CLAUSE STRUCTURE AND V-MOVEMENT
IN THE LANGUAGES OF THE BALKANS*

Albanian, Bulgarian, Modern Greek, and Rumanian share the following clause structure: 
\[ \text{[cp C O [MP M° [T/\text{Agp} T/\text{Agrp} ° [AuxP Aux° [vp V°]]]]]} \]. In Balkan clauses, the phrase headed by the complementizer takes a phrase headed by an invariant modal particle as complement. The Tense/Agreement complex, the auxiliaries, and the main verb follow MP. In addition, Balkan languages share interesting varieties of X°-movement for non-finite verbs, with theoretical consequences for principles of UG.

In Bulgarian and Rumanian, (Long) Head-movement raises V° to C° across the finite Aux°, as in Pročel sům knigata 'I have read the book'; such structures comply with the Empty Category Principle via Relativized Minimality, and escape the Head Movement Constraint. In Albanian, Greek, and Rumanian, Head-movement places the imperative V° in C°, as in Ghrdpse to 'Write it!'. Albanian imperatives show Long Head Movement and comply with the ECP like other LHM patterns in cases where the V-stem precedes the clitic and the affix in that order: Tregoj-i-ni 'Tell him!'. Greek and Rumanian Gerunds display Head-movement to M°, as in I Maria krat6ndas to 'Mary holding it'. In similar Albanian constructions M° is filled, and this prevents V°-raising, as in Fashē [Brixhiden [w duke] kendar] 'I saw Brigitte singing'.

1. INTRODUCTION

This paper deals with the organization of the functional categories of the Balkan clause and its interaction with V°-movement within the GB perspective inspired by Pollock (1989). I argue that Albanian (Alb), Bulgarian (Bul), Modern Greek (MG), and Rumanian (Rum) share the basic clause skeleton in (1).

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In this diagram, the Balkan Complementizer Phrase (CP) headed by C dominates a Modal Phrase (MP) headed by an (uninflected) particle. In turn, the Modal Phrase dominates the Tense/Agreement complex, which is above AuxP when Aux is present. Aux takes either an AuxP (not shown) or a VP as complement.

The literature on V-movement has paid much attention to the processes joining V to Tense/Agreement, i.e. finite movement, and I briefly discuss this topic in relation to Balkan languages as well. However, I concentrate mainly on the effects of the structure in (1) and its Modal Phrase on the movements of nonfinite verbs and auxiliaries. Some of these processes have gone unnoticed or have received scant attention in the literature, but the examination of these processes in Balkan languages leads to new insights for the theory of head movement and for the principles of UG.

I propose that finite verbs and auxiliaries result from head movement of a V or Aux to T/Agr. This process is found in other languages (Emonds 1978 and later work) and applies in all finite Balkan clauses. However, it is characteristic of the languages under discussion that finite inflected items may follow and coexist with an uninflected $M^0$, which I propose heads a distinct functional layer that is absent in more familiar Indo-European languages. For instance, Bulgarian (Az) šte sūm pročel corresponds to English I will have read, but there are major differences between the two constructions. On the one hand, Bulgarian šte ‘will’ is invariable in form, while English will may be inflected (will/would). On the other hand, sūm ‘I have’ shows Tense (present) and Person (1s), while have does, not. In Section 2, I argue that šte is generated under M and remains in situ, while
\textit{sǔm} is generated under \textit{Aux} and raises to T/Agr in (1) by "short" head movement. Thus, the Balkan modal marker remains uninflected, while the perfect marker is inflected, in contrast to the English pattern.

Besides finite V-raising, Balkan languages exhibit several kinds of head movement for nonfinite Vs, which will be the main topic of the paper. An interesting type of head movement discussed in Section 3 raises the nonfinite V from its position in VP to C, skipping over the intermediate finite Aux, as represented in very simplified form in (2). This process gives the \textit{Long Head Movement} (LHM) pattern illustrated in (3), as opposed to the 'short' head movement for finite Aux.

\begin{equation}
\begin{array}{c}
\text{CP} \\
\downarrow \\
\text{C} \\
\downarrow \\
\text{AuxP} \\
\downarrow \\
\text{Aux} \\
\downarrow \\
\text{VP} \\
\downarrow \\
\text{V}
\end{array}
\end{equation}

(2) 
\text{C} \quad \text{AuxP} \\
\text{Aux} \quad \text{VP} \\
\text{V}

I argue that in (3) the participle \textit{pročel} 'read' has head-moved to C across the auxiliary \textit{sǔm} 'has', in compliance with the Empty Category Principle. If this is the case, \textit{X°}-movement is not as local as previous studies on Germanic have suggested, since the movement proposed here does not obey the Head Movement Constraint. However, although an intervening Aux as in (2) allows movement of V to C, as (3) demonstrates, an additional intervening Modal item as in (4) does not, as (5) shows.

\begin{equation}
\begin{array}{c}
\text{Pročel sǔm lednigata.} \\
\end{array}
\end{equation}

\textit{read} \quad I + \text{have book + the}

I have read the book.
I take this contrast to indicate that Relativized Minimality plays a role in constraining head movement, since this movement is sensitive to the type of head in the movement path. Thus the structure of the Balkan clause, the MP layer, and LHM are of major theoretical import for the ECP and Relativized Minimality.

A second type of Balkan nonfinite V°-raising discussed in Section 4 is illustrated by imperatives such as Modern Greek Ghrápse! ‘Write!’ These imperatives share several of the formal properties of the construction in (3) because their verb has raised to C as well. However, we will see that when the M-position in (1) is filled, the verb cannot raise to C. In addition, Albanian imperatives undergo the type of Long Head Movement depicted in (2) when V° as stem skips an inflectional item instead of an auxiliary. These imperative constructions are of theoretical interest since they comply with the ECP subject to Relativized Minimality just like those in (3). Outside the Balkans, a parallel type of LHM across an affix is found in Fiorentino, so that Albanian is not unique in this respect.

A third type of nonfinite V°-raising discussed in Section 5 affects gerunds, as in Modern Greek I Maria kratóndas to,... ‘Mary holding it,...’. Balkan gerunds share the clause skeleton depicted in (1), but two different situations must be distinguished. In the Modern Greek and Rumanian gerund, V moves to the slot labeled M. By contrast, Albanian gerunds contain a particle heading the M-position, which blocks raising to that slot, so V remains in a lower position in the tree. The characteristics
of Albanian gerund constructions further motivate the blocking power of the Balkan MP in situations of V-raising.

This paper is organized as follows. Section 2 outlines the structure of the Balkan clause and discusses finite V-movement. Section 3 deals with Long Head Movement in Bulgarian and Rumanian. Section 4 discusses imperatives in Albanian, Modern Greek, and Rumanian, and Section 5 contrasts Modern Greek and Rumanian gerunds with Albanian gerund-like constructions.

2. The Balkan Clause

In this section, I first introduce the structural layers of the Balkan clause in (1) in detail, and then proceed to motivate finite V-movement to a T-node c-commanded by the M-node for modal items.

2.1. Functional Categories in the Balkan Clause

Consider the bracketed subordinate clauses in the examples in (6). They open with the complementizer, which is followed by the embedded subject, the modal-like invariable particle, and the inflected verb in that order:

(6)a. Dua [që Brixhida të kendojë]. (Alb.)
want-Pres-1s [C Brigitte M sing-Pres-3s]
I want Brigitte to sing.

b. Znam [če az ėte četa]. (Bul.)
know-Pres-1s [C I M read-Pres-1s]
I know that I will read.

c. Pistevi [oti i Maria tha voithisi]. (MG)
believe-Pres-3s [C the Mary M help-Pres-3s]
He believes that Mary will help.

d. Vrea [ca Petru să citească]. (Rum.)
want-Pres-3s [C Peter M read-Pres-3s]
He wants Peter to read.

I contend that these Balkan clauses display the basic skeleton in (1), minus the AuxP, which will be discussed later. Specifically, the CP headed by the item labeled C in the gloss dominates the MP headed by the particle
M, and this last phrase dominates T/AgrP, which is the assumed landing site for the inflected V after head movement out of VP.¹

My proposal is that all Balkan languages have structures such as those presented by the examples in (6), in which the layer marked M in (1) is headed by invariant particles, followed by a V with Tense/Person/Number, and that this configuration plays an important role in Balkan syntax. I will show that this skeleton is exploited by the four languages under discussion and leads to an account of certain language-specific patterns as well. Two situations common to all of these languages should be mentioned. First, items in M can function as future markers, as in Bulgarian (6b) and Modern Greek (6c), which have counterparts in Albanian and Rumanian as well. Second, in all Balkan languages, M is the locus for subjunctive markers, as in Albanian (6a) and Rumanian (6d), which have counterparts in Bulgarian and Modern Greek, but with a null C instead.² Among language-specific constructions involving MP, I mention the aspectual po of Albanian, which forms a variant of the progressive with finite verbs: Unë po vete ‘I am going’ or [MP unë [M po [Agr/TP vete] [VP t]]]]. Albanian also uses duke and several other particles for various types of gerunds, as will be discussed in Section 5 in more detail. Finally, I propose in Section 5 that the Modern Greek and Rumanian gerund affixes óndas and ind ‘ing’ are also under M, triggering V⁰-raising, while parallel constructions are absent in Bulgarian and Albanian.

The relatively simple picture in (1) is complicated when additional categories are added to the basic skeleton. Consider pronominal clitics, which always follow M and precede the inflected V in Balkan languages, as illustrated for Rumanian in (7a). I propose that such clitics are attached to T/AgrP, probably in the Spec of this projection, as shown in (7b). As argued in several sections of this paper, clitics remain anchored to this position in all structures, and I assume no clitic movement rules in Balkan languages.³

¹ The subjects in (6) follow the complementizer and precede the modal particle, so I assume that they appear in the Spec of MP. Subjects are not discussed in this paper, but predication could be the reason why they are projected in/moved to their surface position in situations like (6), as a reviewer suggests.

² For the mixed characteristics of Rumanian să as C and/or I (my M) see Dobrovie-Sorin (1989), Farkas (1989). In view of (6) I assume that Rumanian ca heads CP while să heads MP; the mixed properties of Rumanian să follow if să raises to C when empty. This updates proposals by Farkas (1982) (see also Farkas 1984; Kempchinsky 1986, 1989).

³ I do not take a stand on whether Balkan clitics should project to Xₗₘₐₓ (cf. Rivero 1986 for Old Spanish) or are just heads (cf. Kayne 1989 for Romance), nor on whether they are adjoined to Spec/T/AgrP, or fill these positions if they are XPs. Although I do not assume movement for clitics, local permutations may affect specific clitics, so I mention two. First, the Rumanian 3rd person o ‘her, it’ is exceptional in its position since it may follow participles,
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(7)a. Maria o să i- o dea (Rum)
   Mary FUT him-it give-Pres-3s
   Mary will give it to him.

b. [MP Maria [M' o să [T/AgrP i-o [T/Agr' deai VP]]]]

Now let us consider how negation attaches to the skeleton in (1). The position of this item is identical in all Balkan languages, but two situations must be distinguished on the basis of mood. First, in indicative clauses, the negation precedes the modal particle, the pronominal clitics, and the

as in Am văzut-o ‘I-have seen her’ vs. L-am văzut ‘I-have seen him’. Probably this results from a PF rule, reflecting the unique character of the order Aux + V + Clitic, absent in Romance, the Balkans, or Southern Slavic, except for this specific Rumanian clitic. Dobrovie-Sorin (1990) takes the opposite stand; for her o shows the S-structure position of Rumanian clitics, which move to a pre-Aux site by (unstated) PF rules. This last approach fails to reflect the identical principles behind the position of clitics in all Balkan languages, including Rumanian, so I will not adopt it. Second, the Bulgarian 3rd person sg. present perfect, itself a clitic, follows pronominal clitics, whereas in the other persons the present perfect precedes them, as in (i.a) vs (i.b) from Scatton (1983). Again, I suggest that this is a PF permutation.

(i.a) a. Tja gi e vzela. (Bul)
   she them has taken
   She has taken them.

b. Te sa go videli.
   they have him seen
   They have seen him.

Several Balkan constructions appear to require (obligatory) clitic movement, as pointed out by a reviewer. First, (pro)clitics must attach to the Aux in compound tenses, so I suggest that the Aux is a ‘light’ verb (Grimshaw and Mester 1988), with the main verb transferring argument structure to it, so that the clitic attached to T/Agr keeps a local relation with V once the Aux raises to T/Agr (see the discussion on pronominal clitics, incorporated adverbs, and clitic adverbs in Section 2). In Rumanian this idea must extend to modal putea ‘can’ since clitics must attach to this modal, not to V, as a reviewer points out. Second, causatives have subjunctive complements, and may appear with a matrix accusative clitic relating to the embedded subject exclusively, as in Rumanian (ii) (MG is identical):

(ii) Petru l- a facut să duca cartea. (Rum)
    Peter him- has made SUBJ bring book + the
    Peter made him bring the book.

For this structure Rivero (1991a) argues in favor of ECM of the embedded subject position (i.e. little pro) by the matrix verbal complex including the matrix base-generated clitic, without clitic movement. Third, for perception verbs with a matrix accusative clitic relating to the embedded subject (MG O Yānis ton vilēpi na dhiavadzi ‘John sees him reading’), an ECM analysis is possible too (Rivero 1991a, §3.6). Alternatively, the clitic could relate to an embedded operator, as in French Je la vois qui chante ‘I see her singing’, without clitic climbing. If perception verbs take both a NP complement and a clause, the clitic does not climb from embedded clause to matrix under this perspective either.
verbal complex, as exemplified in (8a) for Modern Greek. Since Neg precedes all other functional layers, I assume that it heads an X\textsuperscript{max} (Kayne 1989, Kitagawa 1986, Laka 1989, Ouhalla 1990, Pollock 1989, and Zanuttini 1989, among others) and takes MP as complement, as illustrated in (8b). Motivation for this view is given in Sections 3 and 4.

(8a) Dhen tha to éXi teliósi. (MG) 
not M it have-Pres-3s finished
He will not have finished it.

(8b) \[
\begin{align*}
&[\text{NegP} \ dhen \ [\text{MP} \ tha \ [T/AgrP \ to \ [T/Agr \ éXi \ [AuxP \ t \ [vP \ teliósi]]]]]] \\
\end{align*}
\]
Second, in subjunctive clauses the order of the negation and the modal particle are inverted; the negation follows the modal. The Rumanian and Modern Greek negated embedded clauses in (9) and (10) illustrate the contrast with the negated indicative clause in (8).

(9) Vreau [ca Maria sâ nu o citească]. (Rum)
I-want that Mary M not it read-Pres-3s
I want Mary not to read it.

(10) Thélo [ta pedhiá na min fighún]. (MG)
I-want the children M not leave-Pres-3s
I want the children not to leave.

I suggest that the difference in the surface position of Neg between indicative and subjunctive clauses does not reflect an underlying difference. Rather, NegP is generated higher than MP in all clauses, and the surface order in subjunctives results from the incorporation of the modal particle into the negation. In particular, (9) derives from \([\text{CP} \ ca \ [\text{NegP} \ Maria \ [\text{Neg} \ nu] \ [\text{MP} \ sâ \ [T/AgrP \ O \ [T/Agr \ Pres/3s] \ [vP \ citească]]]]]])\], with sâ head-moving to nu.\(^4\) However, this suggestion has no bearing on

\(^4\) Neg occupies the same S-structure slot in all Balkan clauses in view of Negative Polarity Item (NPI) licensing, as in Laka (1989, §3). Consider the following patterns with káti 'something' and kápios 'someone', and their negative-polarity counterparts típole 'anything, nothing' and kanénas 'anybody, nobody' in the sense of no [x]. These are representative of the general Balkan situation.

(i)a. I María tha éXi teliósi káti/ *típole. (MG)
the Mary FUT have-Pres-1s finished something/ *nothing
Mary will have finished something/ *nothing.

b. I María dhen tha éXi teliósi típole.
the Mary not FUT have-Pres-3s finished nothing
the different hypotheses on V-movement defended later in the paper. What is important for my aims is that Neg head a NegP and that it c-command at least T/AgrP. I will later show that Neg has the same effect on V-movement processes in all Balkan languages.

Following proposals by Pollock, many recent discussions assume that Tense and Agreement(s) head different projections (Pollock 1989, Chomsky 1989, Belletti 1990, and many others). However, the need for a

Mary will not have finished anything.

c. \([\text{NegP I } \text{Maria} [\text{Neg} [\text{Neg dhen} [\text{MP tha } \text{έXi teliósi tipote}]]]]\)

(ii)a. Kápios/*Kanénas tha to éXi teliósi.

b. Kanénas dhen tha to éXi teliósi.

c. \([\text{NegP Kanénas} [\text{Neg} [\text{Neg dhen} [\text{MP tha to } \text{έXi teliósi}]]]]\)

Limiting myself to this situation, I assume with Laka that Neg licenses NPIs under m-command at S-structure. Under the proposed analysis, both the object tipote ‘nothing’ in (i.b-c) and the subject kánenas ‘nobody’ in (ii.b-c) are m-commanded by Neg and licensed along parallel lines.

Turning to subjunctives, (iii.b) below shows that NPIs as subjects in such clauses behave as in indicatives, but Neg follows the particle: na min instead of den tha. However, an NPI outside of the embedded clause is deviant, even when preceding na min, as in (iii.c). This difference is predicted if the subjunctive M-particle incorporates into Neg, as the structure given in (iii.d) for (iii.b); under this treatment Neg will m-command the subject, but not NPIs external to the clause.

(iii)a. *Thélō [kanénas na dhiavási to vivlío]. (MG)

b. Thélō [kanénas na min dhiavási to vivlío].

c. *Kanénas thélō [na min dhiavási to vivlío].

d. \([\text{NegP kanénas} [\text{Neg} [\text{Neg na } + \text{ min} [\text{MP t} \text{ dhiavási to vivlío}]]]]\)

Language-particular differences which do not affect Balkan V-movements nor the syntactic position of Neg include the following. Albanian and Modern Greek have two different lexical items for clausal negation. For instance, MG dhen is for indicatives and min for subjunctives, including those with an imperative use (as well as gerunds). I interpret this situation in the following way: C takes as complement any type of Neg, but Neg selects either an indicative M or a subjunctive M. This is coherent with the view that NegP dominates MP in the Balkan clause. Finally, a second language-particular characteristic of MG is the use of oxi for constituent negation.
separate AgrP has also been questioned (Iatridou 1990). The T/Agr node in the Balkan skeleton in (1) is for Person, Number, Tense (and Aspect), which could allow for a tiered structure with these items each heading a separate projection. In this paper I do not take a stand on this issue, which appears to have no bearing on the nonfinite V°-raisings discussed in later sections. For my purposes, the different elements in the finite V or Aux can be conflated under T/Agr, as in (1), which I adopt without further discussion. As we shall see, what is important in this paper is that the finite layer marked T/Agr be distinct and appear lower than the modal layer M and the negation.

To summarize, the more articulated structure assumed for the Balkan clause is as follows:

\[
\text{(11) CP} \quad \text{NegP} \quad \text{Neg} \quad \text{MP} \quad \text{T/AgrP} \quad \text{CL} \quad \text{T/Agr} \quad \text{T/Agr} \quad \text{Aux/P} \quad \text{Aux} \quad \text{VP} \quad \text{V}
\]

As before, C stands for complementizer, Neg for negation. The position labeled M is for modal and future particles in all Balkan languages, and for morphemes that mark aspect and inflect verbs as gerunds in some of the languages. T/AgrP is headed by the morphology inflecting finite items,

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5 See Rivero (1990) for the location of Voice and Aspect in Albanian and Modern Greek in the Balkan skeleton.
and this phrase holds the pronominal clitics as well. AuxP is for auxiliaries, and VP for main verbs.

Balkan clauses do not always display all of the layers depicted in (11). Patterns such as the negated Modern Greek and Albanian future perfect indicatives in (12a,b) are interesting because all the relevant layers are overtly displayed. The diagram in (13) shows the analysis for the embedded clause in (12a) (without CP) and for (12b).

(12)a. 

Pistevi [oti i Maria dhen tha to χi πiá telíósi].

He believes that Mary will not have finished it yet.

b. 

Brixhida nuk do të u a këtë shpesh dhënë. Brigitte will not have given it to them often.

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In these constructions, NegP takes the Modal Phrase as complement. Then the verbal complex follows, opening with the pronominal clitics and continuing with the finite auxiliary which has raised out of AuxP to T/Agr. In addition to the functional layers and the VP, these examples contain an adverb between the Aux and the main V; this item plays an important role in the motivation for V/Aux raising to Agr/T discussed in the next section. As shown in (13), I assume that the adverb may attach to the Spec of AuxP. Zagona (1989) justifies such an analysis for English and Spanish, and her arguments extend to the languages of the Balkans, with the exception of Rumanian, which will be discussed in Section 2.4.
2.2. V-movement to T

Having outlined how Balkan clauses are organized, in this section I motivate finite raising of Aux or V to T/Agr, using the positions of the adverb and the negation as symptomatic of the application of the process. The same arguments could be developed using the relative position of modal particles and adverbs instead.

In this context the contrast between so-called compound tenses combining a finite Aux and a nonfinite V and so-called simple tenses with only a finite V is interesting. On the one hand, adverbs of various types may follow Neg and precede the main V when the finite auxiliary is present in Balkan negative compound tenses; this situation is exemplified in (12a) for Modern Greek (see also Hesse 1980, p. 46). Rumanian is exceptional in this respect, as will be discussed in Section 2.4. On the other hand, in negative simple tenses, when adverbs appear after Neg they must also follow V, regardless of the nature of the adverbs. This second situation is illustrated in (14) for Modern Greek; the four Balkan languages under discussion behave identically in this respect.

(14)a. Dhen (se) ëksera akómi. (MG)
not you knew-Is yet
I did not know (you) yet.

b. *Dhen (se) akómi ëksera

Adverb position is quite free in these languages, and there is no prohibition against an adverb following the subject NP and preceding NegP and V, regardless of the nature of the adverb, as illustrated by MG O Yánis akómi dhen éfighe 'John did not leave yet'. Since the location of adverbs is flexible, the clear deviance of (14b) and parallel patterns in the other three Balkan languages seems surprising and requires an explanation. In other words, since adverbs may appear in many different positions, what becomes symptomatic of a given structure are the slots where they are excluded, rather than those where they are possible.

The same facts can be illustrated for Albanian. Example (15c) shows that an adverb cannot intervene between negation and finite V, irrespective of the nature of the adverb. By contrast, (15b) illustrates that an adverb can intervene between subject NP and NegP, preceding V in this context.
(15)a. Fëmijët nuk vene kurrë. (Alb)

children-the not go-Pres-3p never

The children never go.

b. Fëmijët kurrë nuk vene.

(gloss as in (15a))

c. *Fëmijët nuk kurrë vene.

These contrasts in adverb position in simple and compound tenses follow if raising to T/Agr must obligatorily apply in the Balkan clause. As indicated in (13), in compound tenses Aux must raise to T/Agr, and the adverb attaches to AuxP either because it is base-generated there or because it moves to this slot available for adverbs. From this point of view, an adverb can intervene between the subject and the negation or it can appear at the end of the clause, since these are possible positions for adverbs in Balkan languages. However, given the obligatoriness of Aux-raising to T/Agr, an adverb can never intervene between the negation and the auxiliary. This is because such an order would indicate that the Aux has not raised. My approach predicts that configurations such as MG *I Maria dhen pëta eXì teliësi (lit. *Mary not yet has finished) ‘Mary has not finished yet’ must always be deviant in the Balkans, which they are.

With just the inflected main verb, the hypothesis is that the adverb can appear in the Spec of VP and raising must apply to the V itself, as in (14a) and (15a) analyzed as in (16a) below. In general, the adverb can occupy several sentential positions, and given such flexibility it would appear that some of these positions are not basic. It is crucial, however, that the adverb cannot precede the verb and follow the negation.

In the above discussion, I have adapted to Balkan clauses arguments first developed by Emonds (1976, 1978) and Pollock (1989) for English and French, but with a difference. In Balkan languages, which are of the so-called ‘free word order’ type, functional categories such as Neg, M, the clitics, and Aux are rigidly organized and serve to identify the clausal skeleton, while lexical categories are more flexible in position and less directly reflect underlying order. In view of this, I have exploited the fixed positions defined by Neg and Aux (i.e. Spec of AuxP as occupied by the adverb) without considering it essential that the adverb, a lexical category, be fixed. This contrasts with Emonds and Pollock, who assumed that the adverb has a fixed position in languages with less freedom in word order.

A reviewer suggests that (14b) and (15c) are deviant because dhen/nuk ‘not’ are verbal proclitics, that is, because they must cliticize on the verb.
However, this idea cannot be maintained because Neg can cliticize on the modal particles *tha/do tê*, or M in my terminology, and not only on V. By this logic, if *dhen/nuk* are proclitics, there is no reason why they should not cliticize on the adverb itself if that element preceded V.

Finally, under the above assumptions for simple tenses, A (15b) can be analyzed as in (16b), with *kurrê* in the post-subject adverbial position all Balkan languages share. Alternatively, if the NP subject is in a topic position, *kurrê* could be in the Spec of NegP.

(16)a.
The affirmative pattern in (17a) with the adverb before the finite V in a simple tense and the pattern in (17b) with the adverb before the modal particle and the finite V are not counterexamples to my analysis. As shown in (17c) for (17b), they each contain an adverb in the position of A kurre 'never' in tree (16b) – that is, in a slot higher than M.

(17)a. O Yánis akómi ghráfi. (MG)
John still writes.

b. Ta pedhiá amésos tha ksupnísun.
the children immediately Fut wake-Pres-3p
The children will wake up immediately.

c. [MP Ta pedhiá [AdvP amésos] [M' [M tha] [ksupnísun]]]

To summarize, verbs or auxiliaries raise to the category that contains tense, person, number (and aspect) in all finite Balkan clauses. With this general picture in mind, I now turn to two different language-specific situations which appear problematic for this V-to-T proposal. The first concerns Modern Greek and the second Rumanian. In Section 2.3, I argue
that the Modern Greek situation is unproblematic, and in Section 2.4. I come to the same conclusion for Rumanian.

2.3. Modern Greek Adverb Incorporation and Finite V-raising

Consider Modern Greek (18a), with the adverbs κάλα ‘again’ and καλά ‘well’ following Neg and the modal particle but preceding the finite V. This pattern could suggest that the finite V does not raise to T/Agr, contrary to my previous argument. In other words, if adverbs can appear in Spec of VP in the Balkan clause and V does not raise, then they will surface after M (i.e. tha) and before V (fái).

\[(18)a. \text{Dhen tha καλα-κάλω-έδει ἔδει.} \quad \text{(MG)}\]

He will not eat well again here.

\begin{equation}
\text{not FUT again-well-eat-Pres-3s here}
\end{equation}

\[(18)b. \quad \text{[NegP dhen [MP tha [Agr/TP [Agr/To καλα + καλα + fái][vp ti]]]]}
\]

However, Rivero (1992a) argues that Modern Greek has syntactic adverb incorporation. In (18a), the two adverbs form a V° with fái ‘he eats’, so the complex moves to T/Agr° in an unproblematic way, as illustrated in (18b). Therefore, (18a) is not a counterexample to finite V-raising.

Rivero shows that MG adverb incorporation is similar to noun incorporation in the sense of Baker (1988). On the one hand, incorporating adverbs must belong to the class McConnell-Ginet (1982) labels ‘Ad-verbs’ and considers an extra argument of the V in the VP. The Ad-verb class includes both manner καλά ‘well’, and aktionsart καλά ‘again’ in (18). Ksand in particular modifies inherent aspectual properties of V. Adverb incorporation applies in the presence of NP objects, too, and combines with noun incorporation (see Rivero (1992a) for examples and discussion). On the other hand, adverbs external to the VP cannot incorporate. This is illustrated in (19) for the imperfective adverb ακόμη ‘still’ as modifier of aspect.

\[(19)a. \text{Θα μιλάι ακόμη.} \quad \text{(MG)}\]

He will still be speaking. (future imperfective)

\[(19)b. \quad *\text{Θα ακόμη-μιλάι.}
\]

To summarize, Modern Greek Ad-verbs may precede a finite V and follow Neg because adverb incorporation forms a complex word with such adverbs and the verb. The adverbs originate as complements in VP and
head-move to \( V^0 \), with the complex subsequently raising to \( T/Agr^0 \). To my knowledge, adverb incorporation does not exist in the other Balkan languages, but I know of no reason for this restriction.

2.4. **Rumanian Clitic Adverbs and \( V \)-raising**

In this section I propose that Rumanian treats certain adverbs as clitics. This is a language-specific feature not found in the other languages of the Balkans. In addition, I take Rumanian to lack the adverb position in the functional category AuxP found in the other Balkan languages. I stipulate this difference to account for subtle contrasts in the distribution of adverbs and quantifiers in Albanian/MG vs. Rumanian, but I provide no explanation for it.

The Rumanian pattern in (20b) appears problematic for finite \( V \)-raising, since the adverb precedes the \( V \). Instead, it seems to require affix hopping, with \( T/Agr \) lowering to \( V \), and \textit{mai} inside the VP.

\begin{equation}
\text{(20)a. } \text{Nu (i)l-am mai văzut.} \\
\quad \text{not him have-Pres-Is more seen} \\
\quad \text{I have not seen him anymore.}
\end{equation}

\begin{equation}
\text{(20)b. } \text{Nu-(i)l mai văd.} \\
\quad \text{not him more see-Pres-Is} \\
\quad \text{I do not see him anymore.}
\end{equation}

I will now show that (20b) is not a counterexample to finite \( V \)-raising, and so will tentatively conclude that Rumanian has \( V \)-raising to \( T \) like other Balkan languages (see Dobrovie-Sorin (1987) for a similar position, but Dobrovie-Sorin (1990) for the opposite view).

The class of Rumanian adverbs preceding finite verbs, or separating Aux and nonfinite verbs, is limited to a few combinable monosyllabic intensifiers: \textit{cam} ‘little’, \textit{mai} ‘more’, \textit{prea} ‘very’, \textit{și} ‘also’, \textit{tot} ‘still’. This class differs semantically from the class of MG incorporators. The MG items must be Ad-verbs in McConnell-Ginet’s semantic sense, but the Rumanian intensifiers are not. Also, Rumanian adverbs corresponding to MG incorporating adverbs cannot separate Aux and \( V \), so the two classes differ from a syntactic perspective, too.

I propose that Rumanian intensifiers are not adverbs heading an \( X^{\text{max}} \), but clitic elements attaching to the main verb and forming a \( V^0 \) with it: they are \( X^0 \)'s in the sense of Kayne (1989). As we shall see, these intensifi-
ers can be the first branch of the CL node in T/Agr as well, just like the
more familiar pronominal clitics.

Under my approach, the clitic-adverb in (20a) is attached to the nonfin-
ite V° in situ. In (18b), mai is similarly attached to V and moves with it
to T/Agr°, much like incorporated Modern Greek adverbs. Therefore,
the Rumanian pattern in (20b) is not a counterexample to V-raising either.
I now proceed to motivate these claims.

Bona fide adverbs cause ungrammaticality if inserted in the positions of
mai in (20), as seen in (21, 22). By contrast, in other Balkan languages
all types of adverbs may separate Aux and V, as mentioned in Section
2.2.

(21)a. *Nu (f) 1-am adesea văzut.
not him-have-Pres-Is often seen
I have not seen him often.

b. *Nu (f) 1-adesea văd.
not him-often see-Pres-Is
I do not see him often.

(22)a. Ion nu uită niciodată.
John not forget-Pres-3s never
John never forgets.

b. *Ion nu niciodată uită.

c. Ion niciodată nu uită.
(gloss as in (22a))

Rumanian (22c) is equivalent to A Fêmijët kurrë nuk vene in (15b), with
the adverb higher than M, which is unproblematic: \([\text{NegP} \ \text{NP} \ [\text{AdvP} \ [\text{Neg} \ [\text{Neg } \text{nu}] [	ext{MP}]]]]\). The contrasts in (21, 22) distinguish mai and short
intensifiers from true adverbs. They also lead to the conclusion that R
lacks the AdvP position in AuxP shown in (13) for the other Balkan
languages, accounting for the ungrammaticality of (21a).

This difference between Rumanian and the other Balkan languages with
respect to the adverb position is simply stipulated in the present account;
however, it is further demonstrated by the behavior of quantifiers. As
illustrated in (23), a floating quantifier may intervene between auxiliary
and participle in MG, but not in Rumanian.
(23)a. Ta pedhiá éXun óla dhi aftó to érgho. (MG)
   the children have all seen this the movie

(23)b. *Copiii au toţi văzut cartea. (R)
   children-the have all seen book-the

If floating quantifiers occupy adverb positions (Kayne 1984, Pollock 1989),
the distinction between Modern Greek and Rumanian in (23) follows. As will
be shown next, this contrast disappears in simple tenses, as expected from
my proposal.
Let us first illustrate the fact that in the area of quantifier and adverb
position in simple tenses, Albanian and Modern Greek are identical. As A
(24, 25) shows, in Albanian, these items precede the negation or follow
the finite V, just as in MG, which is not exemplified.

(24)a. Fëmijët të gjithë nuk vene. (A)
   children + the all not go
   The children do not all go.

b. Fëmijët nuk vene të gjithë.
   children + the not go all

(25)a. Fëmijët shpesh nuk vene.
   children + the often not go
   The children do not often go.

b. Fëmijët nuk vene shpesh.
   children + the not go often

In this respect R should behave like Albanian and Modern Greek. For
instance, a quantifier should be disallowed in a strictly preverbal position
in tenses with no auxiliary, but should be able to intervene between
subject NP and modal particle. The prediction is correct, as (26) and (27)
illustrate.

(26)a. *Ta pedhiá tha óla dhun aftó to érgho. (MG)
   the children FUT all see-Pres-3pl this the movie

b. *Copiii o să toţi vadă cartea. (Rum)
   children-the FUT all see-Pres-3pl book-the
(27)a. Ta pedhiá óla tha dhun aftó to érgho. (MG)
   *the children all* FUT *see-Pres-3p this the movie*
   The children will all see this movie

   b. Copiii tóti o sá vadá cartea. (R)
   *children-the all* FUT *see-Pres-3pl book-the*
   The children will all see the book.

The quantifiers in (27) are in the AdvP exemplified in tree (16b) for Albanian and Modern Greek: 

   \[ \text{Copiii} \left[ \text{Adv} \, \text{to} \text{tí} \right] \left[ M \, \circ \, \text{sá} \right] \left[ TV \, \text{Agr} \, \text{vadá} \ldots \right] \].

In brief, quantifiers and adverbs distribute along parallel lines in Albanian, Modern Greek, and Rumanian simple tenses, but in compound tenses Rumanian differs from Albanian and Modern Greek. This follows from my suggestion that the functional category Aux does not project a specifier for adverbs in Rumanian.

Finally, a Rumanian intensifier may precede pronominal clitics and follow Neg, as in (28a). By contrast, in MG an adverb between NegP and CL is always ungrammatical. I attribute this difference to the existence of clitic adverbs in Rumanian, but not in Modern Greek.

(28)a. Nu mai îl văd. (Rum)
       *not more him see-Pres-1s*
       I do not see him anymore.

   b. Nu mai îl și văd.
       *not more him also see-Pres-1s*
       Still I do not see him anymore.

I propose that the Rumanian intensifier in (28a) is generated as the first item under CL in T/AgrP. In my approach, the intensifier mai in (28b) is the first branch of the CL node and necessarily precedes the pronominal clitic(s); on the other hand, și ‘also’ is adjoined to V, so the observed order follows without clitic movement rules.

I do not survey the many word orders resulting from the combination of negation, intensifiers, and pronominal clitics in Rumanian, but my analysis correctly predicts the contrast in (29):

(29)a. Nu (i)l-am mai tot văzut.
       *not him have-Pres-1s more still seen*
       I have not even seen him anymore.
Let us see why *mai and *tot cannot be generated as in (29b). First, intensifiers may precede a pronominal clitic when they are generated as first items in the CL node in T/AgrP, as in (28a). They may also precede the main verb when they adjoin to it, as in (20b). An intensifier may precede the pronominal clitic when it is in the CL node in T/AgrP, and another intensifier may follow the clitic and precede the main verb if it adjoins to this verb, as in (28b). However, intensifiers cannot intervene between clitic and auxiliary as in (29b), since in that position they can neither be first under CL nor be adjoined to the main verb.

A last problem remains. We just saw that Rumanian adverb clitics precede pronominal clitics or the main verb in simple tenses; however, they must precede the main verb in compound tenses. On the other hand, Rumanian pronominal clitics always precede the finite item, so they attach to the Aux in compound tenses. MG pronominal clitics as well must precede the Aux in compound tenses; however, by contrast with Rumanian clitic adverbs which attach to the main verb, MG Ad-verbs may incorporate either into the V or the Aux, as in (30) (Rivero 1992a):

(30)a. EXo fái kalá. (MG)  
I + have eaten well

b. EXo kalo-fái.  
I + have well-eaten

c. Kalo-éXo fái.  
well- I + have eaten

I have eaten well.

Why is it that MG and Rumanian pronominal Clitics are positioned along similar lines, whereas MG incorporating Ad-verbs and Rumanian clitic adverbs are not? My suggestion is that in Balkan languages, the Aux is a ‘light’ verb (Grimshaw and Mester 1988) that lacks its own argument structure, so the main verb transfers argument structure to it (and see Note 3). This situation affects the landing site of MG/R pronominal clitics and MG incorporating adverbs along parallel lines, and the same seems to hold for pronominal clitics in Albanian and Bulgarian, which I do not discuss at this point.

On the one hand, MG/Rumanian pronominal clitics relate to argument positions in the theta-grids of verbs, as they are ‘complement’ clitics. MG
Ad-verbs also relate to argument positions in the grid of the verb, as they are 'complement' adverbs. Thus, when the grid is transferred from V to Aux, both pronominal clitics and incorporated Ad-verbs can attach to the Aux, since this item is 'transparent' for the argument structure of the verb. On the other hand, Rumanian intensifier adverbs are not complements and do not relate to argument positions in McConetl-Ginet's semantic sense, thus the information which licenses an intensifier is not transferred from V to Aux. As a result, the Rumanian Aux cannot carry a clitic adverb, even though it carries the pronominal clitics. In the Rumanian simple tense in (26b), clitics of the pronominal and adverbial types can mix, as no Aux intervenes.

To summarize, in Rumanian some short intensifiers may stand between a finite V and Neg because they are clitic adverbs, not because they are full-fledged X^{max} which precede a V that has stayed in the VP.

3. Long Head Movement

This section deals with constructions involving head movement of a V or Aux over an intervening Aux, or Long Head Movement (LHM). I argue that LHM satisfies the ECP under Relativized Minimality even though it violates the Head Movement Constraint. LHM is found in many language types, but the discussion here is limited to Bulgarian and Rumanian.7

In Rumanian LHM applies in conditionals, perfects, and futures, as exemplified in (31, 32). The (b) versions have the force of an exclamation

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7 LHM was also prevalent in Old Romance, with the exception of Old French. In Slavic, it is found not only in Bulgarian, but in Czech, Serbo-Croatian, Slovak, and Slovenian. Within Celtic, Breton is a LHM language (Borsley, Rivero, and Stephens 1992). In the Balkans, LHM is also found in Albanian (Demiraj 1986). Much remains to be discovered in relation to this type of head-movement, which the recent literature often suggests should not exist in UG in view of its absence in Germanic. My proposals raise questions such as the following, which are outside of the scope of this paper. Why is it that some languages have LHM while others do not? In the Balkans, this dichotomy opposes Albanian, Bulgarian, and Rumanian to Modern Greek and Macedonian. Macedonian aside, in Slavic the division runs along a North-South partition, as Russian, Byelorussian, and Ukrainian have no LHM. Why is it that some languages lose LHM diachronically, as the major Old Romance languages did? Why is it that languages such as Rumanian (and probably Albanian) have 'residual' LHM, using the term as in Rizzi (1990) for V2, while others have 'full' LHM status (Southern Slavic, Czech, and Slovak)? In Old Romance, LHM alternates with 'short' head movement, or the incorporation of V into Aux forming a complex head (Lema 1989, 1992; Lema and Rivero 1989, 1991, 1992). However, such incorporation is absent in the Balkans and in most Slavic languages. This points to another interesting difference as to the coexistence of the two subtypes of head movement. Finally, within Slavic, Polish has incorporation of the participle into Aux but no LHM (Borsley and Rivero 1991), and this situation raises additional questions about the connection between long and short head movements.
or question, not a neutral statement, so the process does not extend to all types of sentences, resembling English Subject-Aux Inversion, as in *Would God punish him?*. Rumanian is reminiscent of English in that the former has ‘residual’ LHM while the latter has ‘residual’ V2, using the term as in Rizzi (1990). Also, as the contrast between (31a', 32a) and (31b, 32b) shows, LHM is optional in R.

(31a) Dumnezeu l- ar bate.  
*God him-would-3s punish*  
God would punish him.

a'. L- ar bate Dumnezeu.  
*him-would-3s punish God*  
God would punish him.

b. Bate- l- ar Dumnezeu.  
*punish-him-would-3s God*  
God would punish him!

(32a) Mi s- a spus.  
*to + me SE-impersonal-have-Pres-3s told*  
I was told.

b. Spusu-mi- s- a.  
*told- to + me-SE-impersonal-have-Pres-3s*  
Was I ever/really told?!

(33a) Imi va spune.  
*me will tell*  
He will tell me.

b. Spune-mi-va.  
*tell- me-will*  
Will he tell me?!

Bulgarian LHM applies in the present perfect in (34a) below, and this Aux cannot be initial, as shown in (34b). It also applies optionally in the Past Perfect, as in (35a) vs. (35b). LHM is found with all types of (main) clauses, regardless of illocutionary force. Thus, Bulgarian has ‘full’ rather than ‘residual’ LHM and resembles German, which has ‘full V2’ in the sense of Rizzi (1990).
(34)a. Pročel süm knigata.
   *read  I-have book-the
   I have read the book.

   b. *Sûm pročel knigata.

(35)a. Pročel bjax knigata.
   *read  I-had book-the
   I had read the book.

   b. Bjax pročel knigata.

The analysis I propose for the above constructions appears in (36), exemplified for (33b, 34b).
The auxiliary raises to T/Agr, while the nonfinite V moves to an empty M, and subsequently to C. Under current views on functional categories (Grimshaw 1991, among others), it may be preferable to consider M to be absent when it does not contain lexical material; then V moves directly to C, crucially bypassing the intermediate finite Aux. The movements in (36) are head-to-head V-raisings.

The Rumanian pronouns are neither enclitic nor proclitic, but endo-clitic, occupying a mid-position within the verbal complex; the same is true for some Bulgarian clitics (not exemplified here). This order follows without appeal to movement rules other than LHM.

In the following sections, I motivate this analysis and eliminate alternatives. In Section 4, I provide a different type of motivation for LHM, based on Albanian imperatives where V bypasses an inflectional item rather than an Aux.

Pending further research in other LHM languages, I will tentatively assume the trigger for full LHM that is found in traditional Slavic philology: the (en)clitic nature of auxiliaries such as the perfect or of weak pronouns when they precede those auxiliaries. Clitic auxiliaries and pronouns cannot be clause-initial in Slavic, they require the support of an initial constituent. LHM, a last recourse rule in the sense of Chomsky's (1991) Principle of Economy, provides such a first constituent iff one has not been provided by operation of other rules such as Wh-movement (see Rivero 1993 for discussion). However, present Rumanian differs from Slavic and Old Romance in that LHM is optional. This fact renders the trigger for LHM in Rumanian unclear.

3.1. V in C

Several phenomena support that the nonfinite V in (36) is in C and that the process responsible for its position is head movement. First, LHM is restricted to root environments, as in (37, 38):

(37)a. Datu-v- a vreodatǎ prin gǐnd sǎ faceji
   given-you-has ever through mind SUBJ you-made
   un lucrù bun?
   a deed good
   Did it ever occur to you to do something good?

(Rum)
(37)b. *Am intrebat daca datu-v- a vreodatǎ prin gind
I-have asked if given-you-has ever through mind
sǎ facei un lucru bun.
SUBJ you-make a deed good
I wonder if + (37a).

(38)a. Znam če sǔm pročel knigata. (Bul)
I-know that I-have read book-the
I know that I have read the book.

b. *Znam če pročel sǔm knigata.
I-know that read I-have book-the

Second, (39) illustrates that the R LHM pattern allows Wh-phrases, resulting in a construction that is equivalent to V2, as in English What has John done?. In Rumanian as in Germanic, such structures cannot be embedded. Moreover, (39b) shows that Rumanian allows movement of several Wh-phrases to clause initial position. If such Wh-phrases are in a right-adjoined Spec of CP in Rumanian and in Bulgarian (Rudin 1988, p. 480, (73b)), as shown in (40), then spusu in (39b) is in the C₀ heading the CP containing two specifier positions.

(39)a. Cine spune-mi-va poezia pe dinafarǎ? (Rum)
who tell- me-will poem-the by heart
Who will tell me the poem by heart?

b. Cine ce spusu-mi-a?
who what told me-has
Who has told me what?

(40)

In Bulgarian, which also allows the fronting of multiple Wh-elements, Wh-movement and LHM do not combine. Because LHM is triggered by the clitic-like nature of the Aux requiring a first constituent in CP for support, and a Wh-phrase or another preposed phrase such as a NP subject
or object satisfies the first constituent requirement, LHM as a last recourse rule is unnecessary and does not apply. Rivero (1993) accounts for this situation in terms of Economy of Derivation.

The previous two phenomena indicate that LHM in Rumanian and Bulgarian shares the characteristics of I-to-C movement in V2 languages, as predicted by the proposed analysis. This is because in the perfect, the nonfinite V moves to an empty C in Rumanian and Bulgarian, while the finite Aux must move into that position in Dutch or German, as in *Gestern hat Marie das Buch gelesen* (see Rivero (1993) for why LHM cannot apply in V2 languages). The inverted Bulgarian/Rumanian V is ungrammatical in (37b) and (38b) for the same reason a finite Aux is impossible in that position in Dutch or German: the C slot is filled by the overt complementizer. Since the additional Spec of CP position is realized by adjuncts within a single CP maximal projection, there is no additional C available as landing site, as would be the case with CP recursion.

The third phenomenon that supports the claim that the nonfinite V is in C concerns negation. Inverted constructions cannot be negated in languages such as Bulgarian and Rumanian where NegP is located higher than Aux (for those with a lower NegP see Rivero (1991b)). This is exemplified by the deviant variants of (33b) and (35a) in (41a,b) and (42a,b) respectively. In negative patterns in Bulgarian and Rumanian, V must remain in situ, as in (41c, 42c):

(41)a. *Nu spusu-mi- s- a. (Rum)
   *not told- me-SE-impersonal-has

   *told- not-me-SE-impersonal-has

c. Nu mi s- a spus.
   *not me SE-impersonal-has told
   I was not told.

(42)a. *Ne pročel sūm knigata. (Bul)
   *not read I-have book-the

b. *Pročel ne sūm knigata.
   *read not I-have book-the

c. Ne sūm pročel knigata.
   *not I-have read book-the
   I have not read the book.
To account for the above patterns, I assume that NegP is a barrier (Kayne 1989, Pollock 1989). Thus, in the Balkan structure which is of the form \([\text{CP} \, \text{C} \, [\text{NegP} \, \text{Neg} \, \ldots \, [\text{VP} \, \text{V}]])\), NegP will block the path to C and prevent the nonfinite V from reaching that position. From this perspective, (41a, 42a) are deviant because there is no NegP node higher than C. The structures in (41b, 42b) are disallowed because of the barrier effect of *null* in the path spusu/proćel must cross to reach C.

In Section 2, I argued that Rumanian intensifiers attach to V°, so in (43) the participle spusu is the V which moves to C, with mai and și attached to it.

(43) Mai ști spusu-i-am [sâ- si vadă de drum]. (R)  
more still told-him-have-ls SUBJ-himself see-3s of way  
I also told him to mind his own business!

(44) \([\text{CP} \, [c \, [c \, \text{mai ști spusu} \, i-am \, [\text{VP} \, [v \, [v \, t] \, [\text{CP} \, sâ-si vadă de drum]])]])\]

Also, as the analysis of (43) given in (44) shows, the head of the main VP bypasses the finite Aux and the pronominal clitic, and the clausal complement shown in brackets remains in situ. This word order motivates not only LHM, but also my general assumptions about Balkan pronominal clitics and language-specific proposals for R clitic adverbs, since the Rumanian pronominal is with the auxiliary in T/Agr as in other Balkan languages but the Rumanian adverbs are clitic heads with the nonfinite verb in C, in contrast to adverbs in other Balkan languages.

There are two main reasons to reject the idea that the auxiliaries involved in LHM are specifiers, as in (45).

(45) \([\text{VP} \, \text{AuxP} \, [v \, \text{V}^0]])\]

First, as I show in Section 3.4 in a discussion of the ECP, not only main verbs but also auxiliaries may undergo head movement to the c-commanding C position. Therefore, such auxiliaries must be heads, just like main verbs. Second, in Old Romance, the finite auxiliaries crossed by the nonfinite verb in LHM also serve as landing site for the incorporation of the nonfinite verb (or short head movement of V to Aux) if LHM does not apply (Lema 1989, 1992; Lema and Rivero 1989, 1991, 1992). From this perspective, too, auxiliaries are c-commanding heads that may attract their complement verb, and not specifiers.
3.2. *LHM vs. VP-Preposing*

In the previous section I have proposed a new variety of head movement for nonfinite Vs over a finite Aux, leading to a V + Aux sequence. The recent literature makes reference to several processes having as output partially similar word orders, so it becomes important to show how LHM differs from these other processes. Here, I concentrate on the differences between LHM and VP-Preposing, the better known fronting process. However, LHM is also different from Stylistic Fronting and adjunction of $V^0$ to either I' or IP, as discussed in Rivero (1991b).

In the previous section we saw that Bulgarian and Rumanian LHM is restricted to affirmative sentences, given that movement across Neg is blocked. In contrast to LHM, VP-Preposing is possible across a negation. In fact, in many languages it is often the case that negative VP-Preposing patterns sound more natural than affirmative ones. The contrast as to negation provides a first argument against a VP-Preposing treatment of the LHM patterns presented above. Under a VP-preposing analysis, the order V + Aux in (34) – *Pročel sūm knigata* – could be obtained by scrambling the object NP *knigata* out of the VP, and subsequent phrasal movement of the remains of the VP to the Spec of CP. Webelhuth (1985), Koster (1987), and den Besten and Webelhuth (1990), among others, have proposed this analysis for Germanic examples where the nonfinite V precedes the finite Aux, as in (46).

\[\text{(46) } \text{Gelezen heeft hij het boek niet.} \quad \text{(Dutch; Koster 1987)}\]

\[\text{read has he the book not}\]

He has not read the book.

LHM and VP-Preposing also differ in other respects besides negation: the types of auxiliaries licensing each process, and the target of the process. In LHM languages two classes of auxiliaries can be distinguished on the basis of several independent properties (Rivero, to appear). One of the classes, which I label ‘functional’, licenses LHM while the other, which I label ‘lexical’, licenses VP-Preposing. On the one hand, functional auxiliaries (a) are poor in lexical content, amounting to tense-markers in the shape of stems rather than affixes, (b) lack selectional properties, (c) are phonologically weak in the sense of being clitics, and (d) license LHM and/or incorporation (the short head movement of V to Aux forming a complex word in Old Romance). The final property the functional class shares is that it systematically disallows VP-Preposing, as seen in (47) for Bulgarian and Rumanian.
V-Movement in the Languages of the Balkans

(47)a. *Petur iskaše da pročete knigata i [VP pročel knigata]

Peter wanted to read book-the and read book-the

(toj) {e/beše}.

(he) has/had

b. *[VP Citi cartea] Maria va. (R)

read book-the Mary will

On the other hand, the class of auxiliaries which I label ‘lexical’ (a) are richer in semantic content, resembling certain verbs of propositional attitude, (b) may show selectional properties in relation to their complement, (c) are not phonologically weak, (d) license VP-preposing (when they take such a complement), and (e) disallow LHM.

The difference between lexical and functional auxiliaries is general for LHM languages. It is displayed in a particularly clear way in Czech (see Rivero (1991b, to appear) for further details). The Czech perfect auxiliary *jem ‘I have’ is functional, with the semantic content of a past tense marker. It lacks selectional restrictions and takes both perfective and imperfective VPs as complements. It is phonologically weak – an enclitic which cannot be clause-initial. It licenses LHM and disallows VP-Preposing like its Bulgarian and Rumanian counterparts. By contrast, the Czech future auxiliary *budu ‘I will’ is lexical because it has selectional properties and requires an imperfective VP (i.e. with an unprefixed V) as complement. It is not an enclitic and can therefore be clause-initial. This auxiliary licenses VP-Preposing rather than LHM, like Czech modals. 8

8 A reviewer objects to the functional/lexical dichotomy, stating that it is difficult to see why the Rumanian perfect would be functional, as opposed to French avoir. I do not know whether avoir is lexical or functional, and Rumanian does not have full LHM, which gives it an unclear status typologically. However, the properties of Italian perfect avere, also found in Old Romance LHM languages, provide a possible answer to why perfects may be functional in some languages but not in others. The Italian perfect allows VP-preposing as in [Offerte a sua moglie] credo que Mario ancora non le abbia t ‘I think that Mario had not offered them to his wife yet’ (Longobardi 1985), so it should be lexical in my account. However, another property distinguishes it from the Rumanian perfect: the difference between avere and essere, which has no equivalent in Rumanian. This last characteristic can be interpreted as an indication that avere and essere impose selectional restrictions and are similar to the Czech future auxiliary discussed in the text. Thus, while the Rumanian perfect is basically a past tense marker, as in Slavic, and counts as a functional category, Italian avere plays a richer role in relation to its complement so it is closer to a regular verb or to being lexical, and it also licenses VP-Preposing. Old Romance perfects shared these properties (Lema and Rivero 1991), were not enclitics, and did not allow LHM (nor incorporation).

This reviewer suggests that the crucial factor in LHM is that the auxiliary is a clitic, which is the traditional analysis for Slavic. In my opinion, this characteristic derives from the functional nature of the Aux, the primary factor. Under the clitic view it is accidental that in languages with LHM the process always correlates with a distinct semantic class of...
Turning to Bulgarian from this perspective, it can be concluded that this language makes similar distinctions among auxiliaries but in a less evident way. In Bulgarian functional auxiliaries take VP complements but lexical ones take clausal complements. First, the Bulgarian perfect employs a functional auxiliary that shows all the mentioned properties: it is a marker of past tense, it takes any type of VP as complement, and it is an enclitic which allows LHM but not VP-Preposing. Bulgarian has no (finite) future auxiliary, but its modals are lexical and have the selectional property of taking subjunctive complements. They are never enclitic; they disallow LHM, and they allow the fronting of their clausal complement, which is a type of X$^{\text{max}}$-Preposing equivalent to VP-Preposing in the relevant sense. In conclusion, LHM and X$^{\text{max}}$-Preposing auxiliaries differ in LHM languages, which allows us to distinguish between the two processes.

A second difference between LHM and VP-Preposing is that their targets contrast, since VP-Preposing must affect the phrase containing the verb with argument structure, as pointed out in the literature. This is not a property of LHM. To see this, consider the Bulgarian Renarrated Mood used to report events not witnessed by the speaker. Tenses for this mood are based on the perfect and are ‘perfects of perfects’, with sequences of parallel auxiliaries. For example, in (48a) below the Emphatic Renarrated Present contains the present of have followed by the participles of have and read. In (49a) the Emphatic Renarrated Future is formed by present have, have and a future auxiliary as participles, and the clausal complement with the main finite verb. As shown in (48b, 49b) and the tree in (50), LHM may affect the Aux immediately after the perfect. LHM may also affect a more remote head, as in (48c) and (49c), but this should not be confused with VP-Preposing, which is deviant in this context, as shown in (48d).

(48)a. Az sům bil četjal knigata. (Bul)

I have + Is have + Pcpl read + Pcpl book + the

(According to someone) I am reading the book.

b. Bil sům četjal knigata.
(48)c. Četjal sům bil knigata.

   d. *Četjal knigata sům bil.

(49)a. Nie sme bili šteli da
we have + 1pl have + Pcpl will + Pcpl M
četem knigata. (Bul)
read + Pres + lp book-the
(According to someone) we will read the book

   b. Bili sme šteli da Četem knigata.

   c. Šteli sme bili da Četem knigata.

(50)

As stated, VP-Preposing affects the phrase containing the verb with argument structure as in German (51a) and Rumanian (51b), which certain speakers find ungrammatical.

(51)a. [vP Einen Kuchen backen] wird er doch wohl können.
      a cake bake will he presumably can
      (German; Webelhuth 1985)
      Presumably he can bake a cake.

   b. [vP Citi cartea] nu am putut.
      read book-the not have can
      I have not been able to read the book.
In summary, (a) VP-Preposing can apply over a negation, while LHM cannot, (b) LHM need not affect the verb with argument structure, and (c) LHM applies with functional auxiliaries exclusively, which disallow VP-Preposing.

VP-Preposing is beyond the scope of this paper, but differences between this process and LHM could follow from the lexical/functional distinction as applied to auxiliaries. In this sense, VP-Preposing could be $X^{\text{max}}$-movement to an A-bar position, licensed by a lexical Aux which, similar to other lexical categories such as verbs of propositional attitude, theta-marks its complement; then this fronting could have a freedom of movement comparable to that of other theta-marked complements. On the other hand, LHM is licensed by auxiliaries which, like other functional categories, do not theta-mark their complement; so antecedent government by the moved V is required, giving this fronting a much more local character than VP-Preposing, as discussed in Section 3.4.

3.3. The Effect of $M$ on LHM

When the modal layer $M$ in the Balkan clause is lexically filled, Long Head Movement does not apply. Since the movement from V to C in structures like (52) must bypass both the finite Aux and $M$, it is too long and must be blocked:

\[(52) \ [\text{CP} \ C \ [\text{MP} \ M \ [\text{T/AgrP} \ T/Agr \ [\text{AuxP} \ \text{Aux} \ [\text{VP} \ V]]]]].\]

Tenses meeting the requirements for LHM, but which fail to invert because of lexical material in $M$, are the Rumanian past subjunctive and the Bulgarian future perfect, among others. The Rumanian past subjunctive is formed with the modal particle $să$, followed by the auxiliary $fi$ ‘be’ as Aux and a participle as V, as in $să \ fi \ adunat$ in (53) from Mallinson (1986, p. 291). The example shows that subjunctives are not restricted to embedded contexts, and the same is true in other Balkan languages. If subjunctives were limited to non-root environments, LHM would be impossible in them for other reasons.

\[(53) \ Să \ fi \ adunat \ el \ atișîa \ bani? \quad \text{(Rum)} \]

SUBJ be collected he so-much money

Could he really have collected so much money?

The inverted counterpart of (53) is easily imagined but ungrammatical: $*\text{adunat } să \ fi$. In my proposal, $adunat$ is blocked in its movement to C by the intervening $să$ which prevents this V from landing in $M$, as shown
schematically in (55) below. If Rumanian să is considered a complementizer, as in the references in fn. 2, similar results obtain, but the parallelism with Bulgarian šte, to be demonstrated next, is lost.

The Bulgarian future perfect is similar to (53). It contains šte under M, followed by the finite auxiliary and the main V as in (54). In this context, LHM is not possible either, as indicated in (55).

(54)a, Šte sūm pročel

\[ FUT \text{ have-Pres-Is read} \]

\( \text{I will have read.} \)

b. *Pročel šte sūm.

(55)

\[
\begin{array}{c}
\text{CP} \\
\text{C} \\
\downarrow \\
\text{MP} \\
\downarrow \\
\text{M} \\
\downarrow \\
\text{T/AgrP} \\
\text{R: să} \\
\text{B: šte} \\
\downarrow \\
\text{AuxP} \\
\text{fi} \\
\text{Aux} \\
\text{sim} \\
\text{Aux} \\
\text{VP} \\
\text{adunat} \\
\text{pročel} \\
\end{array}
\]

The parallel effect of să and šte on LHM further motivates the hypothesis that modal particles are in M and head MP, as argued in Section 2 on the basis of word order, clitics, and negation.

Under this approach, both the matrix and embedded sentences in B(56) show no LHM when M is filled. In (56a) the material in M will block the process; in (56b) there will be the double effect of a full M and a full C. Thus, (56) represents the only possible word order for the verb. Šte co-occurs with the complementizer in embedded clauses, so it is not in C; for Rumanian să the situation is often less clear (see fn. 2).
(56)a. Šte sům pročel knígatu.

FUT have-Pres-Is read book-the

I will have read the book.

a'. \([CP \epsilon [MP šte [T/\text{AgrP} sům, [AuxP t, [VP pročel knígatu]]]]]\)

(56)b. Znam če šte sům pročel knígatu.

I know that FUT have-Pres-Is read book-the

I know that I will have read the book.

b'. \([CP če [MP šte [T/\text{AgrP} sům, [AuxP t, [VP pročel knígatu]]]]]\)

The above discussion has shown that LHM is blocked by (a) a c-commanding Neg that stands between CP and MP and heads NegP or (b) a c-commanding modal particle in $M^0$ heading MP. Thus the effect of negation and modal particles on LHM is identical.

3.4. LHM and the ECP

LHM violates the Head Movement Constraint (HMC) discussed in (Travis 1984, Baker 1985a, 1988, Chomsky 1986). This constraint requires that movement of a $X^0$ be to the position of the immediately dominating head $Y^0$, as in (57a), but disallows movement to $Z^0$, as in (57b).

\[(57)a.\]  

\[
\begin{array}{c}
\text{ZP} \\
\text{YP} \\
\text{YP} \\
\end{array}
\]

\[
\begin{array}{c}
\text{Z} \\
\text{Y + X}_i \\
\text{XP} \\
\end{array}
\]

\[
\begin{array}{c}
\text{t}_i \\
\end{array}
\]

\[(57)b.\]  

\[
\begin{array}{c}
\text{ZP} \\
\text{YP} \\
\text{YP} \\
\end{array}
\]

\[
\begin{array}{c}
\text{Z + X}_i \\
\text{Y} \\
\text{XP} \\
\end{array}
\]

\[
\begin{array}{c}
\text{t}_i \\
\end{array}
\]

Baker (1985a, 1988) and Chomsky (1986) argue that the HMC reduces to the ECP, and Chomsky (1991) considers it redundant. For him, when the English perfect auxiliary raises past Neg in (58), the movement violates the HMC but complies with the ECP. The ECP is satisfied because the perfect auxiliary raises to AgrP, marks the original trace [$+\gamma$], and bypasses Neg. The intermediate offending trace in AgrP is then deleted in LF.
(58)a. John has not read the book.

   b. John \([_{TP \text{ hasi} \text{ [NegP not [_{AgP t_i \text{ [t_i read the book}}]]]}}]\)

The approach I adopt for LHM is similar, not in implementation but in spirit. In LHM, the step where \(V^0\) bypasses \(Aux^0\) also violates the HMC, but the derivation complies with the ECP. LHM satisfies the ECP because the auxiliary as head governor is transparent to the antecedent-government relation established between the V moved to C and its trace below the Aux. For Chomsky, IP is defective and, unlike other maximal projections, does not count as a barrier, so it is unclear to him (Chomsky 1986, p. 70) why a head cannot raise beyond INFL to land in \(C^0\), resulting in structures like *Been, I have ti, reading the book. In fact, the previous discussion has shown that LHM constructions represent precisely this type of situation when the intervening head is a functional Aux, or one which does not theta-mark its complement.

Consider the following version of the ECP from Chomsky (1986, p. 17):

(59) A nonpronominal empty category must be properly governed

(60) \(\alpha\) properly governs \(\beta\) iff \(\alpha\) theta-governs or antecedent-governs \(\beta\).

In my view, LHM corresponds to (57b) and represents the case where the intervening auxiliary is a head governor for the trace the verb leaves when it moves to the complementizer position, while the verb itself is the antecedent governor. The auxiliary does not theta-mark its complement, so it is not a theta governor. The moved verb as antecedent governor becomes the essential item to satisfy this version of the ECP.

In familiar cases of head movement, the head and the antecedent governor are the same item. In phrasal movement, head governors and antecedent governors are different items. Likewise, in LHM head and antecedent governors are different. The role of the antecedent governor is crucial because LHM proceeds out of a complement category, so there will always be a head governor for the trace of LHM. However, if the antecedent-government relation between the verb in the complementizer position and the trace in the VP is disturbed, the resulting structures are ungrammatical, as shown above. The antecedent-government relation is disturbed when a negation or a modal particle intervenes between moved verb and trace. Therefore, the core idea which must be preserved in an account of LHM is that the intervening Aux does not block antecedent government of the trace by the V in C, so that the ECP is not violated. Intuitively speaking, the functional Aux is transparent to LHM, and does not count
when computing the antecedent-government relation between a moved head and its trace, while negation and modal particles do. This suggests that Relativized Minimality (Rizzi 1989), originally proposed for antecedent-government relations in the case of phrases, must be extended to heads.

In the unpublished 1988 version of this paper, I relied on the idea that V could cross Aux because the first was a lexical head while the second was a functional head, with Relativized Minimality sensitive to this distinction. However, since Neg is considered a functional head but cannot be crossed in LHM, this idea cannot be right, and Lema and Rivero (1989, 1992) did not pursue it. Here I adopt Roberts’ proposal (1992, Ch. 1) that there are two types of heads, which he dubs A-bar vs. A-heads (see also Holmberg and Platzack 1988). I also use Roberts’ modification of Rizzi’s Relativized Minimality, the clauses in bold in (61).

(61) W is a typical potential antecedent governor for Z if

i. in an A'-chain: for Z = XP, W is an A'-specifier c-commanding Z;
   for Z = X°, W is an A'-head c-commanding Z.

ii. in an A'-chain: for Z = XP, W is an A'-specifier c-commanding Z;
    for Z = X°, W is an A-head c-commanding Z.

With Roberts, I assume that LHM to C is A-bar movement, so the movement can cross intervening A-heads without disturbing the resulting antecedent-government relation between the item in C and its trace. However, if an A-bar head is crossed, the ECP is violated as the antecedent-government relation is disturbed.

As we shall see next, Balkan A-bar heads correspond to lexical items which are traditionally considered operator-like in semantic and syntactic discussions. If heads are classified into different types according to their features, head movement is sensitive to some of those lexical distinctions.

Having stated how the ECP and Relativized Minimality combine in LHM, let us return to how these conditions affect the different patterns of the previous section. First, consider how the finite Aux is crossed by V in (62):

(62)a. Pročel süm.  
   I have read.
With Chomsky (1986), I assume that finite V-raising to T is A-movement, and that T can be considered an A-head, perhaps because it is similar to a name and not a bearer of scope (Partee 1973, 1984; Enç 1987; Guéron 1990). The auxiliary itself is a functional one in that its properties are similar to those of T, therefore, it counts as an A-head. From this perspective, the Tense/Agr/Aux unit forms an $A^0$-complex which can be bypassed by the A-bar movement to C.

As illustrated in (63a), movement over NegP does not result in an antecedenti-government chain because the intervening Neg is an A'-head. Negation is a quantifier-like item with scopal properties. The same conclusion applies to movement over particles in $M^0$, which have the lexical characteristics of traditionals modal operators, as in (63b). The crossing of negation and modal items is shown in (63c).

(63)a. *Pročel ne sūm.
   b. *Pročel šte sūm.
   c. * [ X_i [ Neg/M [ Aux [ t_i ] ]] ]

Series of auxiliaries suggest different options open to further research and comparison with other LHM languages, such as Old Romance on the one hand and Slavic on the other. Consider the alternations in Bulgarian LHM in (48), repeated now as (64). Here, we seem to have a choice as to the head which fronts (see Rivero (1991b) for further discussion of other Slavic languages).

(64)a. Az sūm bil četjal knignata. (Bul)
   I have + Is have + Pcpl read + Pcpl book + the
   (According to someone) I am reading the book.
   b. Bil sūm četjal knigata.
   c. Četjal sūm bil knigata.

If these Bulgarian auxiliaries are all temporal in the sense that they form the present of the Renarrated Mood, then they are A-heads and can be bypassed in LHM, giving the pattern in (64c), as illustrated in (65d).
Under this view, nothing prevents the fronting of bil in (64b). However, if only the finite Aux is an A-head, LHM will necessarily move the Aux adjacent to the inflected one, not a more remote item, giving the pattern in (64b) as the only grammatical option, and excluding (64c), as illustrated in (65b).

(65)a. \[
\begin{array}{c}
\text{[CP } X_j \text{ [AuxP Aux [AuxP Aux [XP t_i]]]]} \\
\text{A'} \\
\text{A} \\
\text{A}
\end{array}
\]

(65)b. \[
\begin{array}{c}
\text{*[CP } X_j \text{ [AuxP Aux [AuxP Aux [XP t_i]]]]} \\
\text{A'} \\
\text{A} \\
\text{A'}
\end{array}
\]

Old Spanish differs from Bulgarian in exactly this respect. In Old Spanish, LHM patterns are always as in (64b) and never as in (64c) (Lema and Rivero 1991). The difference seems to hinge on the nature of the Romance sequence of auxiliaries: the first one may be a temporal marker, but the following ones must contribute to the modal characteristics of the clause, as in Han debido poder hablar ‘They must have been able to speak’. In this sense, the strings of auxiliaries of Romance are very different from the sequences that make up the present of the Bulgarian Renarrated Mood. In view of their modal characteristics, Old Spanish nonfinite auxiliaries count as A'-heads and block antecedent government in LHM. As a result, the pattern in (65a) must have been deviant in Old Spanish, in contrast to what is allowed in Bulgarian.

In all LHM languages, the process is impossible across verbs with argument structure. From this perspective, it can be concluded that theta-assigning properties confer A-bar status to a head. The auxiliaries I have labeled ‘lexical’ in the previous section, that is, Slavic and Balkan modals, resemble other A-bar heads as to their operator-like content, and most noticeably Balkan particles, which block LHM. Also, these lexical auxiliaries share properties with verbs with argument structure in that they allow their VP complement to move in ways reminiscent of theta-marked complements. Thus, it is not surprising that lexical auxiliaries disallow LHM, since they count as A-bar heads from either perspective.

To summarize, in this section I have shown that LHM complies with the ECP in view of a version of Relativized Minimality sensitive to different types of heads.

4. IMPERATIVES

This section deals with imperatives in Albanian, Modern Greek, and Rumanian. Modern Greek and Rumanian imperatives share (a) a special
morphology and (b) syntactic properties which show that their V must necessarily appear in C. These two characteristics fall together if the item with imperative morphology is in C and attracts V. Albanian differs from Modern Greek and Rumanian in (a) not displaying a homogeneous morphology for imperatives and (b) not having V always in C. In addition, LHM applies in Albanian imperatives only when the V stem is not strictly adjacent to the imperative affix. These Albanian characteristics follow if the imperative affix is generated in Agr/T and attracts V or if it allows LHM of V to C if no barriers are crossed, but only functional heads such as the Aux of Section 3.

4.1. True vs Surrogate Imperatives in Modern Greek and Rumanian

MG and Rumanian 'true' imperative and 'surrogate' imperative constructions have very different syntactic properties, which follow from the hypothesis that the 'true' imperative verb moves to C (den Besten 1983) while the 'surrogate' one does not. I label as 'true' imperatives verbs identifiable by a morphology not shared by the same person in any other tense in the system, as in (66). Usually, true imperatives are restricted to second person. In contrast, the verb in a 'surrogate' imperative is identical in morphology to the same person of another tense, usually a present tense as in (67a,b) or an infinitive as in (67c). Surrogate imperatives need not be restricted as to person.

(66)a. Ghrápse!
write-Implv-2s
Write!
(MG)

b. Čintá!
sing-Implv-2s
Sing!
(Rum)

(67)a. Na ghrápanse!
PRT Pres-2p
Write!
(MG)

b. Să cinti!
PRT Pres-2s
Sing!
(Rum)
True imperatives share the characteristics of LHM constructions, which follows from the proposal that their V must move to C. Surrogate imperatives, by contrast, show the syntactic properties of the tense that gives them shape. For instance, in the present subjunctive in (67a,b), V moves to T/Agr, not to C, in the Balkan clause.

True imperatives are reserved for root environments. In embedded contexts, surrogate imperatives are grammatical while true imperatives are not, as shown in (68). This property follows if V must move to C in true imperatives.

(68)a. Ti- am spus să cînti.  
    you I-have told PRT sing-Pres-2s  
    I told you to sing.  
    (Rum)

b. *Ti-am spus să cîntă.

Second, MG and Rumanian true imperatives cannot be negated, while surrogate imperatives are unrestricted in this respect. Joseph and Philippaki-Warburton (1987, p. 16) point out that none of the MG negations give grammatical results with a true imperative, as in (69).

(69)a. *Dhen ghrăpse!  
    Do not write!  
    (MG)

b. *Mi(n) ghrăpse!

c. *OXî ghrăpse!

Rumanian grammars often state that negation requires a switch in the shape of the verb: from the special form to a present subjunctive or the infinitive (or from true to surrogate imperative in my terms). Likewise, a present subjunctive combined with mî(n) is used for MG negative imperatives. This second property follows from the assumption that NegP is a barrier V must cross on its way to C, leading to deviance.

In true imperative constructions, clitics are obligatorily postverbal, as in (70a); in surrogate imperatives, they are necessarily preverbal, as in (70b).

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9 Similar comments apply to the imperatives of Castilian Spanish.
V-MOVEMENT IN THE LANGUAGES OF THE BALKANS

(70)a. Dă- mi cartea! (Rum)
give-Impv-2s me book-the
Give me the book!

b. Să -mi dai cartea!
PRT-me give-Pres-2s book-the
Give me the book!

This property follows if the clitics are in T/AgrP in the Balkan clause and the true imperative V moves to C to occupy the same relative location as the nonfinite V of the LHM construction. Then the clitics appear internal to the verbal complex in LHM, because the finite auxiliary is in T/Agr. In contrast, in true imperatives only one V moves, and it must reach C, causing the clitics to be strictly postverbal.

Finally, in the present subjunctive as surrogate imperative in (70b), să is in the M-layer and the finite V raises into T/Agr – a position lower than the clitics in the proposed Balkan clause – but can proceed no further. In this context, a reviewer mentions inverted subjunctives, as in (71b), where the subjunctive V preposes across the clitic in the absence of să, whereas it must remain after the clitic when să appears, as in (71a).

(71)a. Să se duca unde vrea. (Rum)
PRTC Refl go-3s where want-3s
Let him/her go where he/she wants.

b. Duca-se unde vrea.

For Rivero (1989) such patterns illustrate another instance where lexical content in the modal layer blocks V-raising. The reviewer suggests a different answer, which I find unsatisfying: V-preposing in (71b) is able to delete or prevent the generation of să, while the particle has no blocking effect on the preposing per se.

In conclusion, imperative movement is head-to-head raising to C, like V-movement in the Rumanian/Bulgarian LHM construction. However, in imperatives only one V moves, and the HMC is obeyed. Within the general structure of the Balkan clause, V moves to T/Agr to pick up person, then vacuously to M if present and finally to C. If the functional MP-layer is not projected unless it contains lexical material, then V moves from Agr/T to C in one step. Thus for Modern Greek (72), the analysis is as in (73):

(73) Ghrápse to!
Write it! (MG)
In brief, I have argued that Modern Greek and Rumanian true imperatives (a) show a special morphology and (b) require obligatory movement of \( V \) to \( C \). These two properties fall together if the true imperative affix is generated in \( C \) as a morphological item with a fixed illocutionary effect and must attract the verb for morphological support.

4.2. Albanian Imperatives and LHM

This section has a double aim. On the one hand, it discusses the differences between Albanian and Modern Greek/Rumanian imperatives in relation to \( V \)-movement and suggests that contrasts follow from the different positions of the imperative affix. On the other hand, it deals with Albanian imperatives that have an affix not strictly adjacent to the verb and considers them the result of Long Head Movement. This movement complies with the same syntactic conditions as the movement across an auxiliary discussed in Section 3. It is also proposed that a similar type of LHM is found in Northern Greek imperatives and in Fiorentino subject-verb inversions. Although, these patterns raise important questions for the morphology-syntax interface, such questions are beyond the scope of this paper and are not discussed.

I will first outline the general characteristics of these new LHM constructions, before I consider Albanian imperatives in detail. In the three LHM
cases I have mentioned, a head in the shape of $V^0$, (Albanian, Northern Greek) or $\text{Aux}^0$ (Fiorentino) moves to $C^0$. This head bypasses an affix, rather than an Aux, across an intervening pronominal clitic which surfaces like an infix, as shown in (74).

(74)a.  

$$\begin{array}{c}
\text{CP} \\
C^0 \\
\text{T/AgrP} \\
\text{T/Agr} \\
\text{AFFIX} \\
\text{XP} \\
\{V^0\} \\
\{\text{Aux}^0\}
\end{array}$$

b.  

$$\begin{array}{c}
\text{CP} \\
\{V_i\} \\
\{\text{Aux}_i\} \\
\text{T/AgrP} \\
\text{T/Agr} \\
\text{AFFIX} \\
\text{XP} \\
t_i
\end{array}$$

In other words, although clitics generally precede or follow $V$ and its affix(es) in these languages, in these particular constructions involving movement to $C^0$, a word of the type $V^0 + \text{CL} + \text{Affix}$ is found instead. Formally, the derivation in (74b) shows the characteristics for LHM given in Section 3 in that the head immediately below the functional $T/Agr^0$ moves to $C^0$. It differs from LHM in that the intervening head is an affix or morphologically bound item, rather than an Aux. I suggest that this type of ‘word’ is formed syntactically after LHM, as follows. $V$ moves to $C$ across $T/Agr$ and the clitic. Clitics have lexical entries which specify that they must become syntactic dependents of a $[+V]$ item by S-structure. Thus, in (74b) the clitic must encliticize on the $V^0$ or $\text{Aux}^0$ which has moved to $C^0$, and forms the complex on which the affix must lean. The derivation in (74b) violates the HMC, like the derivations in Section 3, but complies with the ECP in the way discussed in that section.

With this background in mind, let us consider Albanian imperatives and their differences to the MG/Rumanian constructions of the preceding section. Albanian imperatives reveal a more complex situation in their syntax and morphology than do MG/Rumanian imperatives. First, in Albanian the distinct morphology of true imperatives is restricted to only one person, namely 2nd sg. This person appears with postverbal clitics if affirmative, or preverbal clitics if negated, as in (75) (from Newmark et al., 1982):

(75)a.  

$$\text{Digi-} \text{e!} \quad \text{(Alb)}$$

*burn-Impv-2s it*

Burn it!
(75)b. Mos e digj!

not it burn-Impv-2s

Don’t burn it!

Pattern (75) also illustrates another difference: A true imperatives can be negated, which is not possible in MG and Rumanian. In other words, the true imperative V in Albanian remains in T/Agr in (75b), and does not cross the NegP barrier. This option does not exist in MG/Rumanian (or Castilian Spanish), where V must necessarily move to C but cannot cross Neg, with the consequence that true imperatives fail to be negated in these languages, as discussed.

A second complexity of Albanian imperatives is seen in the fact that in the 2nd pl. they share the morphology of the 2nd pl. present, as in trego-ni tell-Pres/2pl. ‘You (pl.) tell’ in (76a). Thus, there is no true imperative morphology in the Albanian plural, still another contrast with MG/Rumanian. Notice that example (76a) has the syntax of the MG/R surrogate imperatives, with tregoni in T/Agr, and no further movement of V to a position higher than the clitic, which remains preverbal. However, this Albanian imperative lacks the morphology of the surrogate MG/Rumanian forms since it lacks a modal head.

(76)a. Mos i trego-ni! (Alb)

not him tell-Pres/2pl

Don’t tell him!

b. Tregoj-i- ni!
tell- him-Pres/2pl

Tell him!

In summary, in contrast to MG and Rumanian, Albanian has a defective true imperative morphology, in which the imperative need not raise to C obligatorily. In the previous section, I placed the MG/Rumanian true imperative affix in C, proposing that the verb successfully raises to such a position only when no barriers are crossed. The patterns presented in this section support the view that Albanian imperative items are not generated in C but in T/Agr, that is, in the same location as the affixes whose shape they partially share. The verb is then able to raise to T/Agr and remain there as in (75b) and (76a), without reaching C. However, when no barriers intervene in the movement path, as in (75a) – in contrast to (75b) and (76a) – the inflected V continues to C, perhaps to trigger the appropriate illocutionary effect.
Finally, consider (76b). In Albanian affirmative imperatives, the clitic may intervene between stem and the person ending (j is an epenthetic segment). In terms of my analysis, V may raise to C in isolation, and leave the affix in T/Agr, if such long movement from V to C crosses no barriers: V + CL + Affix. I suppose that phonological cliticization of the pronominal -i- and the affix -ni on tregoj- provides morphophonological support and satisfies the S-structure or PF requirements of both affix and clitic. This last Albanian pattern provides additional motivation for the idea that the Albanian imperative affix is located in T/Agr, in contrast to what I am assuming for true imperatives in MG/Rumanian. When V° crosses the clitic and moves to C° in (76b), its path is identical to the one across intervening clitics in the Rumanian LHM construction, or equivalent Bulgarian structures.

Joseph (1988) reports similar phenomena in Northern Greek dialects of Thessaly and Macedonia. As seen in (77), imperatives show infix-like clitics just like Albanian imperatives.

(77)a. Pè-m- ti! 
_tell-me-2pl
(You pl.) tell me!

b. Do- m- ti! 
_give-me-2pl
(You pl.) give (to) me!

I assume that the account proposed for Albanian extends to these Northern Greek patterns, too.

Outside the Balkans, infix-like clitics are found in S(ubject) C(litic) I(nversions) in Fiorentino, a Northern Italian dialect, as discussed by Brandi and Cordin (1989), the source of the following examples. I will briefly establish the properties of Fiorentino SCI, before I turn to LHM over an affix. First, SCI inverts a subject clitic and a finite V, such as egli 'he'/tu 'you' and the Aux in (78a, 79a), parallel to what is found in French (78b, 79b):

(78)a. Icché ha-egli preparato? 
(Fiorentino)

b. Quoi a-t-il préparé? 
(French)

What has he prepared?
When did you arrive?

Second, SCI is limited to matrix contexts. In embedded questions, subject clitics must precede the Aux, as shown in (80). The same is true in French.

Thus, SCI is a root pattern, like the Balkan inverted constructions with LHM in Section 3 and the Balkan true imperatives in Section 4.

Based on Kayne (1983), Brandi and Cordin analyze SCI in (78a, 79a) as movement of the finite Aux ha/se' to C° after it raises to Infl. They provide extensive motivation that the subject clitic is in Infl, and propose that in (78a, 79a) Aux and clitic move to C° as a unit, even though the two surface in an order opposite to the one the treatment predicts, i.e. Aux+CL rather than CL+Aux (as seen in non-inverted orders such as (80b)). However if clitics are X°s but need not move with the Y° they attach to, as Kayne argues for Romance Clitic Climbing (1989), or if clitics attach to the Spec of either Agr or T, as argued for Balkan clitics in this paper, then it can be assumed that the Aux in (78a, 79a) moves to C° alone, leaving the clitic in situ. Under this alternative approach, which not only provides the correct surface order but preserves Brandi and Cordin's co proposal that Fiorentino subject clitics are not NP subjects, the Aux in (78a) moves as schematized in (81):

\[
(81) \quad [\text{CP} \text{ Icché} \ [c^0 \text{ ha} \ [\text{IP} \text{ egli t} \ [t_i \text{ preparato}]]]]
\]

In this respect, SCI and true imperatives are parallel, since the V° or Aux° moving to C° bypasses the clitic.

With this background, I now examine Long Head Movement over the affix in SCI. As Brandi and Cordin report, in inverted structures in the 2nd person plural, the subject clitic does not follow the inflected Aux, appearing instead in an infix-like position between Aux and affix, as in (82a). This order should be contrasted with the non-inverted interrogative in (82b), which is also grammatical, since SCI is optional in Fiorentino.
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(82)a. Icché ha(e)-gli- no fatto? (Fiorentino)
   what have- they-3pl done

b. Icché gl' hanno fatto?
   what they have-3pl done
   What have they done?

I propose that (82a) is derived through LHM of the Aux\(^0\) as head, bypassing the functional layer headed by the affix, where the subject clitic is attached. Under this proposal, the Aux in (82a) moves as in (83), identical to Albanian (74) in all relevant respects:

(83) \[
\begin{array}{l}
\text{[cp Icché [c} \text{[ha(e)i }[\text{T/AgrP gli [t/} \text{T/Agr}^0 \text{no] [t_i fatto]]]]]}
\end{array}
\]

As in Albanian and Northern Greek, this LHM lands a head in C\(^0\), crossing another 'defective' head which lacks theta-structure. Since the intervening X\(^0\) is an affix or morphologically dependent item, not an Aux, syntactic dependence is required for it. As in Albanian and Northern Greek, morphological support is obtained by enclisis of the clitic on the Aux in C, with the Agr/T marker -no affixing itself to this complex. The trace of LHM in (83) is antecedent-governed within the chain where the Aux in C is the first link, and the affix as functional item is transparent. Thus, the derivation goes against the locality restriction of the HMC but complies with ECP requirements.

In Sections 3 and 4, I have examined two kinds of head-to-head V-movement to C. The first operates in combination with finite V-raising, whereas the second involves only one V. However, they share the formal characteristics determined by C as landing site: (a) they are restricted to root environments, (b) they lack negative versions, and (c) their clitics follow the V that moves to C.

The next section examines a nonfinite raising which stops at the M-level, and its syntactic consequences, as exemplified by MG and Rumanian gerunds.

5. GERUNDS

In this section I argue that Balkan gerunds have the same structure as other Balkan clauses. However, in MG/Rumanian gerunds an affix is generated as head of MP, triggering V-raising into that position (cf. Baker
(1985b) and Milsark (1988) for English -ing in Infl). In contrast, Albanian displays particles heading MP; so the Albanian V cannot raise to M and must surface lower in the tree. The word order differences between MG/R and Albanian gerunds are determined by V-raising applying in the former, but not in the latter. Bulgarian lacks gerunds.

5.1. Modern Greek and Rumanian Gerunds

MG gerunds are always adjunct adverbial clauses, as in (84). Rumanian gerunds can function as nonsubcategorized adjuncts, as in (85a), but also as subcategorized complements as in (85b).

(84) EXondas timorithí, ta pedhiá éfighan. (MG)  
*having* *been-punished, the children left*

(85)a. Fiind văzută, Maria s- a rușiñat. (Rum)  
*being seen, Mary herself-has shamed*

*Being seen, Mary felt ashamed.*

b. L- am văzut pe Ion cîntînd.  
*him-have-Pres-1s seen to John singing*

*I saw John singing.*

Gerunds may have preverbal subjects in both MG and Rumanian as shown in (86). Therefore, they may show NPs as specifiers of MPs, like other clauses.

(86)a. To pedhi éXondas dhiavási ta vivliá óla, i  
*the child having read the books all, the*  
María éfighe. (MG)  
*Mary left*

*The child having read all the books, Mary left.*

b. Maria văzindu-mă ocupat, nu m- a deranjat. (Rum)  
*Mary seeing- me busy, not me-has disturbed*

*Mary seeing me busy, she did not disturb me.*

The negative counterparts of (86) show the negation between subject and gerund, as in (87a–c). Therefore, NegP is located higher than MP, as in other clauses. In Rumanian (87c) the clitic adverb mai stands between Neg and V, while a true adverb such as deja ‘already’ is excluded from
this position; in my analysis, *mai* forms a head unit with the gerund and head-moves with it as in other clauses, including imperatives, which I did not discuss from this perspective.

(87)a. To pedhí min éXondas dhiavási ta vivlia óla, . . . (MG)  
\textit{the child not having read the books all, . . .}

b. Maria ne- văzindu-mă occupat, . . . (Rum)  
\textit{Mary not-seeing-me busy, . . .}

c. Maria ne- mai lucrănd s- a îmbolnavit. (Rum)  
\textit{Mary not-more working herself has sickened}  
Not working anymore, Mary got sick.

As shown in (87b), clitics must follow the item with the gerundive affix. So in perfect gerunds, clitics follow the perfect auxiliary, as in (88):

(88) To pedhí éXondas ta dhiavási (ta vivlia óla), . . . (MG)  
\textit{the child having them read the books all, . . .}

Adverbs may precede the participle and follow the clitics, as in (89). MG incorporating adverbs have the expected properties and are not exemplified.

(89) EXondhas to piá kataferi, ţighe. (MG)  
\textit{having it already achieved, left-3s}  
Having achieved it already, he left.

These different properties follow if MG -ondas and Rumanian -ind are generated under M as affixes triggering V-movement. Under this analysis, the Aux or the V raises to T/Agr, and then moves from T/Agr to M, landing lower than NegP and higher than the clitics in T/Agr, as shown in (91) for the gerund in (90):

(90)a. O Yánis kratóndas to sfíXtá, . . . (MG)  
\textit{the John holding it tightly, . . .}
A similar treatment serves for the subcategorized Rumanian gerund, if perception verbs take IP complements open to Exceptional Case Marking, similar to English *I saw her singing a song*.

The various target positions of nonfinite V-raising account for the differences and similarities between LHM constructions, true imperatives, and gerunds, without recourse to other movement rules. On the one hand, none of these three constructions have grammatical variants with modal particles in M because the presence of lexical material in this node blocks V-raising. The clitics will not be preverbal in the relevant sense, as they are anchored to T/Agr and non-finite V-movements bypass that level. On the other hand, the three constructions differ as to the root/non-root dimension and the possibility of being negated. Gerunds are non-root constructions and can be negated, in contrast to LHM and true imperatives; this follows from V-raising to a position lower than C and Neg for the former, and movement to C for the latter.

Finally, the construction with inflected main verb which was the topic of Section 2 is not restricted to root environments and has preverbal negation, M-particles, and clitics, but no true adverb intervening between negation and (finite) V, as expected from V-raising into T/Agr.
5.2. Albanian 'Gerunds'

Certain Albanian participial clauses that I will label gerunds are interesting in view of the previous discussion. Consider the constructions in (92) below. (92a) corresponds to the nonsubcategorized MG/Rumanian gerunds and (92b) is similar to the subcategorized complement in Rumanian. (92c) is a progressive construction, with no equivalent in MG and Rumanian. For ease of reading, the participial clause appears in brackets.

(92)a. Mbasi [duke punuar rëndë gjithë ditën], Brixhida
   after [PRT work-Prtcpl hard all day] B.
   shkoj të flegë heret.
   went to bed early
   After working hard all day, Brigitte went to bed early.

b. Unë (e) pashë [Brixhiden duke kenduar].
   I (her) saw [Brigitte-Acc PRT sing-Prtcpl]
   I saw Brigitte singing.

c. Jam [duke e hangër mollën].
   be-Pres-Is [PRT it eat-Prtcpl apple-the]
   I am eating the apple.

I propose that the bracketed portions in (92) are clauses showing the by now familiar Balkan configuration with MP, as given in (93) for (92c), so they all share a common structure which is also seen in finite clauses.
If perception verbs take clausal complements open to ECM, Brixhiden in (92b) is the NP subject of the subcategorized clause and receives accusative from the matrix verb *pashê 'saw'. This gives motivation to the NP under MP in a tree like (93). The M-head contains a modal particle in all instances, the major distinction between these Albanian and the respective MG/Rumanian constructions. The particle is followed by clitics, if present, such as *e 'it' in (92c), doubling the object NP *mollën 'the apple'. So clitics are anchored to T/AgrP, as expected, and appear in the same location as in Modern Greek and Rumanian gerunds. The participle follows, showing the morphological shape of the participle in perfect tenses. Clearly, this V has no moved to M, since that layer has a particle and the pronominals are proclitic. However, I assume that it has moved to T/Agr because adverbs must be postverbal, as shown in (94) for a slightly different but parallel participial clause.

(94)a. Unë kam [për tê shkuar shpesh në Toronto]. (Alb)
   I have for to go-Prtcpl often to Toronto
   I {have to/will} go to Toronto often.

   b. *Unë kam për tê shpesh shkuar në Toronto.

Therefore, V raises to T/Agr obligatorily here, similarly to finite Vs. Alternatively, it could be assumed that the internal structure of the partici-
ple shkuar is that of a small clause (Kayne 1985 and later work), formed with an additional AgrP above the VP containing the adverb shpesh in its specifier: \([\text{AgrP} - \text{ar} [\text{VP} \text{ shpesh} [\text{v} [\text{v} \text{ shku-}]]]]\). Under this second view, V raises obligatorily to this intermediate AgrP, but cannot raise further to M, unlike MG and Rumanian gerunds.

In conclusion, Albanian gerunds are clausal and share the structure of finite clauses as to NP subjects, negation, and clitic position. Also, they are similar in phrase structure to MG/R gerunds, even though their surface order is quite different. The main difference between MG and R vs. A is that the former fill M° with an element which functions as affix while the latter has a modal particle in M° instead. On the one hand, the MG/Rumanian affix triggers V-raising, making V bypass the clitics and resulting in the word order (NP) + Neg + V+Affix + Clitics. On the other hand, V° does not raise to M° in Albanian since that position is filled, so the clitics remain preverbal: (NP) Particle Clitics V.

6. Concluding Remarks

The languages of the Balkans show a clausal structure which includes a modal item M heading a Modal Phrase and c-commanding Tense/Agreement, that is, the inflected verb. They also exhibit interesting types of nonfinite V°-movement, with properties which are absent in better-known European languages.

First, Bulgarian and Rumanian Long Head Movement patterns lead to the proposal that head movement is sensitive to Relativized Minimality, as they involve raising a nonfinite X° to C° across 'transparent' auxiliary heads. Constructions with similar properties are absent in Germanic, but they are common in Slavic and Breton and existed in Old Romance.

Second, Albanian, Modern Greek, and Rumanian imperatives also show movement to C°. In addition, some Albanian imperatives are parallel to Bulgarian and Rumanian LHM constructions in that their V° moves to C° across a 'transparent' bound morpheme. Outside the Balkans, Albanian has a formal counterpart in Fiorentino in this respect.

Third, Modern Greek and Rumanian gerunds involved movement to the M-layer, which is c-commanded by Neg but c-commands Tense in Balkan languages. In Albanian gerunds the M-layer is filled in a way which precludes V-raising to that position.
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