

ATTRIBUTIVE ADJECTIVES IN ROMANCE TOWARD A UNIFIED THEORY OF MODIFICATION

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The Romance tradition recognizes an "attributive" sense for adjectives used in prenominal position in a noun phrase: It. *un pover'uomo/un uomo povero* or Ro. *săracul om/omul sărac* "a poor (pitiable) man/ a poor (indigent) man." While recent studies (Cinque 1993, Bernstein 1993, Martín 1995) establish a clear dichotomy of the two types on syntactic grounds, a derivation of semantic gradation is unavailable. In this paper we propose an integrated theory of the semantics and syntax of attributive and predicative adjectives which, we claim, satisfies natural conditions of economy (Chomsky 1995). Departing from recent tradition (Abney 87), adjective phrases APs are projections of A^0 which merge with NP either as complements of D' or of N' . We assume that predicate adjectives are "unsaturated" (Rothstein 1983, Higginbotham (1985). In this scenario, the lexical properties of adjectives which merge as complements of N' are referentially saturated by identification with the head noun, hence the predicative interpretation. In contrast, adjectives which are complements of D' are not referentially saturated, hence the variable, speaker oriented, quasi-metaphorical reading of the lexical properties of the attributive adjective.

Keywords: adjective, attributive, predicative, saturation, semantic gradation, Romance

1. ATTRIBUTIVE AND PREDICATIVE ADJECTIVES

The Romance tradition recognizes an "attributive" sense for adjectives used in prenominal position in a noun phrase, as opposed to a predicate interpretation in postnominal position. This semantic contrast is readily perceived in a proper subset of the Romance languages from the behavior of a class of lexical items which includes It. *grande* "great/big", *alto* "high/tall", *povero* "poor (pitiable/indigent)", *nuovo* "new (different/unused)", *vecchio* "old (temporal./physical)", etc. (1).

(1)	<i>Grande</i>	
	Italian	il <i>grand'uomo</i> / <i>l'uomo grande</i>
	Spanish	el <i>gran hombre</i> / el <i>hombre grande</i>
	Romanian	o <i>mare</i> familie/ o familie <i>mare</i>
	Sardinian	*(no prenominal position)/ un ommini <i>mannu</i>
	Marsian	*(no prenominal position)/ n'omme <i>yerosse</i>
	English	a <i>great~big man</i> / *(no postnominal position)
	<i>Alto</i>	
	It.	un <i>alto</i> funzionario/un funzionario <i>alto</i>
	Sp.	un <i>alto</i> funcionario/un funcionario <i>alto</i>
	Ro.	un <i>înalt</i> functionar/ un functionar <i>înalt</i>
	En.	a <i>high~tall executive</i> / *(no postnominal position)
	<i>Povero</i>	
	It.	un <i>pover'uomo</i> / un <i>uomo povero</i>
	Sp.	un <i>pobre hombre</i> / un <i>hombre pobre</i>
	Ro.	<i>săracul</i> (<i>bietul</i>) om/ omul <i>sărac</i> (* <i>bietul</i>)
	En.	a <i>poor (pitiable~indigent) man</i> / *(no postnominal position)
	<i>Nuovo</i>	
	It.	una <i>nuova</i> macchina/ una macchina <i>nuova</i>
	Sp.	un <i>nuevo</i> coche/ un coche <i>nuevo</i>
	Ro.	o <i>noua</i> rochie/ o rochie <i>noua</i> [rochie "dress"]
	En.	a <i>new (different~unused) car</i> / *(no postnominal position)
	<i>Vecchio</i>	
	It.	un <i>vecchio</i> amico/un amico <i>vecchio</i>
	Sp.	un <i>viejo</i> coche/ un coche <i>viejo</i>
	Ro.	o <i>veche</i> teorie/ o teorie <i>veche</i>
	En.	an <i>old (life-long~outdated~well-known~...) theory</i> /*(no postposition)

The examples in (1) illustrate the well known properties of Romance adjectives, which affect their syntactic structure as well as their semantic interpretation: their word order position with respect to the noun they modify and their elusive semantic nature and gradation. The adjective may appear either before or after the noun they modify, but without clear categorial determinacy, even in languages like Italian and Spanish. In spite of the appearance based on the items we show in (1), the adjective in Romanian is said to mostly follow the noun (see Dumitrescu and Saltarelli, 1996 and in press). The Marsian dialect of Abruzzo and Sardinian, categorically disallow the prenominal position for every semantic class of adjectives, except the evaluative type. At the opposite end of the syntactic typological scale is Walloon, which disallows the postnominal position, with the notable exception of adjectives of nationality. This crosslinguistic situation suggests that the "attributive/ predicative" sense associated with adjectives is an issue of grammar which

may be only coincidental with the overt syntax of the language and more precisely understood as a syntax-semantic interface phenomenon.

2. THE HEAD PARAMETER HYPOTHESIS

On first approximation, the word-order distribution of attributive/predicative adjectives in Romance may lend itself to a formal definition in terms of a basic principle of N(nominal) Head Projection. Arguably, the nominal Head Parameter might be conceived as a proper projection of its modifier either to its left or to its right position, with attendant classificatory consequences construable as the "grammaticalization", through its syntax, of the attributive/predicative property of the adjectives in question. The Head Parameter may be formulated as in (2).

(2) Head Parameter: (a) [X' [A X]] "X final"
 (b) [X' [X A]] "X initial"

A version of the head parameter hypothesis tacitly underlies syntactic analyses whose goals include an account of the distribution of adjectives with respect to their head noun. A basic phrase structure approach to nominals accounts for the comparative variation observed in (1) through the parameterization of N projection properties. Gross differences between English and Romance are reduced to the categorial setting of option (2b) in the core grammar of Germanic. This would account for the apparent postnominal gap in the distribution of the adjective *Grande*, for example, in (1). If we look within Romance, we observe that the setting of the other option of the head parameter, namely (2a), accounts in turn for the non occurrence of prenominal adjectives like *Grande* in Sardinian and Marsian (cf. (1) above).

3. INTENSIONALITY, EXTENSIONALITY AND LEXICALIZATION

Of the Romance languages illustrated in (1) Italian, Spanish and Romanian make an unrestricted utilization of the head parameter (2) and appear to partake of the full overt grammaticalization of the attributive/predicative categorial opposition, which we provisionally correlate with the labels *intensional/extensional*, roughly as the terms are used in predicate logic and as illustrated in (3).

(3)(a) A1:intensional	(b) A2:extensional	
il <i>grand'uomo</i>	l'uomo <i>grande</i> ~ <i>grosso</i>	Italian
el <i>gran</i> hombre	el hombre <i>grande</i>	Spanish
<i>săracul</i> (<i>bietul</i>) om	omul <i>sărac</i> (* <i>bietul</i>)	Romanian
*	s'ommene <i>yerosse</i>	Marsian
*	un ommini <i>mannu</i>	Sardinian
the <i>great</i> man	the <i>big</i> man	English

Given (2) and (3) as systemic properties of attributive versus predicative adjectives, a high degree of determinacy is expected under a unified theory of modification. Empirical effects are predicted from the assumed semantic/syntactic correlation *intensional*:prenominal (A1:AN) and *extensional*:postnominal (A2:NA). One would reasonably expect, for example, that a linguistic system which makes a limited syntactic use of the syntactic head parameter, such as English (namely 2a), might exhibit other modular means for representing the semantic distinction between *intensional* (attributive) versus *extensional* (predicative) adjectives. Such properties are in fact observed in lexicalization differences between English in contrast with Italian and Spanish, languages which do not restrict the nominal head parameter. Note, for example in (3), that in English there are two distinct adjectival lexemes corresponding to the *intensional/extensional* category: namely *great/big*. In contrast, Italian and Spanish utilize the same lexeme *grande*, the intensionality being arguably recoverable in the distinct syntactic configurations made available by the language through a specific setting of the nominal head parameter.

A second example of the interactive effects resulting from the nominal head parameter, concerns Sardinian and the Marsian variety, the two Romance languages which choose the other possible parameterization, namely (2b). Marsian does not generally allow prenominal adjectives. Hence it is technically a syntactic mirror image of English (and Walloon in Romance) as, arguably, defined by the head parameter setting (2a). Consequently, one would not expect an *intensional* use of *Grande* in these head-initial languages. This is in fact the case. The class of *intensional* (attributive) adjective in Marsian is severely restricted. Strikingly, no lexical reflex of the Romance form *Grande* is available in this Romance variety spoken in Abruzzo. The expected predicative postnominal concept with an *extensional* interpretation is present only in the lexical form *yerosse* (the etymological cognate of It. *grosso*) "big".

We have observed thus far how the interaction of the semantic and syntactic modules can affect the lexical constituency of the language with a certain degree of determinacy. This suggests that the apparently unstable constituency of the lexicon reveals an order of complexity in the system which does not simply follow from the lexicalization processes in the language. Rather, the peculiar distribution of the concept *Grande* in the vocabularies of English, Italian and Spanish, and Marsian and Sardinian can only be understood through a presentation of the syntactic parameterization which characterizes them. This parametric perspective, we maintain, brings an analytical improvement on the degree of determinacy in the lexicon of the languages in question.

4. MOVEMENT HYPOTHESES: N-MOVEMENT AND A-MOVEMENT

Recent studies on the structure of nominal phrases (Bernstein 1993, Cinque 1993, following Abney 1987 and Dobrovie Sorin 1987 among others), propose that Noun Phrase (NP) structures involve head-N movement in Determiner Phrase (DP), just like VP been analyzed as undergoing head-V movement in Inflectional Phrase (IP), particularly

in the case of Romance. Accordingly, a functional projection Agreement Phrase (AGRP) in DP could be supported. From this theoretical viewpoint, it is formally possible to reduce the implementation of the Head Parameter (2). Along these lines Cinque's (1993) paper proposes that the underlying order of Italian adjectives is the same as that of English (4), with the difference that in Italian (cf. 4a) the head Noun raises to a position Y (presumably head of AGRP), thus creating prenominal and postnominal surface order in Italian but not in English. The theory is on inspection theoretically appealing from a cross-linguistic perspective, as it accounts for apparent difference between languages as effects of independent phenomena.

(4)

(a) N-Movement (Romance) (b) No N-Movement (Germanic)

[D..[A1 Y [A2 N]]]

[D..[A1 Y [A2 N]]]

[la [nuova auto [rossa t]]] [the[new Y [red car]]]

Cinque's hypothesis, although it finds independent support in Romance, requires additional statements in order to account for other facts about the full syntactic behavior of other of English adjectives. In this Germanic language, in fact, the canonical Romance postnominal word order is also obligatory with adjectives used transitively: *Mary is a good proud lawyer/ M. is a good lawyer proud of her achievements/* M. is a good proud of her achievement lawyer*. Assuming Cinque's theory, an account of these facts would, arguably, require a lowering rule for English transitive adjectival phrases, a solution which would not be strictly consistent head movement theory.

Nevertheless, the same movement hypothesis of nominal phrases, properly defines an alternative analysis of nominal structures which is the theoretical converse of Cinque's N-movement; namely A-movement, which is illustrated in (4'). Under this hypothesis Adjectival head movement, would, move the head of AP, specifically A2, to the prenominal Y position. A theory of Adjective movement would be better suited to account for facts of English (in contrast with Noun movement), while at the same time being consistent with head raising. Its empirical claim, however, is strikingly different. In a A-movement hypothesis, the word order underlying both Romance and Germanic coincides with the surface order of Romance (rather than that of Germanic), in contrast with Cinque's theory (cf. 4'b). While N-Movement and A-Movement may account for the facts at hand, they lead to opposite conclusions regarding the syntax of Romance and Germanic and therefore cannot be both correct.

(4')

(a) No A-Movement (Romance)

[D..[A1 Y [N A2]]]
 └───┘
 X[la [nuova Y [auto rossa]]]
 └───┘
 X

(b) A-Movement (Germanic)

[D..[A1 Y [N A2]]]
 └───┘[the[new red [car t]]]
 └───┘

In sum, movement theory can (although paradoxically) account for the word order distribution of adjectives in Romance and in Germanic in a uniform way (cf. Bernstein 1993). Yet the contrastive logico-semantic behavior of adjectives (cf. 3), the Attributive/Predicative interpretation, remains unresolved. In what follows we propose a unified theory of modification. The hypothesis relies on a minimal utilization of the Head Parameter (2) and provides a conjoined account of the *intensional* use of adjectives.

5. TWO SEMANTIC/SYNTACTIC TYPES OF MODIFIERS: THE PREDICATION HYPOTHESIS

We claim that the word order distribution of adjectives in Romance languages like Romanian, Italian, and Spanish closely reflects its logical form in surface syntax. In this respect Italian and Spanish in particular differ from other Romance varieties, like Sardinian and Marsian which do not allow prenominal adjectives, as well as from English which permits only prenominal adjectives in the general case. Our analysis assumes a predication hypothesis of adjectives, along the conceptual lines of recent neo-Fregean thought (Higginbotham 1987, Degriff and Mandelbaum 1993). We depart, however, from these studies in crucial respects. For an exhaustive presentation we refer to a recent work on Romanian now in press (Dumitrescu and Saltarelli 1997).

Under this conceptual framework, a unified syntactic/semantic representation of the two classes of adjectival modifiers introduced in (3) is illustrated in (5) for Italian, Spanish and Romanian. Adjectives are uniformly analyzed as predicate structures containing an open variable <1>. They are c-selected as syntactic complements of the functional category Determiner (5a) and, alternatively, of the lexical category Noun (5b). Assuming the minimal Head Parameter hypothesis (2), we claim that (5) is the appropriate syntactic and semantic representation of the two classes of adjectives. The scenario for English and non-conforming Romance languages (i.e., Marsian and Sardinian) is defined by the setting of the Head Parameter in the languages in question. Notice, in particular, that prenominal adjectives (5a) are "in construct with" (i.e., are complements of) the Determiner (head of DP), whereas postnominal adjectives (5b) are complements of the Noun (head of NP). In both cases, the complement is projected uniformly to the right (2b) of the respective head category (cf. Kayne 1994). In this context, we observe the selectional restrictions of adjectival classes. For example, adjectives of nationality such as *italiana* "Italian" can only be selected as complements of N. Conversely, a (small) class which includes It. *mera* "mere" and Ro. *biet* "pitiable" can only be selected as complement of the Determiner.

Remarkably, members of a third lexical class, including It. *povero*, Sp. *pobre* and Ro. *sărac* "poor" can be selected as complements either by D or by N, hence, we argue, its contrastive nature. See (1) and (3) for other examples of this class.

(5)

- (a) [DP [D'D [AP *săracul*, <1>], <*1>]...
 It. [il *pover'*]uomo, *[l'*italiana*] invasione
 Sp. [una *mera*] opinión, *[la *italiana*] invasión
 Ro. [*sărac-ul*] om, [un *biet*] batran, *[*italiana*] invazie

- (b)...[N *omul*, <1> [AP *sărac*, <1>], <*1>]
 It. l'[uomo *povero*], l'[invasione *italiana*]
 Sp. una *[opinión *mera*], la [invasión *italiana*]
 Ro. [*omul sărac*], un *[*bătrân biet*], [*invazia italiana*]

6. TWO MANNERS OF PREDICATE SATURATION

Having sketched the conceptual-syntactic representation of adjectives in a nominal phrase, as illustrated in (5), we now demonstrate how the elusive intensional semantics of adjectives (3) can be derived through function composition in accordance with the two syntactic conditions in which the open variable of the adjectival predicate can be saturated.

Let us focus first on prenominal adjectives which function as nominal specifiers (cf. 5a), rather than strictly as modifiers of the head noun (5b). Under these syntactic condition the variable of the prenominal adjectival predicate is syntactically bound, but referentially unidentified with respect to the head noun. This predicts that theta-bound adjectives do not exhibit the referential gradation of extensional expressions (see below (6b)). In fact, note that the interpretation of Sp. *viejo* in (6a) does not vary in correlation with the lexical semantics of the head noun: *un viejo coche*, *un viejo amigo*, *una vieja idea*. Semantic gradation would be expected if the adjective were identified compositionally with the Noun. Prenominal *viejo* has a stable temporal interpretation. Consider, in addition, the Italian evaluative adjective *bella* with a speaker-oriented flavor in colloquial expressions such as *mi sono mangiata una bella pizza* "I ate a beautiful (satisfying) pizza", *mi sono fatta una bella dormita* "I took a beautiful (restoring) nap". The equivalent of these noun phrases in Spanish might be better conveyed by the adjectival parameter *Rico* "rich" as in *una rica pizza*, *una rica siesta*.

(6)(a) Theta-binding by D:

Attributive Interpretation:

(i)	un <i>viejo coche</i>	"an old car"	Spanish
(ii)	un <i>viejo amigo</i>	"an old friend"	
(iii)	una <i>vieja idea</i>	"an old idea"	

(iv)	una bella pizza	"beautiful pizza"	Italian
(v)	una bella dormita	"a beautiful nap"	
(vi)	una rica pizza	"a rich pizza"	Spanish
(vii)	una rica siesta	"a beatiful siesta"	

What the expressions in (6a) show is that the Italian *bella* is idiomatically parallel to Spanish *rica* in prenominal contexts and in no way related to the referential extension of the noun phrase. Rather, prenominal adjectives are uniformly used epithetically or evaluatively of the noun. It is, we suggest, the particular referentially unidentified manner of predicate saturation which lends itself to a speaker-oriented, subject-oriented, sometimes ironical or metaphorical use of adjectives. This, we propose, is the conceptual basis for the traditional notion of "attributive adjective." The definition of "attributive" interpretation we have just outlined must be considered in systemic alternation with the definition of "predicative" adjectives. In contrast with theta-binding (6a), theta-identification (6b) is the function composition of the noun and the adjective in which the open variable of an adjectival predicate is saturated by strict identification with the referential properties of the lexical head noun. Under this structural condition we obtain the extensional (cf. 3b, above) interpretation of the noun phrase with reference to the objects in the mind world a noun identifies with, for an selected concept. We derive the predicative interpretation with examples from Romanian (6b). Note that in *omul sărac* "the poor (indigent) man" the interpretation differs from that of *pământul sărac* "the poor (infertile) land", as the object of reference differs. This gradation in extensionality is also observable when we vary the adjective: *pământul virgin* "the virgin land", *femeia virgină* "the virgin woman", *[e] virgină* "the virgin", *o mașina veche*, *un prieten vechi*, *o idee veche*.

(6)(b) Theta-identification by head N:

Referential (Predicative) Interpretation:

- (i) *omul sărac* "the poor (indigent) man" Romanian
- (ii) *pământul sărac* "the poor (infertile) land"
- (iii) *pământul virgin* "the virgin land"
- (iv) *femeia virgină* "the virgin woman"
- (v) *[e] virgină* "the virgin"
- (vi) *o mașina veche* "an old car"
- (vii) *un prieten vechi* "an old friend"
- (viii) *o idee veche* "an old idea"

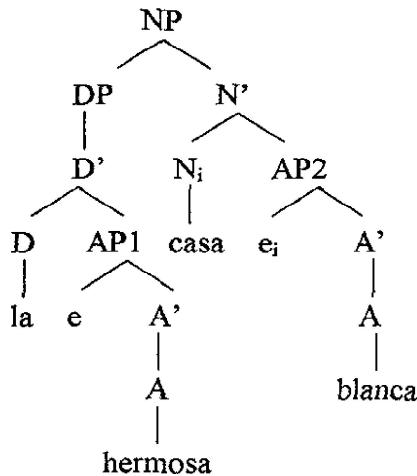
Note that owing to the nature of function composition we perceive the totality of the noun phrase as the interpretation of an expression in the context of our knowledge of the world. For example, a "car" can be *Old* in at least two ways: in terms of time or physical degradation. A "friend" is *Old* in time past relative to life span or personal perspective, a referential standard which is different from the one required by a lexical-conceptual object

like *Car*. An "idea" may be dated in novelty or interest. The same intension is activated as a possible extension of the identifying referent. Accordingly the lexical-conceptual representation of the adjectival predicate *Old* is more like a temporal [PAST] parameter (rather than a list of properties) along which the meaning of the noun phrase is derived.

7. DERIVING PHRASE STRUCTURE

In this paper, we have proposed a logico-semantic definition of the notion "attributive vs. predicative" adjectives in Romance with implications for a general theory of modification. Our conclusion is as follows. If the line of argumentation developed in the course of this paper holds crosslinguistically, then strict word order theories of NP's are limited in their contribution to the semantics of adjectives. We believe instead, that a predicate theory of AP's, as outlined above, can not only provide us with a better understanding of how adjectives are used, but can also help us define constraints on their syntactic distribution. To achieve this comprehensive research goal, the implementation and testing of the proposed hypothesis regarding the interpretation and use of adjectives requires a minimal assumption about nominal phrase structure. Its syntactic variation, we claim, is more precisely constrained by the mechanism of function composition and set in overt syntax by a general version of the Head Parameter (2). A provisional illustration of the phrase structure of adjective phrases in syntactically conforming Romance languages like Italian, Spanish and Romanian can be gathered from the representations (7-9).

(7) Attributives and Predicatives

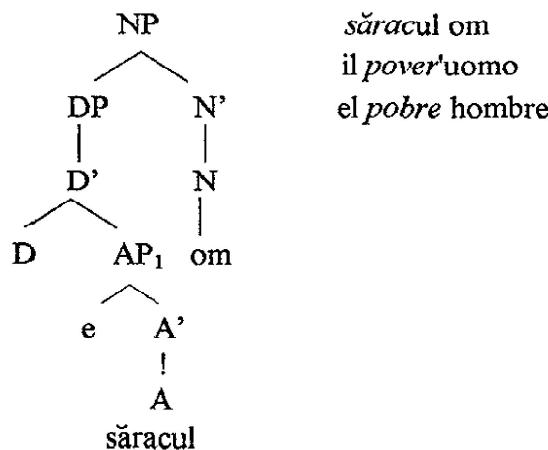


In (7), the representation of the typical Romance noun phrase is given in accordance with the predication theory of modification proposed in this paper. In the representative Spanish noun phrase *la hermosa casa blanca* "the beautiful white house" the adjective *hermosa* receives an intensional (attributive) interpretation in the sense of (3a), while

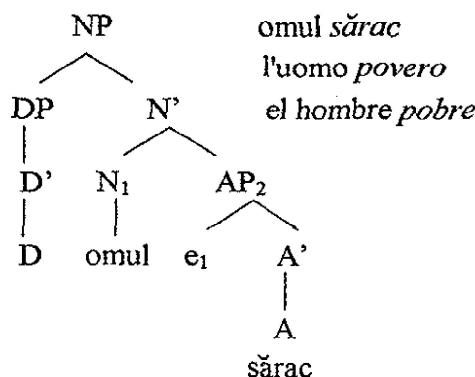
blanca has an extensional (predicative) interpretation, which is derived from the logical syntax of adjectival predicates uniformly selected as head-initial complements of D or N (cf. sections 5 and 6). Given this conceptual basis, the typical overt (surface) syntax of the Romance noun phrase (7) derives directly from its logical structure under the minimal (default) activation of the syntactic head parameter proposed in (2). Romance varieties, like Marsian and Sardinians, which generally disallow prenominal adjectives, are described as restricting the head parameter to head-initial (2b), with significant consequences for the lexicon which must compensate for the word order grammaticalization of the attributive use of adjectives. By contrast, those varieties, like Walloon, which reportedly disallow postnominal adjectives can be described as restricting the syntactic parameter to head-final (2a). Under this proposal, the overt syntax typical of English (cf. 4, above), we suggest without discussion, may follow from the same conceptualization, but not excluding head movement for adjectival incorporation.

(8) Contrastive Interpretations:

(a) Intensional (prenominal)



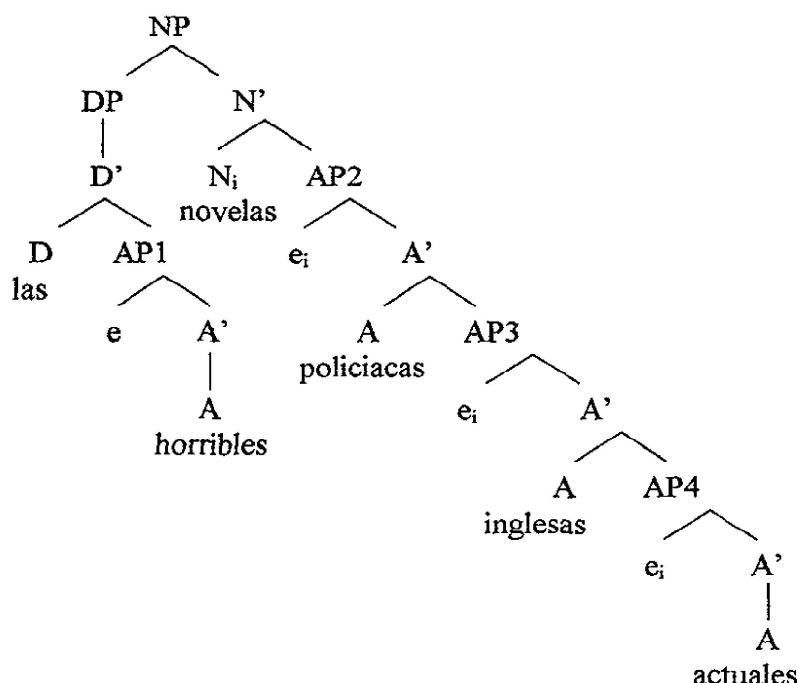
(b) Extensional (postnominal)



The analysis of modification we are proposing, while providing semantic bootstrapping to a description of adjectival word order variation in Romance, is independently motivated by its uniform syntactic/semantic understanding of the theoretically elusive contrastive use of adjectives in expressions like "why is my old friend not old?" (Degraff and Mandelbaum 1993), which is illustrated in (8a) and (8b) for the adjectival conceptualization of *Poor*

One final point will be made in support of the proposed interface hypothesis. A predication analysis of modification has further implications involving stacking of adjectives in noun phrases as in (9). As one can gather from the English gloss and the illustrative configurational representation, our analysis distinguishes between an intensional use of adjectives, which both in Spanish and English *horribles/horrible* is prenominal, and the extensional use Sp. *policiacas inglesas actuales*, where the open variables *e* for each adjective must be in a binding chain with the selecting *N* in order to accomplish stacked referential identification. This semantically required configurational constraint predicts that intervening other possible intervening modifiers such as relative clauses are banned, as in fact is the case : *N policiacas inglesas [que son actuales]/*N policiacas [que son actuales] inglesas*.

(9) Stacked (Right Branching) Adjective Phrases



(las horribles novelas policiacas ingleses actuales)

"those horrible recent English detective stories"

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