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A RIGHT BRANCHING VERBAL COMPLEX FOR ROMANCE*

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0. Introduction

It has been argued frequently that the Romance auxiliaries in (1) are members of the category V:

(1)	(English)	<u>French</u>	<u>Spanish</u>	<u>Italian</u>
	be+en	être+é	ser+do	essere+to
	have+en	avoir+é ₁	haber+do	avere+to
	be+ing	----	estar+ndo	stare+ndo

Kayne (1975) and Harris (1967) (for French and Spanish respectively) have noted that these auxiliaries take the full range of verbal inflections for person, number and aspect, and behave the same as verbs with respect to negation and interrogative formation. Since Romance also has no equivalent of the English modal auxiliaries, there is little clear evidence for a separate Aux node under VP or S.

If such a node is not motivated, some alternative structure must be posited to generate Aux's under VP. Furthermore, this structure must be able to account for the properties of Aux's in (2):

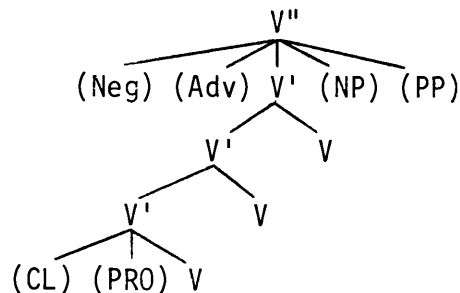
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- (2) a. Fixed number and ordering of cooccurring Aux's
 b. Form of the following verb
 c. Selectional dominance of the main verb
 d. Similarities of Aux's to main verbs

Within the \bar{X} syntax framework, the possibility arises of generating multiple occurrences of V in a given verb phrase. Emonds (1978) proposes the structure in (3) for French, where V' has itself, V', as an optional left daughter:

- (3) Emonds (1978)--Lbc (Left branching verbal complex)

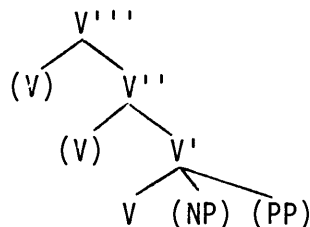
- a. $V'' (=VP) \rightarrow (Neg)(Adv) V' (NP)(PP)$
 b. $V' \rightarrow (\left\{ \begin{array}{c} V' \\ (CL)(PRO) \end{array} \right\}) V$



An alternative structure is proposed for English in Akmajian, Steele and Wasow (1979). This structure follows the convention of strictly descending levels of primes (following Jackendoff (1977)) and branches to the right:²

- (4) ASW (1979)--Rbc (Right branching verbal complex)

- a. $S \rightarrow NP V^3$
 b. $V^n \rightarrow (V) V^{n-1} \dots$



Both of these proposals can account for the similarities between Aux's and main verbs. That is, rules like French Neg-placement and interrogative formation which refer to the first V in VP will apply equally well to the left and right branching configurations.

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But there are two significant differences between these proposals, listed in (5):

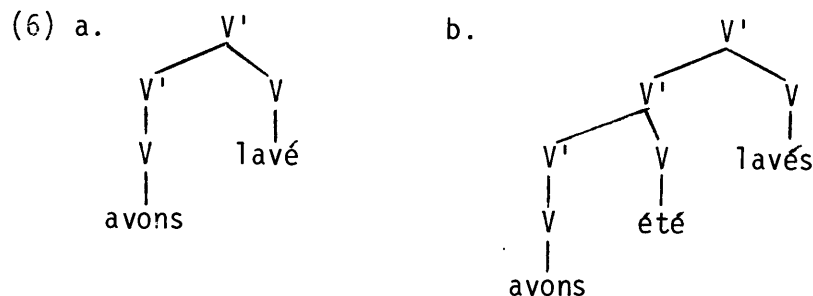
- (5) a. Constituency of the main verb and its arguments
 b. Rule form: The Lbc, but not Rbc, crucially uses the rule type: $X^n \rightarrow (X^n) X^{n-1}$

I will treat each of these points in sequence in sections 1 and 2. There are, of course, empirical consequences arising from these differences. In addition, I argue that predictions concerning permissible recursion of optional elements follow from (5), and that in this respect, as well as empirically, the Rbc represents a more restrictive \bar{X} option for Romance.

In section 3 I will briefly elaborate the Rbc for Romance, and suggest formal restrictions on recursion, attempting to characterize general differences between Romance and English. Specifically, the rule type in (5b) is considered a subcase of rules which generate subject (\neq determiner) of phrase. A parameter of Romance languages is that (5b) is not an option for the expansion of major categories, whereas for English, (the possessive) NP does have such an expansion.

1. Constituency of the main verb and its arguments.

The Lbc analysis generates instances of perfective have and passive be under V' , which is a left sister to V , the main verb, as in (6):



The past participle lavé(s) is the main verb in the passive and compound tenses. However, progressive be in (7) is argued by Emonds (for English) and Otero (1974) (for Spanish) to be a main verb. This structure, it is argued, allows be to retain its similarity to main verbs of temporal aspect in English, which also take -ing complements as in John stopped working at 4:00. Emonds further argues that if one assumes that such complements, which do not alternate with sentential complements, are base VP's, then their inability to be tensed, passivized, or independently negated is accounted for.

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A class of syntactically similar verbs in French, Emonds notes, includes the motion verbs (monter, descendre, sortir), which take infinitival (VP) complements. These complements cannot be negated, passivized, tensed, or appear in the past participle form with a tenseless auxiliary:

- (7) a. *Je suis monté être engagé par le directeur.
'I went up to get hired by the boss'
b. *Les invités sont partis ne plus se sentir mal
à l'aise.
'The guests left (in order) to no longer feel
ill at ease'
c. *Je suis retourné avoir terminé avant le dîner.
'I returned (so as) to have finished before dinner'

In addition to these cases noted by Emonds, there are a number of other verbs whose complements have these properties, as has been noted frequently in the literature (see Bordelais (1974), D'Introno (1979), Morin (1980), Zagona (to appear)). These verbs include the causatives and Spanish 'clitic-climbing' verbs such as querer 'want' in constructions where the clitics have 'climbed':

- (8) a. *María la quiere no cantar.
'Mary it wants not to sing'
b. *María le quiere ser presentada a Juan.³
'Mary to him_i wants to be introduced to John_i'
c. *María lo quiere haber terminado.
'Mary it wants to have finished'

In (8), a clitic object of the embedded verb is attached to the matrix verb. In this construction, the embedded verb cannot be (a) negated, (b) passivized, or (c) have its own auxiliary. The examples in (9) and (10) show the same restrictions on French and Spanish causatives:

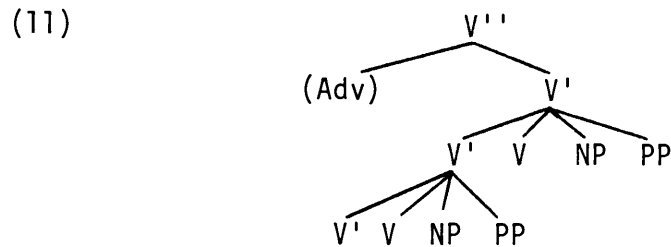
- (9) a. *On fera ne pas partir Jean.
'Someone will make John not leave'
b. *On le fera être engagé par le directeur.
'Someone will make him be hired by the boss'
c. *On le fera avoir terminé le dîner.
'Someone will make him have finished dinner'
- (10) a. *María hizo no cantar a Juan.
'Mary made John not sing'
b. *Hice ser castigado a Juan.
'I made John be punished'
c. *Lo hice haber corrido.
'I made him have run.'

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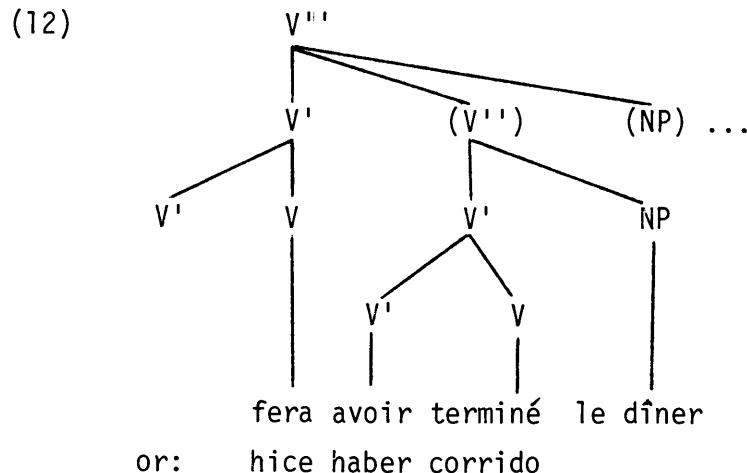
Let us consider how the Lbc accounts for this range of data. If we assume that passivization is a sentential process, (however the mechanics of it are executed) then Emonds can automatically rule out the (b) examples in (7)-(10) by virtue of there being no embedded S for passive to operate on.

As for negation, Emonds does not take a consistent position which would show how the (a) examples are accounted for. He first suggests that Neg be introduced under S, rather than VP, thus claiming that VP complements are never negatable. However, he later argues that Neg must be under VP, so as to allow a rule of Finite Verb Raising to replace tense placement. While this rule is not crucial to his analysis of the Aux, the argument indirectly supports an analysis where Neg and Adv are generated as sisters. Thus, the (a) examples are not accounted for.

Now, with respect to the (c) examples, the constituent structure of the objects is crucial. In order to generate VP complements containing objects, the complement node would have to be V'' ($=V^{\max}$), since objects are daughters of V'' . This is necessary to prevent their generation at every level of V' , as in (11):⁴



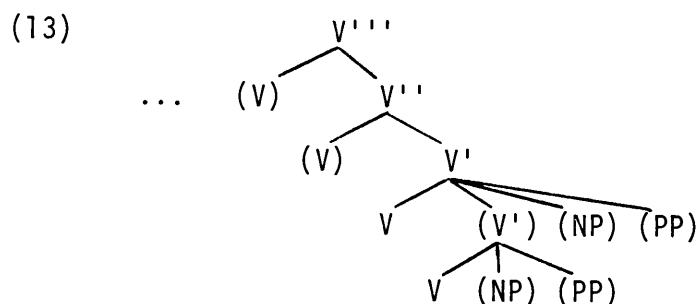
This structure would incorrectly predict that auxiliaries take objects and complements. So, since the constituency must be that of (12), the (c) examples are generated:⁵



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So the Lbc does not account for the absence of auxiliaries in the complement. And furthermore, the account of the (a) and (b) examples is dependent on factors unrelated to the structure of the verbal complex, namely the sentential characteristics of passivization and negation. This explanation, while compatible with the Lbc, in no way supports it.

The Rbc analysis provides a unified account of the ungrammaticality of (7)-(10), since a main verb and its objects are a constituent. VP complements can be generated as in (13):



Since the complement node is a minimal projection of V, the nodes which dominate negatives, auxiliaries and passive be are automatically excluded.

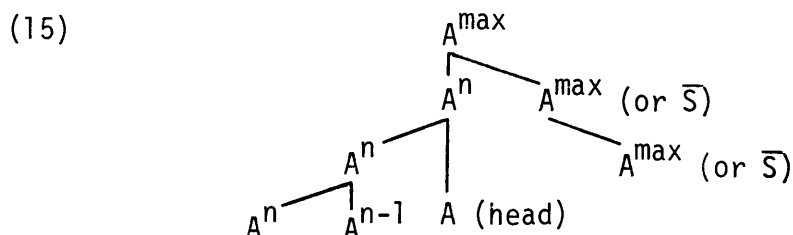
To conclude this section, we can summarize the argument as this: The Rbc is to be preferred on the basis of its ability to generate complements whose form is a minimal projection of V. This is possible because of the constituency of the main verb and its objects.

2. Rule form

Let us now consider the second point of comparison in (5), repeated as (14):

(14) The Lbc, but not Rbc, crucially uses the rule type:
 $X^n \rightarrow (X^n) X^{n-1}$

The Lbc expansion of the verb phrase implies that at least one category in French has the recursion properties expressed in (15):

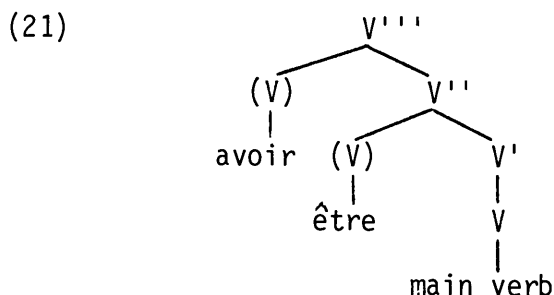


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limited to two or three members in a clause, and whose order must be stated. The Lbc, which generates Aux's under V' when a past participle follows, does not capture the crucial ordering of être and avoir, so both (a) and (b) are generated in (20):

- (20) a. *Jean a été lavé. 'John had been washed'
 b. *Jean est eu lavé. 'John is had washed'

The Rbc, on the other hand, expresses the order and the fixed number of auxiliaries by subcategorizing avoir as a V of V''', and être as V of V'':



This analysis applies also to Spanish haber and ser, and Italian avere and essere. French, in addition, has avoir which is V'', used in the passé surcomposé:

- (22) Jean a eu acheté un livre. 'John has (had) bought a book'

The Rbc, in other words, utilizes the restrictiveness of strictly descending levels of primes to account for order and number of auxiliaries. The Lbc generates auxiliaries by a rule exhibiting leftward weak recursion, thereby failing to properly restrict auxiliary cooccurrences.

There is also evidence from other categories that (14) represents an inadmissible rule type in Romance. Recall that the English possessive construction in (17) and (18) was proffered as an example of leftward weak recursion for NP. The absence of an equivalent structure in Romance is not idiosyncratic, but rather is one example of the general fact that the appearance of prehead modifiers is restricted in Romance. Possessives and most adjectives are complement structures. But we do find that Herschensohn (1980) argues that phrases such as those in (24) of quantity and quality are generated by a rule like (23):

- (23) $N'' \rightarrow N'' N'$

- (24) a. $(N'', (N'', \text{un kilo}) (N', \text{de pommes}))$

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b. (N'' (N'' , un imbécile) (N' , de *médecin*))

Similar structures in Spanish, such as (25) are argued by Rivero (1980) to be N'' specifiers of N' :

(25) (N'' (N'' , una cantidad) (N' , de vino))

There are several incorrect predictions made by this analysis. First, it fails to note that measure and quality phrases in Romance are sequences of NP-PP, rather than NP-NP. While some English measure phrases and partitives are sequences of nouns, (three teaspoons salt; four parts water) the equivalent phrases in Romance are always introduced by prepositions:

(26) a. *tres partes agua 'three parts water'
b. *tres cucharaditas sal 'three teaspoons salt'

If the phrases in (24)-(25) are analyzed as noun+PP, we would no longer require rule (14) on the basis of NP's. Also, there would be no requirement for preposition insertion, which implies that a head N of N'' must be governed in the presence of a certain class of specifiers.

In fact, there is evidence that the nouns pommes and vino are not the phrasal heads. They do not behave like heads with respect to agreement or selectional restrictions. In (27), subject predicate agreement with pommes, and subject predicate adjective agreement with vino result in ungrammaticality:

(27) a. *Un kilo de pommes sont sur la table.
'A kilo of apples are on the table.'
b. *Esta cantidad de vino es muy pequeño.
'This amount of wine(masc.) is very small(masc.)'

Furthermore, vino could not be the head in (27b) with respect to selectional dominance, since the adjective pequeño could never modify a mass noun:

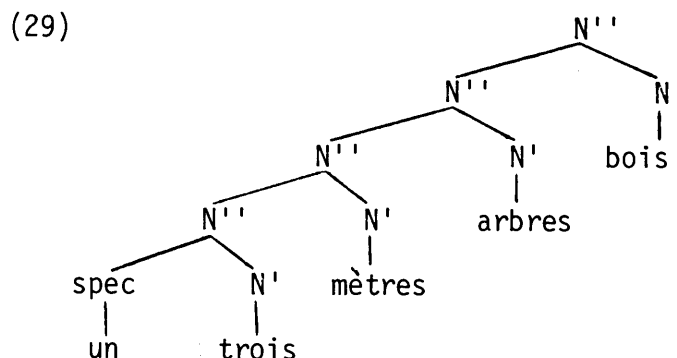
(28) *Este vino es pequeño. 'This wine is small'

Due to limitations of space a full critique of the positions of Herschensohn and Rivero is not possible here. But in view of the ungrammaticality of (26)-(28), the evidence suggests that it is questionable to analyze these structures along the lines of rule (23).

A third incorrect prediction of this rule is that the specifier N'' is recursive, parallel to the English possessive John's sister's cousin's (etc.) goldfish. Romance measure nouns neither

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embed nor may be embedded in left-branching structures such as (29):



*un trois mètres arbres bois (a three meter tree forest)
'a forest of three meter (high) trees'

The fact that structures like (29) are not grammatical in English either suggests that the recursive properties of the possessive construction is not general. I will return to this point in section 3. The same pattern of ungrammaticality is seen among prehead quantifiers. Rivero notes that quantifiers of N may not be modified by quantifiers:

(30) *muchos demasiados niños
'many too many children'

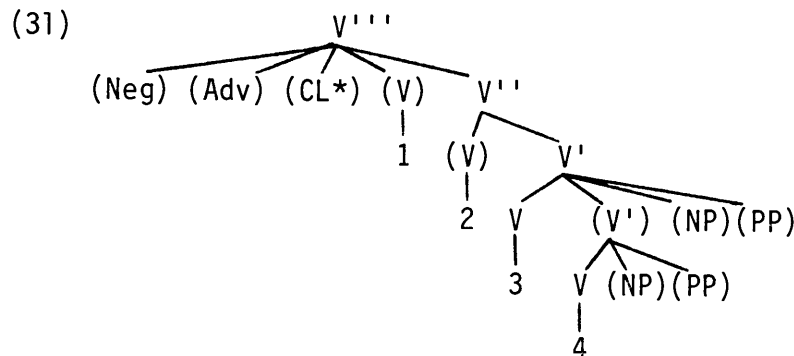
To conclude this section, we have examined several constructions with respect to weak recursion of specifier nodes. In VP, rule type (14) prevents the grammar from properly constraining the cooccurrence and ordering of auxiliary elements. In NP, it makes incorrect predictions with respect to specifier recursion generally, and the structure of measure and quality phrases specifically. More generally, we find that all such rules that imply leftward weak recursion on the specifier side of a head are doubtful in Romance. This impels us to reject the left branching verbal complex in principle.

3. The Right branching verbal complex

The Rbc structure in (4) is repeated in (31), with the clitic, adverb, negative, and complement nodes included. The aspects of (31) which are general in Romance include, but are not restricted to the expansion of the major category nodes. Thus, Adv in French is as in (31), while in Spanish it is VP final. French and Spanish also differ in the details of clitic node expansion, as Spanish has no equivalent preverbal node for French y and en and Italian ci and ne. As in Zagona (to appear) I assume clitic movement to be an instance of move category.

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Cliticization itself is not an instance of Chomsky-adjunction to V, but a morpho-phonological rule, which is not subject to the optionality of rule application in core grammar.



The Rbc crucially follows the convention of obligatorily descending levels of primes, and I claim that this convention applies between, for example, the lexical category V which is a head of phrase and its maximal projection. Thus, head of phrase is automatically defined as (32):

- (32) Head of Phrase: The head of phrase is the lowest A in a configuration of $A^{\max} \rangle \dots \rangle A$ where the number of primes descends at every level.

This definition selects V-3 rather than 4 in (31), since V-4 is not dominated by nodes whose number of primes descends at every level.

I have argued above that a proper analysis of certain complements in Romance can be expressed by positing recursion of minimal projections of phrasal categories. I have also argued that weak recursion may not be a property of specifier nodes, at least in Romance. This claim is formalized in (33):

- (33) In rules defined under Base Restriction II of Emonds (1976):
- In a rule $A^j \rightarrow (B) A^{j-1}$, if $B=A^k$, then $k < j$.
 - In a rule $A^j \rightarrow (B) A^{j-1}$, $B \not\rightarrow X Y$, where Y is C^{\max} (C=a phrasal category), and $Y \not\rightarrow S$ or \bar{S} .

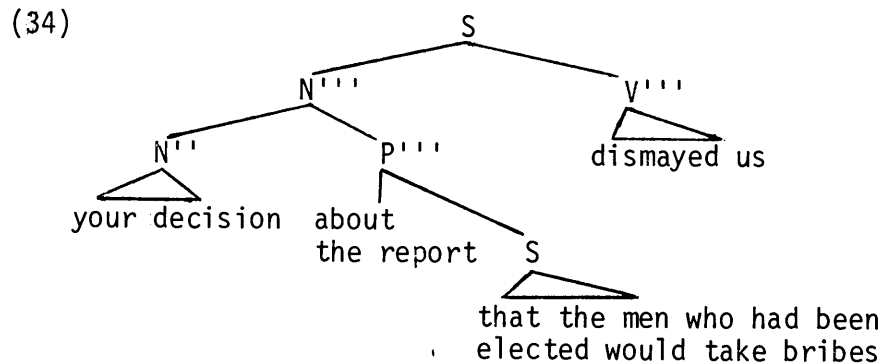
(33a) disallows weak recursion of specifier nodes, as defined in (16b). Language particular rules of Romance may additionally specify restrictions where $B \neq A^k$.

(33b) is a revision of Emonds' Surface Recursion Restriction

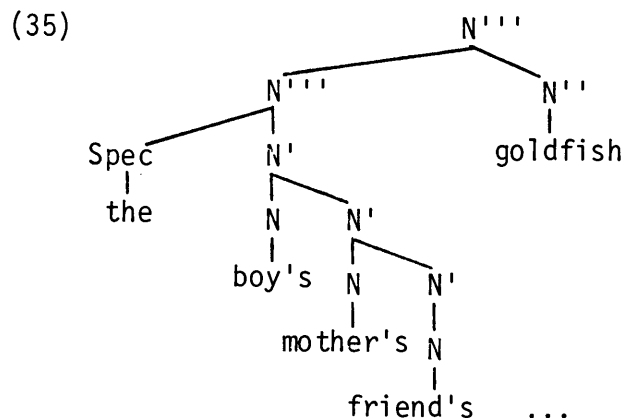
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(1976:25), modified as a condition on base expansions, and strengthened to apply to cases of strong recursion as defined in (16a).

(33) is prefaced with the restriction that the constraints therein apply to rules defined by Base Restriction II of Emonds (1976), which defines proper expansions of phrasal nodes for endocentric, or headed phrases. Within his framework, S is not considered endocentric, thus accounting for the fact that subject NP's, unlike optional nodes to the left of head within NP, AP, PP or VP does exhibit free right branching recursion:



In this context, we can suggest a modification of Emonds' model which accounts for the apparent violation of (33b) in the English possessive construction. I would suggest that English NP's, unlike Romance NP's, may also be exocentric, in other words, have a structurally defined subject, rather than specifier. If possessive structures are analyzed as something like (35),



then we see the constraints in (33) as converging to define possible expansions of specifiers, and the converse of (33) possibly characterizes subjects. This analysis is compatible

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with analyses which have analyzed the possessive as having a subject on independent grounds.

4. Conclusion

The purpose of this paper has been to argue for an analysis of the verbal complex in Romance which is restrictive enough to properly account for auxiliary and complement properties. By defining certain constraints on recursion, the analysis has been extended to account for a wider range of facts relating to specifier recursion. These principles in addition suggest one parameter differentiating English NP structure from Romance NP structure. Further testing of these claims is clearly necessary, and hopefully this paper has suggested some areas that can be pursued in further refining a theory of phrase structure within the \bar{X} system.

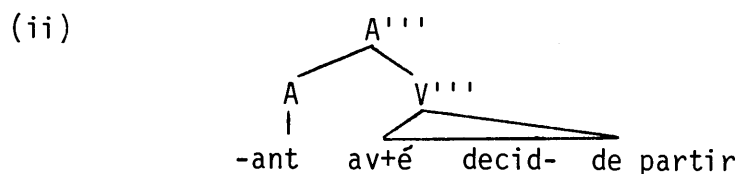
FOOTNOTES

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¹ Although French does not have a present continuous tense equivalent to the be+ing form of English, the gerundive affix -ant is used in adjectival and absolutive constructions, as in (i):

- (i) a. Paul, ayant décidé de partir, personne ne put le retenir.
'Paul, having decided to leave, no one could hold him back'
- b. Jean s'est mis en colère, en trouvant ce qui est passé là.
'John became furious upon finding what had happened there'

This suggests that the gerundive -ant is [+Adj], and is lexically inserted as head of AP as in (ii), following the deverbalizing schema of Jackendoff (1977):



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²The ASW analysis is based on arguments from English, hence the details of that analysis do not necessarily apply to French or Spanish. I refer mainly to the restructuring rules posited there, but also to the assumptions about the non-existence of such cyclic rules as Equi, Subject-raising, etc. ASW claim that restructuring rules are cycle-initial, but then proceed to dispense with cyclic rules. Since it is not clear whether the notion of the syntactic cycle is being disclaimed entirely, and since Romance has no equivalent restructuring phenomenon, I assume only the parts of their analysis pertaining to permissible configurations within the \bar{X} system, and offer additional arguments for the correctness of their position with respect to that.

³Ivonne Bordelois (personal communication) has pointed out that (8b) is grammatical for her and some other speakers. Within the analysis proposed in Zagona (to appear), this would be accounted for by the dual subcategorization of querer, which then differs from the causatives in also taking an infinitive S complement. Thus (8b) could be acceptable due to its ambiguous underlying structure, whereas hacer, which takes only a V' complement, is unequivocally unpassivizable. The refinement of a theory of phrase structure (particularly complement structure) argued for here admits the possibility of another solution to this discrepancy. See Zagona (in preparation) for further discussion.

⁴Another motivation for the constituency of the objects as V' elements is that it enables direct object clitic placement (the Le-la-les rule of Emonds (1975)) to be stated as a local rule.

⁵The inability of the Lbc to account for examples like (7)-(10) is noticed independently in Morin (1980).

⁶By this criterion (complement recursion restricted to weak recursion within a given category), English could be said to have no VP complements, or only those with -ing heads, if progressive be is correctly analyzed as a main verb. Within a theoretical context where only S complements are assumed, the above criterion might be used to specify the nodes which may be Chomsky-adjoined to S, as in V-preposing analyses of causatives.

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REFERENCES

- Akmajian, A., S. Steele and T. Wasow (1979) "The Category AUX in Universal Grammar," *Linguistic Inquiry* 10, 1-64.
- Bordelois, I. (1974) *The Grammar of Spanish Causative Complements*. MIT doctoral dissertation.
- D'Introno, F. (1979) *Sintaxis Transformacional del Español*. Ediciones Catedra, Madrid.
- Emonds, J. (1975) "A Transformational Analysis of French Clitics without Positive Output Constraints," *Linguistic Analysis* 1, 1-32.
- Emonds, J. (1976) *A Transformational Approach to English Syntax*. New York, Academic Press.
- Emonds, J. (1978) "The Verbal Complex V'-V in French," *Linguistic Inquiry* 9, 151-175.
- Harris, J. (1967) *Spanish Phonology*. MIT doctoral dissertation.
- Herschensohn, J. (1980) "X', AUX and the Structure of V' in French," Paper presented at the Groningen Symposium on the Auxiliary.
- Jackendoff, R. (1977) \bar{X} Syntax: A Study of Phrase Structure. *Linguistic Inquiry Monograph* 2. Cambridge, Mass.: MIT Press.
- Kayne, R. (1975) *French Syntax: The Transformational Cycle*. Cambridge, Mass.: MIT Press.
- Morin, Y. C. (1980) "The Structure of Auxiliary Verbs in French," unpublished paper. Université de Montréal.
- Rivero, M. L. (1980) "Theoretical Implications of the Syntax of Left-branch Modifiers in Spanish," *Linguistic Analysis* 6, 407-461.
- Zagona, K. (to appear) "Evidence for VP Complements in Spanish" *Proceedings of the X Annual Linguistic Symposium on Romance Languages*.
- Zagona, K. (in preparation) *Romance Verbal Complement Structure*. University of Washington dissertation.