

Saw.1sg him.cl

d. * Viždam ne **go**.

e. * (Az) viždam (az) **go**.

'I saw/did not see him.'

If no CP-related XP or X is available, enclisis obtains in all Tobler-Mussafia languages, where typically the highest available non-affixal verb hosts the clitic:

(12) a. Veit **me** li reis. [Old French]

Sees me the king

'The king sees me.'

b. Četjal **sum** **ja** **bil** knigata. [Bulgarian]

Read have.1sg it.cl had book-the

'I have read it, the book.'

Finally, (13-14) illustrate the fact that the CP-related X or XP must c-command the clitic in order for proclisis to obtain:

(13) a. A muito mestre **o** *enviaram*!' [European Portuguese]

To many teacher him.cl they-sent

'Many teachers have they sent him to!'

b. *Enviaram*-**no** a muito mestre.

(14) a. Que **me** *valha* Deus! [Galician]

That me.cl may-help God

b. *Valha*-**me** Deus!

'May God help me!'

(both examples taken from Raposo & Uriagereka 2005)

1.2.2 Past analyses

Numerous analyses have been proposed that try to capture the properties of the proclisis-enclisis alternation in finiteness sensitive and Tobler-Mussafia languages.

PF-only analyses assume that the prohibition on clause initial clitics (and hence the presence of enclisis) in Tobler-Mussafia languages only stems from the inherent enclitic property of the clitics (see e.g. Barbosa 1996). When syntax cannot provide a prosodic host, a PF operation takes place that corrects/filters out the ungrammatical structure (this takes different forms, e.g. as PF-inversion (see Halpern 1995), or PF-merger (see Franks 2008), or in the form of spell-out of a lower copy (see Boskovic 2001, Revithiadou 2006, 2008, Samuels 2009 although she talks about

second position clitics in languages which do not necessarily involve inherent enclitics (e.g. Slovenian))). Enclisis, then, at least in these languages, is a PF-product based on a syntactically derived proclitic input. It is much less clear how enclisis in finiteness sensitive languages is derived, but Boskovic (2004) for example has proposed that it could also be attributed to host-related PF reasons (and see Raposo & Uriagereka 2005 for a similar intuition).

Syntax-only analyses do not take into consideration the enclitic or proclitic nature of clitics in Tobler-Mussafia languages. Rather, they argue that enclisis is derived by syntactic movement of the (main/auxiliary) verb across the cliticization site to a higher head (see e.g. Kayne 1991, Martins 1994, Rivero 1994, Benincà 1995, Dimitrova-Vulchanova 1995, Rivero & Terzi 1995, Uriagereka 1995a,b, Tomic 1996, Terzi 1999a,b, Shlonsky 2004, among others). Enclisis in finiteness sensitive languages is derived in exactly the same way. The generalization seems to be that verb movement to a C-head, across the cliticization site in T, derives enclisis in both language types.

Syntax-PF analyses also argue that enclisis is syntactically derived via syntactic verb movement across the cliticization site, but the motivation for this movement is phonological/prosodic in Tobler-Mussafia languages (see e.g. Cardinaletti & Roberts 1991). These analyses view the syntax-PF interface in a way that is not compatible with current assumptions in the literature (see e.g. Chomsky 2001), and which would not be compatible with the null hypothesis that syntactic and PF operations are interrelated though independent.

The common property that all these approaches share is that enclisis is analyzed as a uniform phenomenon across the two language types and across constructions. In this paper I will argue that such a conclusion faces theoretical problems, and moreover it cannot adequately account for

the data in both language types. My main claim will be that both proclisis and enclisis, in both language types, should be analyzed as the result of the combination of syntactic and PF operations, and that what looks like the same phenomenon might not be derived in the same way in all constructions and all languages. I will follow the basics of the approach proposed by Pancheva (2005) for Bulgarian cliticization, according to which syntactic operations first take place, followed by PF/morphological operations. If syntactic or PF-operations linked to affixal features do not offer a prosodic host for the clitic, further PF/prosodic operations can give rise to a grammatical sentence.

2. V-movement analysis as a purely PF or syntactic account

In this section I will argue that both syntactic and PF operations need to be postulated in order to account for the proclisis-enclisis alternation in finiteness sensitive and Tobler-Mussafia languages. .

2.1 Against a pure PF account

According to some pure PF analyses, clitics in Tobler-Mussafia languages are inherently enclitic, so they will phonologically attach to any preceding constituent that meets their prosodic requirements. If no host is offered by the syntax, PF reorders the CL-V cluster, giving rise to finite enclisis. A different version, proposed by Franks (1998), Boskovic (2004), and Revithiadou (2006), among others, argues that PF filters out ungrammatical sentences by choosing a lower clitic copy for pronunciation in only those cases where a higher copy would violate a prosodic restriction/rule. According to this view, enclisis may be derived by purely

syntactic means, in which case PF spells out the lower clitic copy. For pure PF-analyses, finiteness sensitive enclisis is either syntactically triggered or linked to PF properties of the host (see Boskovic 2004).

There a number of issues that pertain to pure PF analyses more generally, and to those analyses which make use of the copy theory of movement in particular. First of all, a preceding XP or X cannot always support an inherently enclitic, as the following example illustrates:

(15) a. Pjos =**to** *ekamen*? (*ekamen =**to**) [Cypriot Greek]

Who it.cl did.3sg

'Who did it?'

b. O Spiros *ekamen* =**to**. (***to**= ekamen)

The Spiros did.3sg it.cl

'Spiros did it.'

(16) a. Ipen oti *ekamen* =**to** i Maria. (**to**= ekamen)-see footnote 5

Said.3sg that did.3sg it.cl the Mary

'H/she said that Mary did it.'

b. Otan =**to** *ekamen*… (* ekamen =**to**)

when it-cl did-3sg

'When he/she did it…'

In (15) a preceding wh-word triggers proclisis, as opposed to a preceding subject topic. Assuming that clitics require an appropriate prosodic host (see Richards 2004), one could argue that a wh-word can form a prosodic word with the clitic but not with a topic XP (see e.g. Barbosa 1996). However, it is not entirely clear why this should be the case, given that left-dislocated topics may or may not be separated by an intonational break from the rest of the sentence. Moreover, in (16) we see that two tonic complementizers trigger enclisis and proclisis respectively, which is not expected under a prosodic account, without further stipulations.

Second, it is possible to find examples of finite enclisis which involve syntactic V-movement to the front of the clause, as the following example from Bulgarian shows (see Franks 2008):

(17) a. Pročela mu ja beše.

READ me.cl it.cl had.3sg

'She had READ it to him (and not…)'.

b. Pročela beše knigite.

READ had.3sg books-the

'She had read the books.'

(17) illustrates a case of V-moment with a focus effect (long head movement), which takes place independently of the presence of a clause initial clitic. This suggests that enclisis may be the result of an independently motivated syntactic operation in certain languages and contexts, and

that the sentence is grammatical if the prosodic requirement against clause initial clitics is satisfied.

A third problem faced by most (although not all) PF-only accounts is that Tobler-Mussafia clitics, like finiteness sensitive clitics, can be both proclitics and enclitics, as the following examples illustrate (see e.g. Fischer 2002 for Medieval Romance; Pancheva 2005 and Franks 2008 for Bulgarian). This means that the ban on first position clitics in these languages is related to an absolute PF requirement that clitics should not appear at the beginning of some prosodic domain (e.g. utterance), and not necessarily to their inherent enclitic nature.

(18) a. Tharo pos **tá**=*fae* ta pitakja. [Kos, Dodecanese]

Think.1sg that them.cl ate.3sg the little pies

'I think s/he ate them the little pies.'

b. …ke ná=**to** *pulisum* ton, na parum lio kirjas. [Ulaghatsh, Cappadocia)]

and na it.cl sale.1pl were.3sg, na get.1pl some meat

'We would have sold it to get a little meat.'

c. Ne=**mu** kazvaj. [Bulgarian]

Not him.cl tell.imp

'Do not tell him!'

d. Az **săm** už **ti**= **go**= dala. [Bulgarian]

I have maybe you.cl it.cl given

'I have maybe already given it to you.'

e. en=**mu** ethkiavasen. [Cypriot Greek]

not me.cl read.3sg

'She did not read to me.'

f. pos= **to**= thkiavasen [Cypriot Greek]

that it.cl read.3sg

'That he read it.'

Although this argument does not disprove the role of prosody, it narrows it down to such an extent that at least some examples would be attributed to the syntactic component.

A fourth argument against the pure PF nature of the alternation is that in very few Tobler-Mussafia languages (mainly old Romance), clitics may be allowed in clause initial position (see e.g. Fischer 2002, Fontana 1996):

(19) a. **S**'=*est* il donques corrouciez a nos? [Old French]

'Himself is he then vexed with us'

b. oy dia en Grecia : **lo=** traen por… [Old Spanish]

today in Greece it.cl bring.3pl for…

'Today in Greece they bring it as…" (taken from Fontana 1996)

These examples show that Tobler-Mussafia clitics can be proclitics, and that they may sometimes appear at the beginning of the clause, suggesting that these two prosodic requirements are independent, and that the ban against clause initial clitics may not always be PF-related.

A final point should be raised here with regard to PF accounts which recognize the role of syntax in the alternation, but treat finite enclisis as the product of a PF-filtering operation. I think there are two main problems with these accounts: first, they analyze non-finite enclisis as purely syntactic and finite enclisis as purely PF, which is not necessarily true, as I hope to show later on, at least not in all cases. Second, they postulate massive syntactic movement of clitics and verbs, which provide the necessary copies. This would not be a problem if these copies were accounted for independently (via syntactic and/or semantic means). Unless the copy theory of movement is modified or evidence is given for the presence of all these postulated copies (especially those of clitics), it remains a question whether this particular form of PF filtering is appropriate for all cases. For example, the postulation of one clitic copy in T and another one within the VP complement in finite enclisis (under standard assumptions on cliticization- see Kayne 1991) would either predict massive interpolation (if the lower VP clitic copy is used), or V-movement to a C-head for no obvious reason (if the higher T clitic copy is used). Such hypotheses would need to be independently proved.

All in all, it seems that although PF factors may be related to the distinct properties of the proclisis-enclisis alternation in each language type (e.g. the ban on utterance initial clitics as well as the c-command restriction imposed on XPs and Xs, which would suggest that Long Distance Agree is not a sufficient condition for proclisis), these are not sufficient to account for all cases, and in addition they fail to recognize the importance of syntactic factors. For example, as I hope to show later on, a PF-only analysis misses the generalization that the proclisis-enclisis alternation seems to be related to the presence of a phase head with a PF requirement on its edge (at least in a number of cases, but in both Tobler-Mussafia and finiteness sensitive languages), and that this phenomenon is also found in other syntactic contexts, which do not involve

cliticization (see e.g. Collins 2007; Nchare & Terzi to appear). More generally, these approaches view the PF-syntax interface as a static process, whereas it appears to be much more dynamic, as I hope to show in the rest of this paper.

2.2 Against a pure syntactic account

According to pure syntactic analyses, enclisis in both language types is derived via syntactic movement of the highest verb across the cliticization site (typically T) to some higher head (typically CP-related). PF does not seem to play any role whatsoever. The role of syntax is based on the claim that both finite and non-finite enclisis is linked to syntactic features, with syntactic and semantic effects. These features reside in a projection that immediately c-commands the cliticization site, and they include, among others, imperative agreement, gerund agreement, focus, negation, wh-features or interrogative (Q) features. PF analyses argue that it is far from clear whether these features have anything in common, and hence a syntactic approach based on the postulation of such features is not tenable (i.e. it is merely a descriptive artifact). However, my view is that this is a rather weak argument, as it is based on a technicality issue. In fact, within a phase model of derivation, such as the one proposed by Chomsky (2001), all these cases seem to involve a phase head, and phase heads need only contain syntactic and semantic features, along with a PF requirement. Whether a purely syntactic approach works or not should be based on theoretical issues (such as e.g. the postulation of operations/rules and their nature) or on empirical grounds.

An argument in favor of a syntactic approach is the blocking potential of particles/heads with regard to V-movement in both language types. This is a phenomenon that is independent of cliticization, and there are various ways of accounting for it syntactically (e.g. as an intervention

effect, or as complementary distribution between particle and v-related features, among others). An example is given below, where the presence of a preverbal particle is in complementary distribution with the [+ imperative] form of the verb in Modern Greek (see Roussou 2000):

(20) * *na* dhine! vs. *na* dhinis [Modern Greek]

subj give.2sg.[+imp] subj give.2sg.[- imp]

'Give!'

If this blocking effect is syntactic in nature, it seems possible to assume that enclisis is linked to the presence of a syntactic head/feature in a position where the particle would normally be found in the proclitic cases. That could suggest that enclisis can be derived via syntactic head movement across the cliticization site, at least in certain cases (namely those where V-movement can be independently shown to have taken place).

Moreover, a syntactic approach correctly predicts that phonological proclisis is possible in Tobler-Mussafia languages, provided the clause initial PF requirement is satisfied. This could be done either in the syntax or in the PF (e.g. via a filtering approach, according to some PF analyses) depending on the structure involved:

(21) a. …pos= **mas**= ghirevi. [Cypriot Greek]

that us.cl looks.for

'that s/he looks for us.'

b. …oti=**mas** ghirevi. [Cypriot Greek]

that us.cl looks.for

'that s/he looks for us.'

c. Pročela **mu** = **ja** = beše. [Bulgarian]

READ me.cl it.cl had.3sg

'She had READ it to him (and not…)'.

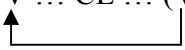
Although the evidence given above and in section 2.1 suggests that syntactic factors do have a place in the proclisis-enclisis alternation in both language types, it remains a fact that PF is also part of this alternation, as the section on PF analyses has shown, and that purely syntactic accounts would fail to capture this. In what follows I will argue that PF may have a more complex role that goes beyond a prosodic requirement, and that syntax could be closely linked to this role. This will have important implications for theories of head movement.

2.3 V-movement across the cliticization site: what is syntax and what is PF?

In this section, I will argue that enclisis in finiteness sensitive languages is not purely syntactic, as it is commonly assumed, but the result of the syntax-PF interface. Enclisis will be linked to the presence of syntactic features in a head c-commanding the cliticization site, and to a PF requirement that these must be realized by a non-affixal vocabulary item. On the other hand, proclisis will be linked to merger of syntactic features and their subsequent realization by the PF component.

The main claim of the syntactic approach is that enclisis is the result of syntactic verb movement to a head c-commanding the cliticization site. Proclisis obtains if the verb does not cross the clitic.

(22) Enclisis: … V … CL … (V)



(23) Proclisis: … CL …V … (V)

There are at least two major issues with regard to this analysis. First, in Tobler-Mussafia languages certain XPs or Xs block movement of the verbal host, and as a result proclisis obtains. It is not clear how a purely syntactic head movement approach would capture the blocking effect of an XP.

Moreover, in finiteness sensitive languages V-movement across the cliticization site is not a sufficient condition for enclisis (assuming that the cliticization site stays constant, in that the clitic targets the same set of features in the clause, wherever these are). This is illustrated below:

(24) a. *(*Se*) Giorgio **l'** *avesse* comunicato al direttore, … . [Standard Italian]

If George it.cl. had communicated to-the director

'If Giorgio had told it (the change) to the director… .'

b. (**Se*) **l'***avesse* Giorgio comunicato al direttore, … (adapted from Rizzi 1982).

(25) **Go** *vide* li? [Macedonian]

Him-acc saw Q

'Did you see him?'

(26) **Me** daste mo ka les medijines enscnoet ? [Marebbe]

me give.scl mo here the medicines tonight

'Will you give me my medicine tonight?' (from Poletto & Zanuttini 2010)

In (24a-b), *se* in C is in complementary distribution with the CL-V cluster. This means that in (24b) the cluster is in C, and assuming that the cliticization site is in T, movement across the cliticization site has given rise to proclisis. In this example, the proclitic positioning correlates with the finiteness of the verbal host, and not with its position in the clause. The same observation can be made for (25), which also involves finite V-movement to C and proclisis (see Tomic 1996). Finally, in (26) the finite interrogative verbal form precedes the CP particle *mo* but proclisis obtains. The following example from Modern Greek shows that verb movement across the cliticization site may give rise to proclisis, independently of the exact clausal positions targeted by verb movement or cliticization.

(27) a. Ta kerdhi tu schedhon/idhi **ta** *triplasiase* o Jianis. [Mod. Greek]

The winnings-acc his.cl almost/already them.cl tripled-3sg the John-nom

'John almost tripled/already tripled his winnings.'

b. Ta kerdhi tu **ta** *triplasiase* schedhon/idhi o Jianis.

c. * Ta kerdhi tu *triplasiase* **ta** schedhon/idhi o Jianis.

d. * Ta kerdhi tu *triplasiase* schedhon/idhi **ta** o Jianis.

e. * Ta kerdhi tu **ta** schedhon/idhi *triplasiase* o Jianis.

Assuming that in this language object clitics target the vP periphery (see Mavrogiorgos 2010), and that the verb may move to distinct positions within the IP domain (see Ledgeway & Lombardi 2005), proclisis again correlates with the finiteness marking on the verb, and not with its position within the clause. Even if we assumed that clitics can target two distinct positions within the IP domain (one higher and one lower than T), it is not clear why the verb must be next to the clitics. It seems more likely that the clitic piggy-backs on the verb, after having incorporated into it at the vP periphery (see Matushansky 2006).

Directly relevant to the above mentioned observation is the fact that non-finite enclisis (in both language types, modulo some rare exceptions) obtains when the verb moves across the cliticization site to some higher head. Given that here again the outcome of verb movement is contingent on finiteness, it appears that finiteness is an independent factor that cannot be reduced to verb movement. An example of non-finite enclisis is given below:

(28) Avendo**lo** Gianni visto… [Standard Italian]

Having-it.cl John seen

'Having John seen it…'

In what follows I will argue that the role of finiteness, although linked to syntactic features, is also PF-related (in that it involves affixal features that must be supported phonologically), and that finite enclisis seems to share similar properties, at least in some contexts.

3. V-movement to a V-related head: the role of PF

3.1 The finiteness factor in finiteness sensitive languages

It has been proposed that in finiteness sensitive languages the role of finiteness in the proclisis-enclisis alternation correlates with the lack of an unvalued person feature (see Mavrogiorgos 2010 for Modern Greek and Romance). The non-finite feature(s) is located in a head immediately c-commanding the cliticization site, it is affixal in nature, and it must be spelled out in situ (via an agreement morpheme on the verbal host, or via the verbal host itself if an overt exponent is not available). According to this analysis, the presence of such a syntactic feature triggers obligatory realization of the verbal host in the head containing the feature (i.e. verb movement), and this is taken to be the PF/morphological reflex of a syntactic Agree relationship.

In Modern Greek, and other languages, true imperatives cannot be negated (see Han 1998), the standard analysis being that negation blocks some form of syntactic relationship between the lower verb and the higher head that contains the relevant verbal features (see e.g. Roussou 2000). Moreover, as we have seen in section 2.2., particles block verb movement, giving rise to proclisis. One way to account for this blocking effect is to argue that particles both check and realize the relevant syntactic features. However, if we look at Bulgarian (see e.g. (29) below) and similar languages, which allow true negated imperatives, we see that long distance Agree between the verbal host and the higher head hosting the imperative features is indeed possible. Assuming that movement is contingent on Agree, this could indicate that the blocking effect in other languages is PF-related, in that it involves a PF requirement that the relevant verbal features are realized in situ. The presence of a negation head would block such morphological realization, and the sentence would be ungrammatical, unless a verbal form with no syntactic features related to this higher position was involved.[7]

[7] See also Boscovic (2004) for the same intuition.

(29) Ne **mu** kazvaj! [Bulgarian]

Not him.cl tell.2sg.imp

'Don't tell him!'

For positive suppletive forms, we must assume that the indicative or subjunctive form can spell out the imperative features (if we assume they are present) as elsewhere forms in a CP or IP position (depending on the language) (see Harris 1995). In negative suppletive imperatives, we could either assume that the negation head satisfies the PF requirement, or that there are no special imperative features merged in this particular case.[8]

The important point to keep in mind here is that enclisis in finiteness sensitive languages appears to be linked to syntactic features which are located in a head c-commanding the cliticization site, and which have a PF-requirement that they should be realized phonologically by the verbal host (or, possibly, by a particle if a verbal form is used that does not realize such features). Later on, we will see that the PF requirement may be satisfied by a verb, a particle/non-affixal head or an XP, depending on the language, i.e. it is a requirement that holds for the edge (i.e. head or specifier, following Chomsky 2001) of a projection right above the cliticization site.

As for proclisis, in finiteness sensitive languages it typically correlates with the clitic moving to a TP-internal position that c-commands the verb. Clitic movement is typically taken to be linked to syntactic features (involving either Agree and/or Move), as it gives rise to syntactic and semantic

[8] Although a spell out requirement could be satisfied by any form in principle, it seems that the form must be syntactically linked to the spelled out position (see finite enclisis below). For the purposes of this paper I will not look into the details of the morphological form of the verb (e.g. whether it contains a conjugational vowel or additional morphemes). What is crucial is that the verb spells out a set of features which include imperative (or imperative related agreement) features. Other constituents (e.g. particles) can also spell out these features, if available.

effects (see e.g. Anagnostopoulou 2003 for Greek, Uriegereka 1995a for Romance, and Daskalaki & Mavrogiorgos to appear for Greek resumptive clitics), whereas V-movement to T could be linked to syntax or PF, depending on theoretical assumptions. The status of head movement in this particular case would not play any role in the outcome, namely proclisis.

A more difficult question concerns those cases where the verb has moved across the cliticization site to some higher head, but proclisis obtains (see e.g. (24-26)). One important aspect of these structures is that the verbal host lies within the CP domain (cf. e.g. interrogatives), and that the verbal form used is no different from the forms used within the TP domain (namely, indicatives and subjunctives). This suggests that syntactic features in some C-head are present (cf. interrogative, modal (counterfactual), etc. interpretation), and that these features are not affixal in nature (i.e. they do not involve a morphological affix that may only get phonological support from the verbal host). This is the opposite situation from what we find with non-finite enclisis, and could be related to the proclisis-enclisis switch we find between non-finite enclisis and finite proclisis within the CP domain (or any domain higher than the cliticization site). This in turn would mean that enclisis (at least in these particular structures in finiteness-sensitive languages) is PF related, even if it is based on a syntactic configuration (namely an Agree relation between two heads within the extended verbal projection).

Based on these observations, I would like to propose that finite proclisis in CP is an instance of true syntactic head movement. In particular, the features on the T head are re-merged in some position within the CP domain. If an independent 'non-agreement like' head is present in the numeration that can check these features, verb movement does not take place. PF simply spells out those syntactic features that are present in the C-head at Spell-Out. Given that only proclisis

is possible in these structures, and that proclisis is related to movement of the verb across the cliticization site for syntactic reasons (and not for PF-related reasons, since the C-head does not contain a verbal affix), one could assume that the clitic and the verbal host in T already form a unit before the verb moves to C, and as a result no reordering is possible. There are different ways of implementing this intuition, but one possibility would be to argue that in enclisis the presence of the higher inflectional head blocks merger between the clitic and T, while in proclisis merger takes place before the verb is syntactically moved to the higher non-inflectional head.[9] Such an analysis would imply that enclisis in these structures is linked to PF/morphology (besides syntax), and that verb movement can be purely syntactic or both syntactic and PF/morphological.

3.2 Non-finite enclisis in Tobler-Mussafia languages

Most Tobler-Mussafia languages have obligatory non-finite enclisis, and in those cases they resemble finite sensitive languages in that enclisis correlates with finiteness and not with the presence/absence of a c-commanding XP or X. This is illustrated in the following example: [10]

[9] The same reasoning would apply to cases of enclitic non-finite structures, when the verb-CL cluster appears inside the CP.

[10] Not all Tobler-Mussafia languages have obligatory non-finite enclisis. For example, Bulgarian, early stages of Old French, and Medieval Greek allow proclisis with imperatives if an XP precedes the clitic-verb cluster:

(i) aghia **tin** ipe! [Medieval Greek]

Holy her.cl call.2sg.imp

'Call her holy!'

Given that in these languages any XP can trigger proclisis, two possibilities arise: either, such structures are independently derived in the syntax, and the PF requirement (namely ban on first position clitics) is met; or this is a PF phenomenon related to the prosodic requirement against first position clitics in these particular languages. My

(30) a. To VIVLIO thkiavase **tu**! [Cypriot Greek]

The book read.2sg.imp him.cl

'Read to him THE BOOK!'

b. min eksevrondas **to** [Medieval Greek]

not knowing it.cl

'Not knowing it…'.

The simplest hypothesis would be to extend the analysis of non-finite enclisis in finiteness sensitive languages (i.e. as a syntactic and phonological phenomenon involving the features of a head c-commanding the cliticization site) to those cases, as well. What would remain to be explained is finite enclisis in Tobler-Mussafia languages. This task will be undertaken in the following section.

3.3 *Finite enclisis in Tobler-Mussafia languages*

In this section I will argue that this analysis can be extended to finite enclisis in Tobler-Mussafia languages, although a number of residual cases will need to be accounted for separately. In particular, it will be argued that finite enclisis, which is not found in finiteness sensitive languages, also involves a F(unctional)- head merged above the cliticization site. The main difference between this head and the one found in non-finite enclisis, is that while the latter contains features that are linked to subject, tense and/or mood agreement (i.e. agreement normally linked to the TP domain and the notion of finiteness), the former contains CP-related

view is that these structures are derived in the syntax, as they normally involve the syntax and semantics of a topic or focus constructions which may be independently found in those languages, but more research is required.

features.[11] On a par with non-finite enclisis, these features are taken to be affixal, triggering reordering of the clitic –verb cluster at PF. This PF requirement, which is distinct from the prosodic ban against first position clitics, will be shown to be satisfied in three distinct ways.

First of all, the existence of such a head in Tobler-Mussafia languages has been proposed by various researchers, who have claimed that it lies above T and contains strong (syntactic) V-features, triggering overt movement under certain conditions (see e.g. Laka 1990, Martins 1994, Uriagereka 1995a,b, Terzi 1999b, Cardinaletti & Roberts 1991, Fischer 2002, Raposo & Uriagereka 2005). This head, and its projection, have been assigned various names (including F, M, Σ, W or CFin), and a number of claims have been made regarding its semantics (see Uriagereka 1995a,b). What remains a fact, though, is that this head is an abstract syntactic category, as it surfaces with such different features as neg, foc, wh, inter, topic, among others. As I have already pointed out in section 2.2, this fact has been presented as an argument against a syntactic approach to finite enclisis by some PF approaches.

If we look at the properties of the F- head, we can see that it behaves in a way that is similar to imperative and other non-finite heads in finiteness sensitive enclitic constructions. For example, it triggers obligatory V-movement resulting in enclisis (the verb cannot be spelled out in the lower T position, unless an appropriate XP or X can satisfy the PF-requirement of the relevant feature(s)). We saw evidence for that in the data section, where it was pointed out that in finite enclisis constructions some overt constituent (either an XP, an X, or the verbal host) must realize some syntactic feature(s) on the F- head. Typically, the XP or X must be related in terms of

[11] In a feature inheritance model (e.g. Chomsky 2001), where a CP-related phase head transfers phi-features to the lower T head, these heads would not involve such an operation. This is so, because in enclisis the inflectional features are affixal, and hence they must trigger V-movement to the relevant C-head at PF. The role of syntax (presumably in terms of Agree) is to establish a syntactic relationship between the two heads.

syntactic features with the feature(s) on the head, and the same would apply to the verbal host, given that both share a V-feature (cf. that they are part of the extended verbal projection). Second, in certain environments a special overt morphology can appear either on the verb or on the projection itself, which is what we find also with imperative and gerunds (e.g. special agreement (31b), or focus particles (31a)).

(31) a. …depois que aqui **er** veeres [Medieval Galician]

after that here FOC came.2sg

'…after here you did come.' (from Uriagereka 1995b)

b. Convidarmos-**te** para a fiesta seria una boa ideia. [European Portuguese]

To-invite.1pl-you.cl for the party would.be a good idea

'To invite you to the party would be a good idea.' (from Raposo & Uriagereka 2005)

Although such overt morphology is rarely found, it strongly suggests that this head contains some syntactic feature which is affixal, on a par with non-finite heads in finiteness sensitive languages. Using Chomsky's (2001) ideas that syntactic derivation proceeds in phases, and that each phase involves a phase head, which contains all features related to the phase and which triggers Agree and Merge, I would like to propose that the C-head which is merged above the cliticization site in T, and which is linked to enclisis in both language types, is a phase head. Accordingly, it triggers Agree (i.e. a syntactic relationship) with T, but also has a PF requirement that may be satisfied by a number of constituents, depending on the syntactic features involved. This is illustrated below:

(32) $F_{[+V]}$ …CL-X…T-V // $XP_{[+a]}$… $F_{[+a]}$… CL-X… T-V// $X_{[+a]}$ – $F_{[+a]}$… CL-X… T-V

Since the F-head contains features related to the CP domain (such as wh, neg, foc, etc.), which in most cases are not related to impoverished agreement, the lack of correlation with finiteness would follow. What connects finiteness sensitive enclisis to non-finiteness sensitive enclisis is that both involve the presence of a syntactic feature with a PF requirement.

Finite enclisis allows us to take a better look at this PF requirement, and at how it relates to the independent prosodic requirement that bans first position clitics, as well as to the syntactic Agree relationship established between the F-head and the lower T-head. The main characteristic of finite enclisis is that it is blocked by the presence of an overt head or XP above the cliticization site.[12] When more than one constituent precedes the clitic, it is the one immediately c-commanding the cliticization site that normally decides whether proclisis or enclisis obtains. This is illustrated in (33):

(33) Ta vivlia pjos **ta** edhoken? (* edhoken **ta**) [Cypriot Greek]

The books who them.cl gave.3sg

'The books, who gave them?'

Assuming that in Null Subject Languages, preverbal topics precede wh-words, which immediately precede T (see e.g. Barbosa 2001), it follows that the F-head heads the projection

[12] In non-finite enclisis, no cases of an XP that precedes the cliticization site and which triggers proclisis are to be found, at least to my knowledge. This would be attributed to the fact that XPs with imperative, gerund, or infinitival features are not available for independent reasons. Preverbal particles, such as negation or subjunctive (see e.g. Roussou 2000 for Modern Greek), could count as instances of an independent (i.e. non-affixal) X-head that triggers proclisis.

that immediately c-commands the cliticization site, and that it is this head that is directly related to the proclisis-enclisis alternation. Particles that realize some syntactic feature of the F-head (e.g. negation) also trigger proclisis. Verb movement is only forced if no XP or X is present (12a), or if an XP or X is present that cannot establish a syntactic relationship with the F-head (6a and 16a respectively), or if an XP is present that can establish a syntactic relationship with the F-head but cannot satisfy the PF requirement of the relevant feature as it is not merged at the edge of the F-projection (13b).

These data show that all the constituents that may satisfy the PF requirement must first establish a syntactic relationship with the F-head. If an XP can be internally merged or if an X can be externally merged to the edge of the F-projection, the PF requirement can be satisfied by merger. If no such constituent is available (either because no such constituent is available in the numeration, or because no syntactic relationship can be established, or because internal merge does not apply), the verb satisfies the requirement. This is possible, as both the verbal complex in T and the F-head share a V-feature. Given that the feature on the F-head is affixal (as it must be obligatorily realized by a non-affixal constituent at PF), enclisis is derived via some PF operation that unites the verb and the F-head. This is exactly what we found with non-finite enclisis, which is a welcome result, as it unites enclisis in both language types.[13]

What is important to point out is that in all cases the PF/prosodic requirement is satisfied automatically (i.e. no special operation takes place), and that the actual realization of the F-head by the T-V head could take place via some PF/morphological operation which repairs the PF

[13] An implication of this analysis is that the F-head must involve a zero affixal morpheme, and that this morpheme can be supported by an X or an XP constituent. It is not clear to me in what sense these two possibilities could be unified in a way that would make sense morphologically. Presumably, both a phrase and a head can support the affixal edge.

representation. If this operation does not take place, the derivation crashes at PF. Finally, the fact that finite enclisis is blocked by an XP or X with appropriate syntactic features clearly captures the PF nature of verb movement in this particular structure, which is that V-movement to the F-head takes place, if the PF/morphological requirement imposed by the F-head has not been satisfied in the syntax (see also Raposo & Uriagereka 2005 for a similar intuition). This is a form of a doubly filled comp criterion, which has also been attributed to PF (see e.g. Pesetsky 1998), and it differs from other criteria like the wh-criterion or V2. A similar requirement has been proposed in the literature by Collins (2007) and Nchare & Terzi (to appear) in relation to prepositional phrases, according to which the edge of a projection (strictly spec or head) must be phonologically realized. At the moment, it is not clear how such a PF requirement could be related to the EPP requirement of phase heads, as the latter is a requirement that the edge is projected syntactically. Further research is required in this respect.

Three additional points should be made here. First, although the presence of a null affixal head can be argued for independently (cf. e.g. semantic and/or syntactic properties of the structure – and see (14)), this is less clear for other cases (cf. e.g. simple indicative clauses). Some researchers have proposed that even such full clauses contain a CFin head (see e.g. Roberts 2005), which could be used for our purposes. However, even if such a postulation turned out to be wrong, this would not affect the analysis proposed here for enclisis, as the latter is analyzed as being the outcome of a PF requirement. Although this is often a morphological requirement, nothing in principle prevents a prosodic requirement from yielding the same surface result. This could be the case, for example, with positive imperatives in languages like Bulgarian, as the latter allow the syntactic realization of imperatives in T.

Second, in some Tobler-Mussafia languages any XP may block enclisis (e.g. Bulgarian), and multiple preverbal XPs are possible (cf. (7c)). One way to deal with this issue would be to claim (following the analysis in Dimitrova-Vulchanova 1995) that in these languages all preverbal XPs are hosted in the F-projection, e.g. as multiple specifiers. One XP would be required for proclisis, but more XPs could be available. Alternatively, in these languages the spell out requirement may not always be contingent on the establishment of a syntactic relationship between the F-head and the constituent that realizes its features.

Third, in languages like Cypriot Greek we find both proclisis and enclisis with certain complementizers, something which is not normally found in other Tobler-Mussafia languages (e.g. E. Portuguese). This is illustrated below:

(34) a. Ipen oti **to** ethkiavasen/ethkkiavasen **to** i Maria [Cypriot Greek]

Said.3sg that it.cl read.3sg the Mary

'H/she said that Mary read it.'

b. Ipen oti i Maria ethkiavasen **to**.

Crucially, this possibility seems to arise mainly with complementizers such as *oti*, which have been found to be able to appear in a higher or lower C-head (cf. recomplementation constructions in Spanish, where a topic phrase is sandwiched between two *que* complementizers –see Demonte & Fernández-Soriano 2009). Accordingly, we could assume that enclisis obtains only if the

complementizer does not phonologically realize the F-head[14], a possibility that would explain (34b).

4. Summary and conclusions

Although the analysis presented in this paper is tentative to some degree, it seems that there is some evidence from different structures from finiteness sensitive and Tobler-Mussafia languages that cliticization and the proclisis-enclisis alternation are the complex result of syntactic and different types of PF operations/requirements. In this, as well as in previous sections we identified at least five cliticization strategies:

(a) proclisis 1: This is the most typical case of proclisis found in finiteness sensitive languages (cf. 1a). Here, the clitic (cluster) targets a position that c-commands the verb (typically within the TP domain), without any further operations applying (modulo incorporation, which is a syntactic or PF operation that mergers the clitic with its verbal host – see Matushansky 2006; Roberts 2010).

(b) proclisis 2: This corresponds to finite proclisis within the TP domain in Tobler-Mussafia languages (cf. 2a). Here, the clitic (cluster) targets a position that is immediately c-commanded by a C-head (what I called 'the F-head'). This head carries syntactic features and a PF/morphological requirement, which is satisfied by an XP or X (particle) that is merged (for syntactic reasons) at the edge of the F-head, and which has established a syntactic relationship with it. A prosodic requirement that bans clause initial clitics (if applicable) is also satisfied in this case.

[14] This could be the result of movement or direct base generation.

(c) proclisis 3: This case corresponds to finite proclisis within the CP domain (cf. 24-26). Here, the clitic incorporates into the verb within the TP domain (as in all other cases of proclisis), and then the whole cluster moves syntactically to a CP head.

(d) enclisis 1: This case corresponds to most cases of non-finite enclisis within the CP domain (cf. 1b). Here, the F-head contains syntactic features and a PF/morphological requirement. The latter triggers the spell-out of the verbal host in the F-head and gives rise to enclisis, which is analyzed as a syntax-PF phenomenon.

(e) enclisis 2: This case corresponds to finite enclisis within the CP domain (cf. (7)-(14)). The derivation proceeds as in *enclisis 1*. Enclisis 2 is aborted if an appropriate XP or non-affixal X can satisfy the syntactic and PF requirements of the F-head. The presence of such constituents depends on availability in a certain language or construction, i.e. it is linked to the type of features that the F-head contains (TP vs. CP features).

(f) enclisis 3: This case is quite rare and corresponds to non-finite enclisis in the CP domain in those cases where enclisis has already obtained within the TP domain (cf. e.g. gerunds). The derivation proceeds as in *enclisis 1*. After the clitic-V cluster has been formed, T is attracted to some C-head, leading to syntactic dislocation of the cluster within the CP domain.

(g) enclisis 4: This form of enclisis is a residual case, and it involves purely syntactic or PF verb movement to some head preceding the cliticization site. Possible examples would involve Bulgarian V-movement for focus reasons, or Bulgarian V-movement for PF/prosodic reasons (linked to the ban on initial clitics, independently of whether this is an object clitic or some affixal zero V-head).

This picture is quite different from what has been proposed before, and it follows from the nature of the PF-syntax interface. The implications for head movement are that the latter may be related to PF even if semantic/syntactic effects are present. These are the cases where head movement is related to an affixal head (i.e. to a morphological requirement), and where enclisis standardly arises. However, we have also seen cases where head movement is triggered solely for syntactic or PF reasons. As things stand at the moment, it seems that enclisis might, in these cases only, correlate with a syntactic or prosodic requirement (and not a morphological requirement). Although the postulation of enclisis for prosodic reasons may not seem problematic (as enclisis is linked to PF operations in all these cases), a syntactically triggered enclisis might turn out to be problematic for our generalization. Such a possibility could be linked to whether and when clitics incorporate to their verbal host in these structures, or to whether the C-head also has an affix requirement. Further inquiry is required for these cases, and it should involve the presence or absence of syntactic and/or semantic effects that could help us distinguish when movement of syntactic features has taken place and whether such movement ever correlates with enclisis.

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