The Verb Complex in Romanian:
A Case Study on the Interaction between Morphology and Syntax[*]

Alexandra Teodorescu
University of Texas at Austin/McGill University

ABSTRACT

This paper focuses on the verbal domain in Romanian and discusses the theoretical implications of the generalizations that emerge. (Purely) syntactic analyses are shown to be at a disadvantage due to the special property of the so-called verb complex to behave as a single unit. While morphosyntactic accounts are more desirable, they too run into some problems. On the one hand, intensifiers and the perfective morpheme *fi* raise challenges to the Mirror Principle and the left-adjunction requirement on head movement. On the other hand, Romanian verbal inflection exhibits a number of syncretism and multiple exponence cases that cannot be easily accommodated by a theory in which morphological and syntactic structures are isomorphic.

1. INTRODUCTION

There has long been an interest in the interaction between morphology and syntax (Anderson 1992; Marantz 1984; Baker 1985, 1988; Lieber 1992; Janda & Kathman 1992; Halle & Marantz 1993 to name just a few), and various proposals have been made. Some hold that word formation and syntax should be seen as independent modules, each with its own constraints, while others argue that word formation should be subsumed under syntax and thus be subject to syntactic rules. In this paper I will focus on a topic that has been at the heart of this debate, namely the verbal domain. More specifically, I will present some data from Romanian and discuss how it bears on two types of verb movement analyses: (i) a (purely) syntactic one in the spirit of Pollock (1989), where there is no direct relation between morphology and syntax, and (ii) a morphosyntactic one in line with Baker (1985) and Belletti (1990), where morphological and syntactic structures are isomorphic, and complex verb forms are derived in the syntax.

Verb movement was initially conceived as a purely syntactic phenomenon that derived word order variation (Emonds 1978; Pollock 1989 and subsequent literature). For example, English and French differ in terms of how the verb is positioned with respect to negation, floated quantifiers and so-called VP adverbs. Rather than listing a set of possible word orders

---

[*] I would like to thank Lisa Green and Lisa Travis for very helpful discussion. Thanks also to Rajesh Bhatt and Bernhard Schwarz for their helpful suggestions. All errors are mine.

for English, and respectively French, Pollock suggested that the difference can be stated in terms of the verb moving (or not) past these elements. This kind of verb movement analysis is mainly concerned with word order effects, and verbal morphology plays little or no role.

Following work by Baker (1985), however, much of the research on verb movement became morphosyntactic in nature. He proposed that the order of affixation mirrors the order of the syntactic operations associated with those affixes. While this argument was made for grammatical function changing phenomena, Belletti (1990) extended it to the verbal domain and argued that verb movement can be seen as a morphosyntactic process by means of which complex verb forms are put together in the syntax.

Romanian represents an interesting case for the conceptualization of verb movement, as neither the first type of approach nor the second can be straightforwardly extended to this language. First, the sequences of elements making up the Romanian verb complex are syntactically opaque; they behave as a single unit, and consequently, word order tests do not provide any evidence for how functional projections inside the IP should be organized hierarchically. Secondly, verbal inflection has some quirks that cannot be easily accounted for under morphosyntactic analyses that assume a one-to-one mapping between morphology and syntax.

The paper is organized as follows: Section 2 introduces the Romanian verb complex and shows that the elements that compose it behave as a single unit. Due to this idiosyncratic property, purely syntactic analyses are shown to be at a disadvantage in explaining the Romanian data. In Section 3 I describe a problem with the left adjunction requirement on verb movement. Section 4 presents some cases of syncretism and multiple exponence in Romanian and discusses their implication for the interaction between morphology and syntax. Finally, Section 5 concludes.

2. A PECULIAR PROPERTY OF THE ROMANIAN VERB COMPLEX

In this paper the term 'verb complex' refers to sequences of elements that belong to the set in (1). Since the discussion presented here excludes non-finite verb forms, the list in (1) is characteristic only for forms that show person and number agreement, namely indicatives, conditionals, subjunctives and imperatives.

(1) Mood Particle,[1] Negation Particle, Pronominal Clitics, Auxiliaries, Intensifiers, Perfective Morpheme *fi*, Verb Stem, Aspect, Tense and Agreement Suffixes

The defining property of such sequences in Romanian is that they behave like a single unit; that is nothing can intervene between the elements that enter their into make-up, and the order in (1) is the only possible way in which they can be arranged with respect to each other (see also Alboiu 2000 and Dobrovie-Sorin 1994). The examples in (2) illustrate the adjacency requirement with indicative clauses; if the subject is placed inside the verb complex, the respective sentence is ungrammatical (2a). The same thing happens if the subject is replaced with a full fledged adverb as shown in (2b). The examples in (3) illustrate the ordering requirement.

---

[1] This refers to the subjunctive particle *să*.

(2) a. (Anca) [mi   l-a   (*Anca)   trimis] (Anca).
       Anca   CL.1S.DAT   CL.3S.M.ACC-AUX$_{PAST}$.3S   Anca   sent   Anca
       'Anca sent it to me.'
    b. (Probabil) [mi   l-a   (*probabil) trimis] (probabil).
       Probably   CL.1S.DAT   CL.3S.M.ACC-AUX$_{PAST}$.3S   probably   sent   probably
       'S/he probably sent it to me.'

(3) a. *Indicative*
       Nu i-l   va   mai fi   trimis.
       not CL.3S.DAT-CL.3S.M.ACC   AUX$_{FUT}$.3S more PERF sent
       'He will not have sent it to her/him anymore.'
    b. *Conditional*
       Nu i   l-ar   mai fi   trimis.
       not CL.3S.DAT CL.3S.M.ACC-AUX$_{COND}$.3S   more PERF sent
       'He wouldn't have sent it to her/him any more.'
    c. *Subjunctive*
       Putea   să   nu i-l   mai trimita.
       could.IMPF.3S SUBJ not CL.3S.DAT-CL.3S.M.ACC   more sent.SUBJ.3
       'S/he could not have sent it.'
    d. *Imperative*
       Nu i-l   mai   trimiteti!
       not CL.3S.DAT-CL.3S.M.ACC   more   sent.2S
       'Don't send it to her/him any more.'

Given this peculiar property of the Romanian verb complex, word order tests don't have much to say about the structure of the IP in Romanian. For example, we know from the positioning of VP adverbs like *often* and *seldom* with respect to the verb that, in Romanian, the verb always raises to the inflectional domain, independently of the presence of auxiliaries. According to Pollock (1989) such adverbs are base-generated at the left edge of the VP. Consequently, if the verb follows them it is still in its base position, within the VP. If the verb precedes them, this means that it has moved out of the VP to some functional projection. Since both in (4a) and (4b), the lexical verb precedes the VP adverb *des* 'often' we can conclude that in Romanian verb raising is obligatory.[2]

---

[2] Romanian also has some constructions where the lexical verb precedes the auxiliary. Rivero (2001) argues that they are instances of Long Head Movement.
(i) Bate-   l-   ar   Dumnezeu.
    punish- CL.3S.ACC- AUX$_{COND}$.3S God
    'God would/should punish him!.'

(4) a. *Lexical verb*
         Ion (*des) <u>mănâncă</u> (des)   fructe.
         Ion often   eats   often   fruit
         'John often eats fruit.'
     b. *Lexical verb and auxiliary*
         Ion (*des) ar   (*des) <u>mânca</u> (des)   fructe.
         Ion often   AUX_{COND}.3S   often   eat   often   fruit

Ion (*des) ar   (*des) <u>mânca</u> (des)   fructe.
Ion often AUX_{COND}.3S   often   eat   often   fruit
         'John would often eat fruit.'

However when we try to determine how high the verb moves and through which functional projections it does so, by means of other, more powerful adverb tests such as Cinque's (1999) universal adverb hierarchy, we don't get any results. Cinque (1999) argues that *all* adverbs occupy unique positions. For him, adverbs are the overt manifestation of different functional projections, and they obey a universal hierarchy. This amounts to saying that, crosslinguistically, adverbs are ordered with respect to each other in the same way. For example, *frankly* precedes *fortunately*, which in turn precedes *probably*, and so on, in all languages. Note that the universal hierarchy of adverbs consists of two ordered sequences: a sequence of 'high adverbs' and a sequence of 'low adverbs' and the first ordered sequence precedes the second one. Under this view, adverbs can serve as a fine grained test for how high and to which position the verb moves: if the verb follows a certain adverb it means that it is situated in a position below that adverb; if it precedes it, it means that the verb has moved past the adverb to a functional projection higher than the functional projection of the adverb.

Suppose that in Romanian, too, adverbs occupy unique positions. By extending Cinque's theory to Romanian, we would be able to get a glimpse into the structure of IP in this language. The test unfortunately doesn't work; no full-fledged adverb can intervene between the elements of the verb complex. Specifically, all 'high adverbs' precede the verb complex, while all the 'low' ones follow it.

Floated quantifiers are not a very useful test for Romanian either, again because of the peculiar property of the Romanian verb complex to behave like a single unit. As shown in example (5) floated quantifiers either precede or follow the verb complex, but cannot occur inside it.
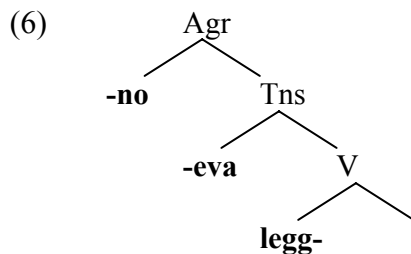
(5) (Toți) studenții   (toți) [ar   (*toți) mai (*toți) fi   (*toți) lucrat]
     all   student-the all AUX_{COND}.3P   all   still all   PREF   all   worked
     (toți) la proiect.
     all   at project
     'The students would have all worked more on the project.'

In the absence of any immediate syntactic evidence, the structure of the IP needs to be read off the ordering of morphemes inside the verb complex. In other words, the syntax needs information from morphology. The next two sections examine to what extent a morphosyntactic analysis in the vein of Baker (1985), Belletti (1990) and others can be applied to Romanian, and discusses some of the challenges that this kind of analysis faces.

3. AN ISOMORPHIC MAPPING BETWEEN MORPHOLOGY AND SYNTAX

Ever since Baker proposed his Mirror Principle, one prominent view has been that there is a systematic mapping between morphology and syntax, in that "morphological derivations must directly reflect syntactic derivations (and vice-versa)" (Baker, 1985:375). Verb movement analyses that adopted the proposal derived morpho-phonological strings in the syntax (Belletti 1990), by means of an operation known as head movement (Travis, 1984).

For instance, a complex verb form such as the Italian *leggevano* 'they read' is derived by moving the verb stem *legg-* through a succession of functional heads occupied by inflectional affixes. This is shown schematically in (6): the verb stem *legg-* first raises to the T^0 head where it left-adjoins to the tense affix *–eva* and incorporates it. The resulting complex head moves further up to the Agr^0 head, where the same operation of adjunction applies and *leggeva-* incorporates the 3rd person, plural agreement suffix *–no*. The final result is [[[legg$_{VROOT}$]-eva $_{PAST}$]-no $_{3P}$], 'they read'.

(6)

```
          Agr
         /   \
       -no    Tns
             /   \
           -eva    V
                  / \
                legg-
```

Under this approach, the order of the functional projections in the syntax is prompted by the linear order of inflectional morphemes: the highest functional head in the tree corresponds to the rightmost affix, the second highest functional category is given by the second rightmost affix and so on.

I will call this type of verb movement analysis *isomorphic*, and its main ingredients are:

(7) a. a one-to-one mapping between morphology and syntax, namely the type and order of functional categories mirrors the type and order of inflectional morphemes
   b. syntax manipulates actual morphemes; that is functional heads dominate morphophonological strings
   c. verb movement obeys all the requirements that head movement does, among which the left-adjunction constraint (Kayne 1991), according to which a lower head can only adjoin to the left of a higher head (and never to its right)
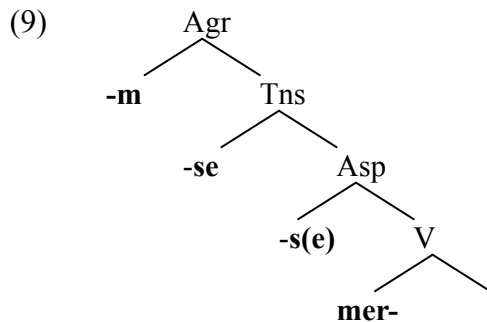
The first ingredient makes it very tempting to extend this kind of analysis to Romanian. Since the sequences of elements that make up the verb complex in this language are syntactically opaque (i.e. we can't use any word order tests to probe into their structure), any account of the Romanian IP needs to make reference to morphological information, so isomorphic analyses are welcome.

Take for example a complex verb form like *mersesem*, the past perfect of the 3rd conjugation verb *a merge*, 'to walk'. The verb root is *mer* and it is followed by 3 affixes: *-s(e)*, which encodes aspectual information, *-se*, which conveys tense: [+past, +anterior], and *-m*,

which represents 1st person singular agreement (for more details on each of these affixes, see Cornilescu 2000:85-86). Under an analysis where morphology and syntax go hand in hand, the information encoded by each of these morphemes will tell us which functional projections are present within the Romanian IP, and the order of the morphemes will determine the hierarchical organization of these functional projections. Forms like *mersesem* 'I had walked' suggest that the Romanian IP contains an aspect, a tense and an agreement projection (8a), and that according to the Mirror Principle these are ordered as in (8b).

(8) a. $[[[mer_V] + s(e)_{ASP}] m_{AGR}]$
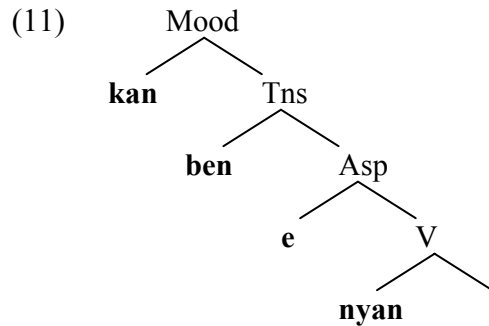   b. AgreementP > TenseP > AspectP

Since all the inflectional morphemes inside the complex verb form *mersesem* 'I had walked', are post-verbal affixes, the corresponding derivation is similar to the one for *leggevano* 'they read' in Italian (9). The verb stem raises to Asp^0, where it left-adjoins to the morpheme *-s*, yielding *mers*. The newly formed head now moves further up to the next head, T^0, where it combines with the T^0 morpheme *-se-*, the result being *mersese*. Finally, the complex head *mersese* reaches Agr^0 and there it combines with the 1st person, singular morpheme yielding what descriptive grammars call an indicative, past perfect, 1st person singular verb form: *mersesem*.

(9)

While forms like *mersesem* 'I had walked' fit very nicely with the isomorphic approach to verb movement and produce welcome results, other complex verb forms don't. In the remainder of this section I will discuss an (apparent) syntactic problem for isomorphic analyses in Romanian, and in the next section I will present two morphological issues.

Isomorphic analyses can easily account for languages where verbal inflection is expressed solely by post-verbal affixes or solely by pre-verbal particles. The first case is illustrated above with the Italian *leggevano* 'they read' and the Romanian *mersesem* 'I had walked'. The second case is exemplified by various Creole languages like Sranan for instance (see Cinque 1999 for more data). In contrast to 'suffixal' languages, here the highest functional category corresponds to the leftmost morpheme/particle (9a,b), and no verb movement is considered to apply (10).

(10) a. Sranan
  A kan ben e nyan.
  he may PAST PROG eat
  'He may have been eating.'
 b. MoodP > TenseP > AspectP

(11) Mood

 kan Tns

   ben Asp

    e V

     nyan

However, if Kayne (1991) is right and there is no right-adjunction at work in the syntax, then 'isomorphic' analyses cannot account for languages where verbal inflection is expressed

(i) solely by post-verbal particles or
(ii) solely by pre-verbal affixes or
(iii) by a mixture of non-affixal and affixal morphemes.

Romanian is an example of the third type of languages: its verbal morphology is actually a mixture of pre-verbal non-affixal morphemes and post-verbal affixes. Examples (12) through (14) illustrate the whole range of possible combinations between pre-verbal non-affixal morphemes and synthetic forms in this language.

(12) a. *Mood particle + synthetic form*
   să [mestec- $_{VROOT}$]-i
   SUBJ chew   2s
   'You should chew.'
 b. *Auxiliary + synthetic form*
   am   [mestec- $_{VROOT}$]-at
   AUX$_{PAST}$.1 chew   PERF
   'I/we chewed.'
 c. *Intensifier + synthetic form*
   mai [mer- $_{VROOT}$]-s(e)-se-m
   before walk   PERF-PAST-1s
   'I had walked before.'

(13) a. *Mood particle + 'fi' + synthetic form*
   să fi   [mestec- $_{VROOT}$]-at
   SUBJ PERF.*fi* chew   PERF
   '1/2/3 should have chewed'
 b. *Auxiliary + 'fi' + synthetic form*
   vom   fi   [plec- $_{VROOT}$]-at
   AUX$_{FUT}$.1P PERF.*fi* leave   PERF
   'We will have left.'

(14) a. *Mood particle + intensifiers + 'fi' + synthetic form*
   să mai fi   tot   [mânc- $_{VROOT}$]-at
   SUBJ again PERF.*fi* continuously eat   PERF
   'One would have kept eating and eating.'
 b. *Auxiliary + intensifiers + 'fi' + synthetic form*
   Ar   mai fi   tot   [cit- $_{VROOT}$]-it
   AUX$_{COND}$.3 again PERF.*fi* continuously read   PERF
   'S/he would have kept reading and reading.'   (adapted from Alboiu 2000)

While at first sight this seems to be a problem, a closer investigation of complex verb forms that contain both pre-verbal non-affixal morphemes and post-verbal affixes shows this is generally not the case.

   Let us first consider the present subjunctive form *să mesteci* 'you should chew' (12a). The verb root is *mestec* and it is followed by the affix *-i* encoding 2nd person, singular agreement. The particle *să* preceding the verb root is a subjunctive mood marker. Besides mood and agreement information, the complex verb form *să mesteci* also conveys imperfective aspect. There is language internal evidence that the imperfective aspect is conveyed by the bare verb form.[3] Consequently, the relevant functional projections in the syntactic representation of *să mesteci* are MoodP, AgrP and AspP. The question that arises at this point though is: how should these projections be ordered with respect to each other? We know that the AgreementP is higher than the AspP – this is apparent from the morphological marking of these categories and the Mirror Principle, and there is also evidence from past perfect forms of 3rd conjugation verbs (8). In contrast, there is no clue as to how MoodP should be ordered with respect to AgrP and AspP if we consider only present subjunctive verb forms. Based on the assumption that languages share some universal principles, a solution to the puzzle is to extrapolate from cross-linguistic data to Romanian. It has been observed that the hierarchy in (15) is true for a great number of the world's languages (Cinque 1999), so we can therefore conclude (pending evidence to the contrary) that it holds for Romanian as well.

(15) MoodP > AgreementP > TenseP > AspectP

---

[3] The evidence comes from the future indicative form, which also carries imperfective aspect. This is an analytic verb form where tense and aspectual marking are clearly distinct: tense is conveyed by a specialized auxiliary (AUX$_{FUT}$) and aspect is conveyed by the bare infinitive form of the verb.

The syntactic representation for *să mesteci* is then argued to contain the hierarchy MoodP>AgreementP>AspectP, and the derivation has only two steps: the verb root first raises to Asp^0 and then further to Agr^0. No movement takes place from Agr^0 to $Mood^0$.

Secondly, complex verb forms that contain auxiliaries (12b) don't represent a problem for the left-adjunction requirement, either. Romanian has three auxiliaries: Aux_{PAST}, Aux_{FUT} and Aux_{COND}. The first two encode tense information (past and future respectively), and the third one is a marker of conditional mood.

(16)

Aux_{PAST}	*am mestec-at*	AUX_{PAST}.1S chew- PERF
Aux_{FUT}	*voi mesteca*	AUX_{FUT}.1S chew
Aux_{COND}	*aş mesteca*	AUX_{COND}.1S chew

Unlike English auxiliaries *have* and *be*, Romanian auxiliaries do not occur as lexical verbs.[4] The morphology of future and conditional forms is represented by the sequence in (17a). The morphology of the periphrastic past form is given in (17b).

(17) a. Aux_{+AGR} $V_{INFINITIVE}$
      b. Aux_{+AGR} $V_{ROOT}+PERF$

Since agreement is marked on the auxiliary rather than the verb, it means that the verb raises to Asp^0 and stops there; no further movement applies. The Asp^0 head can be either perfective (for the periphrastic past form), or imperfective (for the other two forms), and the derivation yields the desired result. The question of how to model the fact that tense and agreement are expressed by a single non-affixal morpheme (rather than two) will be addressed in the next section.
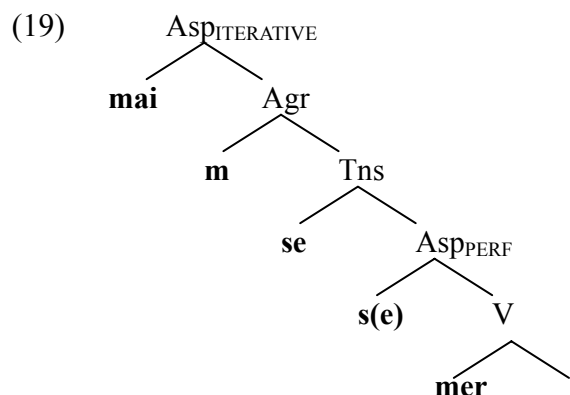
So far, we've seen that the left-adjunction requirement on verb movement is not a problem for isomorphic analyses in Romanian. However, once we look at intensifiers and the perfective morpheme *fi* the situation gets more complicated. I will first discuss the simpler case in (12c), and then address the challenges raised by those in (13) and (14).

The term 'intensifiers' refers to the five monosyllabic adverbs in (18). The first three function as aspect markers, while *prea* 'too much' and *cam* 'a little' behave as degree modifiers. Unlike full fledged adverbs, intensifiers are allowed to occur inside the verb complex. Actually they are required to, the verb complex being the only place where they can show up. *Şi* 'already' is a positive polarity item in that its distribution is restricted to positive contexts. The interpretation of *mai* 'more, still, before, again' is polarity sensitive; it varies depending on whether *mai* occurs in affirmative or negative contexts.

---

[4] Aux_{PAST} and Aux_{COND} are historically related to – but nowadays distinct from – the verb *a avea* 'to have'. Similarly, Aux_{FUT} is distinct from, but diachronically related to the lexical verb *a voi/vrea* 'to want' (Alboiu & Motapanyane 2000).

(18) a. *mai*   'more, still, before, again' -conveys iteration (~again)
    b. *tot*   'continuously, repeatedly' -conveys iteration (~again and again)
    c. *și*   'already'   -conveys completion
    d. *prea* 'too much'
    e. *cam*   'a little

Let us now analyze a complex verb form like *mai mersesem* 'I had walked before' (12c), which contains the intensifier *mai*. We've seen above how the derivation for *mersesem* 'I had walked' works, but how should *mai mersesem* be accounted for given that *mai* is a pre-verbal non-affixal morpheme encoding aspect? Since there is already one aspect morpheme present, let's say that we represent *mai* in the syntax as a second aspect head. But where should it be positioned with respect to the other functional heads Asp_{PERF}^0, $Tense^0$ and Agr^0? A mechanical way of solving the problem would be to argue that the aspect projection corresponding to the morpheme *mai* is situated above the agreement projection, and that the verb raises only as high as Agr^0 (14).

(19)

However, why should Romanian syntax have an aspect projection higher than the agreement projection if in language after language this never happens? A solution is to argue that *mai* is a clitic whose requirement is to adjoin to a (complex) verbal head (see also Alboiu 2000, and Baker 1985 on locative applicative constructions in Kinyarwanda). Being a clitic, the distribution of *mai* is fixed syntactically rather than morphologically, so it does not interfere with the Mirror Principle. Its requirement is to attach to an aspectual head. The derivation for *mai mersesem*, is then exactly like the one for *mersesem*, with the difference that *mai* adjoins to the complex aspectual head *mers(e)* before this raises to the T^0 head. Evidence for this comes from the semantic interpretation of *mai*, which is always in the scope of the tense operator.

    What about cases like (13) now? The perfective morpheme *fi* only occurs with irrealis verb forms, namely future, subjunctive and conditional forms (Avram 1999). Secondly, it always co-occurs with the post-verbal perfective affix.[5] This is shown in table (20).

---

[5] The post-verbal perfective affix is the sole marker of perfectivity in the case of realis verb forms. It is realized as –s for 3rd conjugation verbs and –t for all the others.

(20)   The perfective morpheme *fi*

periphrastic past, indicative	am (***fi***) mestec-**at**	'I chewed'
future perfect	voi **fi** mestec-**at**	'I will have chewed'
perfect conditional	<u>aş</u> **fi** mestec-**at**	'I would have chewed'
perfect subjunctive	<u>să</u> **fi** mestec-**at**	'I should have chewed'

The second fact about the distribution of *fi* has led some researchers to analyze it as a discontinuous morpheme (Dobrovie-Sorin, 1994). However, examples like (21) show that this is not the case. Intensifiers can come in between *fi* and the verb, which is unexpected if *fi* is an affix.

(21)   Ar   fi   tot   citit.
       AUX$_{COND}$.3   PERF   continuously   read
       'S/he would have kept reading.'   (Alboiu 2000)

Therefore Alboiu (2000) analyzes *fi* as a clitic that adjoins to an aspectual head, just like the intensifier *mai* 'again'. While this seems to be the right approach given examples like (21), there are a couple of questions that arise: first, why is it the case that *fi* and *tot* 'continuously', both clitics that adjoin to an aspectual head, are not freely ordered with respect to each other? The question also extends to examples like (14), where *mai*, 'again' needs to precede the perfective morpheme *fi*, which in turn needs to precede the intensifier *tot* 'continuously'. Secondly, why is it the case that subjunctive forms that contain *fi* show no agreement, even though agreement marking exists in present subjunctives (cf. (14a) vs. (12a))? Could this be taken as evidence that *fi* is actually a head that blocks movement? That would mean that the verb stem raises to the perfective aspect head (occupied by the perfective suffix), then to the irrealis perfective head (occupied by *fi*), and stops there. However this scenario would pose a serious problem to the left-adjunction requirement on head movement, which would predict that *fi* should also be a perfective suffix.

A new set of data shows that it is actually the perfective suffix that blocks movement. In Romanian the paradigm of the periphrastic past and imperfect are identical, with the exception that the sequence of morphemes encoding tense and agreement behave as a pre-verbal non-affixal unit in periphrastic past forms, but as a post-verbal affix in imperfect forms (22). This seems to hold for verbs of all conjugations. Semantically, the two verb forms differ minimally in the kind of aspect they encode; in the periphrastic past form, the morpheme *-t* marks perfective aspect, and in the imperfect form the bare root is interpreted as conveying imperfective aspect. The two verbal forms are identical in all the other respects (tense, agreement notions).

(22)

		Periphrastic Past		**Imperfect**	
1ST PN	SG	**am** mestec-at	'I chewed'	mestec-**am**	'I was chewing'
	PL	**am** mestec-at	'we chewed'	mestec-**am**	'we were chewing'
2ND PN	SG	**ai** mestec-at	'you chewed'	mestec-**ai**	'you were chewing'
	PL	**ați** mestec-at	'you chewed'	mestec-**ați**	'you were chewing'
3RD PN	SG	**a** mestec-at	's/he chewed'	mestec-**a**	's/he was chewing'
	PL	**au** mestec-at	'they chewed'	mestec-**au**	'they were chewing'

This seems to suggest that the perfective aspect head blocks movement while the imperfective head doesn't.[6] In the imperfective cases, the verb raises to the Aspect head, then to Tense and finally to Agreement. In contrast, in the perfective cases, the verb does not move past the aspect head, and thus, tense and agreement information are no longer realized as suffixes. Going back to the irrealis perfective morpheme *fi*, it follows that there is no direct evidence for it to be analyzed as a head, which is good news for the left-adjunction requirement.

To conclude then, the left-adjunction requirement on verb movement is not a problem for isomorphic analyses in Romanian - provided that intensifiers and the perfective morpheme *fi* are analyzed as clitics. However, such an analysis leaves open the question as to why all these clitics (all of which need to adjoin to an aspectual head) seem to be rather strictly ordered with respect to each other. In the next section, I will show that isomorphic analyses (also) run into problems when certain morphological facts are considered.

4. TWO MORPHOLOGICAL PROBLEMS

In what follows I present two more issues about Romanian verbal morphology and discuss their implication for the interaction between morphology and syntax.

The first issue refers to a phenomenon known as syncretism; that is, instances of complex verb forms where one morpheme encodes more than one functional category. In Romanian, manifestations of syncretism are found both with synthetic and analytic verb forms (23). For example, the past perfect form of verbs other than those in the 3rd conjugation contains a morpheme that expresses both past tense and perfect aspect. The same happens with past simple forms of verbs of any conjugation. Additionally, all the analytical forms that contain an auxiliary show instances of syncretism as illustrated in (23b,c) and (24). In the future and periphrastic past forms it is the tense and agreement notions that are expressed by a single morpheme. In conditional forms, the same morpheme expresses both mood and agreement.

---

[6] Since there is no overt morphology corresponding to the imperfective aspect, it can even be argued that there is no imperfective head in the syntax. However, evidence against this position comes from future indicative forms, which carry imperfective aspect. VP adverb tests show that the verb always raises out of the VP (i), yet we know from the derivation of these forms that it never reaches the tense head. What position does the verb move to then? It must the imperfective aspect head.

(i) Va   (*des)   <u>mânca</u>   (des)   fructe.
   AUX~FUT~.3S   often   eat   often   fruit
   'S/he will often eat fruit.'

(23) a. TENSE AND ASPECT   – past perfect (conjugation 1, 2, 4), past simple
      b. TENSE AND AGREEMENT – periphrastic past, future
      c. MOOD AND AGREEMENT – conditional

(24) Analytical forms with auxiliary

periphrastic past	**am** mestec-at	AUX$_{PAST}$.1S chewed
future	**voi** mesteca	AUX$_{FUT}$.1S chew
	voi fi mestec-at	AUX$_{FUT}$.1S PERF chewed
conditional	**aş** mesteca	AUX$_{COND}$.1S chew
	aş fi mestec-at	AUX$_{COND}$.1S PERF chewed

Syncretism cases are left unexplained under any morphosyntactic account that derives complex verb forms from actual morphemes. One way to get around this problem is to adopt Chomsky's (1993) Checking Theory in which syntactic nodes like Aspect, Tense or Agreement are bundles of features. Instead of collecting morphemes on its way up the tree, the verb collects these features, and the phonological component spells them out as the relevant morphemes. Under such an analysis, the difference between the paradigm of the periphrastic past and that of the imperfective (22) boils down to the contrast between (25a) and (25b), and it is up to the phonology to spell out any idiosyncrasies, in the same way that it spells out syncretic morphemes.

(25) a. PASSÉ COMPOSÉ: [+perfective, +past, +1s]
      b. IMPERFECT: [-perfective, +past, +1s]

A second problem for isomorphic analyses is represented by cases in which the same functional category seems to be encoded by more than one morpheme. For example, in Romanian both the category of perfective aspect and that of subjunctive mood are marked more than once morphologically.

Perfective aspect is encoded twice in irrealis verb forms: by the pre-verbal non-affixal morpheme *fi*, and also by the perfective suffix *–s/–t*.

The subjunctive mood is encoded in three places: mood particle, verb stem and agreement paradigm. The table below shows the paradigm of present indicative and present subjunctive for the verb *a trăi* 'to live'. If we compare the cells for 1st and 2nd person we notice that they are identical except for the presence/absence of the particle *să*, which points to *să* being the subjunctive marker.

(26)

		Present Indicative		**Present Subjunctive**	
1ST PN	SG	muncesc	'I work'	să muncesc	'I should work'
	PL	muncim	'we work'	să muncim	'we should work'
2ND PN	SG	muncești	'you work'	să muncești	'you should work'
	PL	munciți	'you work'	să munciți	'you should work'
3RD PN	SG	muncește	's/he work'	să muncească	's/he should work'
	PL	muncesc	'they work'	să muncească	'they should work'

However, as the examples in (27) and (28) show, *să* is not the only subjunctive mood marker. In the absence of this particle, subjunctive forms are still recognized as such. This is due to the presence of two other markers: an inherent verb root and an inherent agreement marker.

(27) *Subjunctive*
    a. <u>Trăiască</u>   regina!
        live.SUBJ.3 queen-the
        'Long live the Queen!'
    b. <u>Trăiască</u>   conducătorii!
        live.SUBJ.3P leaders-the
        'Long live the leaders!'

(28) *Indicative*
    a. Regina   <u>trăiește</u>.
        queen-the   live.IND.3
        'The queen lives.'
    b. Conducătorii   trăiesc.
        leaders-the   live.IND.3p
        'The leaders live.'

Instances where one functional notion is encoded by more than one morpheme are definitely a challenge for isomorphic analyses, but they are also problematic for analyses where syntactic categories are represented as features. As apparent from the description of the data there seems to be some sort of agreement mechanism holding between the morphemes that participate in the multiple exponence phenomenon. Should this be represented as a syntactic or a morphological relation? Additionally, agreement is known to be subject to locality constraints. Yet this doesn't seem the case, at least with the subjunctive markings. For instance, the subjunctive particle can be separated from the subjunctive stem bearing subjunctive agreement by up to two intervening elements: the negation particle and pronominal clitics.

(29) As   vrea să   nu o   certe   prea tare.
      AUX$_{COND}$.3 want SUBJ not CL.3S.ACC scold.SUBJ.3S too   much
      'I wish he wouldn't scold her too much.'

5. CONCLUSIONS

This paper looked at the properties of the so called Romanian verb complex and examined how verbal inflection is realized in this language. Given the fact that the elements inside the verb complex behave as a single unit, any syntactic analysis of the Romanian IP will need to make reference to morphological information. Therefore a morphosyntactic account of the verbal domain in this language is highly desirable. In view of the generalizations that emerged from the data, I suggested that a suitable analysis will be able to read the order of functional projections from the order of inflectional morphemes and at the same time account for certain morphological facts such as syncretism and multiple exponence.

REFERENCES

Alboiu, Gabriela. 2000. The features of movement in Romanian. Doctoral Dissertation, University of Manitoba.

Alboiu, Gabriela, and Virginia Motapanyane. 2000. The generative approach to Romanian grammar: An overview. In Virginia Motapanyane, ed., *Comparative Studies in Romanian Syntax: North-Holland Linguistic Series 58*, 1-48. Amsterdam: Elsevier.

Avram, Larisa. 1999. *Auxiliaries and the Structure of Language*. Bucuresti: Editura Universitatii din Bucuresti

Anderson, Stephen R. 1992. *A-morphous Morphology*. Cambridge: Cambridge University Press.

Baker, Mark. 1985. The mirror principle and morphosyntactic explanation. *Linguistic Inquiry* 16: 373-416.

Baker, Mark. 1988. *Incorporation: A Theory of Grammatical Function Changing*. Chicago: University of Chicago Press.

Belletti, Adriana. 1990. *Generalized Verb Movement: Aspects of Verb Syntax*. Turin: Rosenberg and Sellier.

Chomsky, Noam. 1993. A minimalist program for linguistic theory. In Kenneth Hale & Samuel Jay Keyser, ed., *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, 1-52. Cambridge, MA: MIT Press.

Cinque, Guglielmo. 1999. *Adverbs and Functional Heads: A Cross-linguistic Perspective*. Oxford: Oxford University Press.

Cornilescu, Alexandra. 2000. The double subject construction in Romanian. In Virginia Motapanyane, ed., *Comparative Studies in Romanian Syntax: North-Holland Linguistic Series 58*, 83-133. Amsterdam: Elsevier.

Dobrovie-Sorin, Carmen. 1994. *The Syntax of Romanian: Comparative Studies in Romance*. Berlin: Mouton de Gruyter.

Emonds, Joseph. 1978. The verbal complex V'-V in French. *Linguistic Inquiry* 9:151-175.

Halle, Morris & Alec Marantz. 1993. Distributed morphology and the pieces of inflection. In Kenneth Hale & Samuel Jay Keyser, ed., *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, 111-176. Cambridge, MA: MIT Press.

Janda, Richard & David Kathman. 1992. Shileding morphology from exploded infl. In Jeannette Marshall Denton, Grace P. Chan & Costas P. Canakis, eds., *Papers from the 28th Regional Meeting of the Chicago Linguistic Society Volume 2*, 141-157. Chicago: Chicago Linguistic Society.

Kayne, Richard S. 1991. Romance clitics, verb movement, and pro. *Linguistic Inquiry* 22: 647-686.

Lieber, Rochelle. 1992. *Deconstructing Morphology: Word Formation in Syntactic Theory*. Chicago: University of Chicago Press.

Marantz, Alec. 1984. *On the Nature of Grammatical Relations*. Cambridge, MA: MIT Press.

Pirvulescu, Mihaela. 2002. Le concept de paradigme et la morphologie verbale. Doctoral Dissertation, University of Toronto

Pollock, Jean-Yves. 1989. Verb movement, universal grammar and the structure of IP. *Linguistic Inquiry* 20: 365-424.

Rivero, María Luisa. 2001. Last resort and V movement in Balkan languages. In María Luisa Rivero & Angela Ralli, ed., Comparative Syntax of the Balkan Languages, 200-223. Oxford: Oxford University Press.

Travis, Lisa. 1984. Parameters and effects of word order variation. Doctoral Dissertation, MIT. Distributed by MIT Working Papers in Linguistics.

Alexandra Teodorescu
Department of Linguistics
McGill University
1085 Dr. Penfield
Montreal, PQ   H3A 1A7
Canada

teodorescu@mail.utexas.edu
alex.teodorescu@mail.mcgill.ca

RÉSUMÉ

Ce papier est consacré au domaine verbal en roumain et considère les implications théoriques des généralisations qui émergent. On montre que les analyses (purement) syntaxiques présentent un désavantage à cause de la propriété spéciale du verbe complexe qui consiste à se comporter comme une seule unité. Bien que les explications en termes de morphosytaxe soient préférables, elles aussi sont confrontées à des problèmes. L'inflexion verbale en roumain comporte un nombre de cas de syncrétisme et d'interprétation multiple q'une théorie dans laquelle la structure morphologique et syntaxique sont isomorphiques ne peut facilement expliquer.