Why is my old friend not old?\(^1\)

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The class of adjectives is perversely heterogeneous. This has been noticed at least as far back as 1967 both by Vendler and by Bolinger. Here is a sampler:\(^2\)

(1) a. Our \textit{red} flowers have just blossomed  
b. Our flowers which have just blossomed are \textit{red}

(2) a. Our \textit{old} friend just walked in  
b. Our friend who just walked in is \textit{old}

(3) a. The \textit{mere} fact that they're negotiating does not imply that they will agree  
b. *The fact that they're negotiating is \textit{mere}.

Please, focus on the (underlined) adjectives in (1)–(3); they are either in adnominal or predicate positions. In (1), \textit{red} means approximately the same thing in either position. The situation changes in (2). There, adnominal \textit{old}, in (2a), is ambiguous: are we referring to someone who has been our friend for a long time or to a friend who is aged? Yet, this ambiguity disappears in (2b): the predicate \textit{old} can only mean 'aged'. As for \textit{mere} in (3), It can occur only in adnominal position (with an unambiguous meaning).

In this paper, we take a preliminary stab at making these adjectives less perverse by showing that at least \textit{some} of their heterogeneity has thematic and structural correlates. Namely, we argue that adnominal adjectives are, in X-bar terminology, either (i) heads that take an NP complement and then project to AP; or (ii) heads that directly project to AP, which AP then Chomsky-adopts to NP. We believe that this structural distinction is intimately tied to the semantics of adjectives, more precisely to the number and the nature of their thematic (\(\theta\)-) roles. Our proposal is buttressed by a number of distributional and cross-linguistic observations.

At the onset, we must confess that our account is not really original, in the sense that we use thematic and syntactic constructs already in use in a few generative circles. In other words, the building blocks of our account come straight from our book-shelves and file cabinets. Three of these building blocks are (i) Higginbotham's (1985, 1989) modes of thematic discharge, (ii) Bernstein's (1992) structural analysis of Romance adjectives, and (iii) Siuwell's (1978, 1983), Couquaux's (1982) and Burzio's (1986) 'Small-Clause' theory of predication.

Let us put the first block down — Higginbotham.

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\(^2\)Actually, most of the examples in this example are borrowed, adapted or inspired from previous works; see references, especially Bolinger (1967), Vendler (1968) and Siegel (1976).
1 Higginbotham's Thematic Theory . . . (revisited)

Higginbotham's work on thematic roles lies at the core of our account. Here we spell out its central mechanisms.

Higginbotham adopts Chomsky's $\theta$-criterion, in (4), and extends it as in (5).

Chomsky's (1981) $\theta$-criterion:

(4) Each argument bears one and only one $\theta$-role, and each $\theta$-role is assigned to one and only one argument.

Higginbotham's (1985) revised $\theta$-criterion:

(5) a. Every thematic position is discharged.
b. If $X$ discharges a $\theta$-role in $Y$, then it discharges only one.

Thematic discharge in (5) is the process whereby predicates become saturated (as they must, because of (5a)). Higginbotham makes the following ancillary assumptions:

(6) a. All arguments are saturated
b. All predicates start out as unsaturated.

The key to our proposal is how thematic positions are discharged. Higginbotham introduces four basic modes of thematic discharge:

(7) a. $\theta$-marking: e.g., a predicate (say $V$) $\theta$-marks its internal argument (the nominal phrase under $V'$);
b. $\theta$-binding: e.g., a determiner or quantifier $\theta$-binds an open position in a nominal;
c. $\theta$-identification: e.g., absolute modification of a noun by an adnominal adjective — one open position from the adjective and one from the noun merge into a single open position;
d. Autonomous $\theta$-marking: the value assigned to an open position in a $\theta$-marker is the very phrase marker of its sister constituent; it provides an attribute along which to "evaluate" the $\theta$-marker — this position in the autonomous $\theta$-marker will be referred to as the attribute position.

It is crucial to note that all four modes must operate under government.

The mechanisms in (7), along with some modifications of our own, will become handy in explaining why adjectives such as old, in the title and in (2), are (potentially) ambiguous, with their distinct interpretations occurring in selected distributions. But, before going into that, we must elaborate on the theoretical underpinnings of (7) and on the modifications that we bring to them.

The net result of each discharge operation in (7) is to reduce the number of open positions available from one level to the next level up. However, each procedure fulfills its discharge function in a discrete mode, giving rise to particular interpretations.

1.1 Theta-Marking

$\theta$-marking in (7a) is the vanilla case: there, one open position from (the $\theta$-grid$^3$) of a verb, say, is discharged by an argument of the verb, with this argument being assigned the role associated with the discharged position. Take the verb love, as in (8a). Its lexical entry specifies a $\theta$-grid with two open positions: $<1,2>$ (we arbitrarily assign the labels agent and theme to 1 and 2, respectively). In (8b), love combines with John under the $V'$ projection to form (8b), discharging the open position 2 onto the argument John ("**" symbolizes thematic discharge). At a higher level up, (8b) combines with the subject argument in (8c), forming Mary loves($<1*,2*>$) John,$^4$ where all of love's open positions are discharged (i.e., saturated),$^5$ in accordance with (5a) — and all is well.

(8) a. love: $+V, -N < 1 , 2 >$
   b. loves($<1*,2*>$) John
   c. Mary loves($<1*,2*>$) John

1.2 Theta-Binding

As we just saw in (8), one function of arguments is to saturate open positions in predicates. However, not all open positions are discharged by arguments. Nominals are one case in point. Nominals in some languages function as predicates (e.g., French Jean est médecin) 'John is a doctor'. Thus, it must be that nominals too, like verbs, have thematic roles to be discharged, i.e., they must contain a thematic grid, on a par with love in (8a):

(9) doctor $-V, +N < 1 >$
   doctor(2)

With that in mind, consider:

(10) The doctor has arrived

where the doctor acts as an argument. Thus, by (5a) and (6a), the open position of doctor in (9) must be saturated in (10). What saturates this open position in (10)? In Higginbotham’s (1985) terms, the open position of doctor is accessible to Spec(NP) and it is the determiner in Spec(NP) that $\theta$-binds it, as in (11a) — or as in (11b), in a more recent X-bar framework (e.g., Abney 1987).

$^4$We ignore inflectional s.
$^5$How romantic!
The discharge of doctor's open position by the in (11) gives rise to the following interpretation:6,7

(12) the doctor : NP, <1*> : the(x) such that doctor(x)

Let us turn to θ-identification and autonomous θ-marking, which are most relevant to elucidating adjectival meanings.

1.3 Theta-Identification

As argued in Higginbotham (1985), the modification of one predicative expression by another is sometimes comparable to conjunction, as in a red flower, which refers to a thing that is both red and a flower. In a red flower, the conjunction of the meanings of red and of flower is achieved through θ-identification: one open position in the adjective is identified with the open position in the noun. Consequently, there is one less open position in the next level up, at the N' level as per Higginbotham, as shown in (13a)—or at the NP level, as per our adaptation of (13a) in (13b).

(13) a. N',<1>  
     | \  
     |  A,<1>  
     | N,<1>  
N,<1>  
| doctor

(13b)  

(Higginbotham 1985)

The dotted line in (13b) connects the two positions which are to be equated, one from AP and one from NP percolated up from A0 and from N0 respectively. Discharge, in this case, refers to the reduction, by identification, of two open positions into one open position, the latter being associated with the highest nominal projection in (13).8

We take θ-identification to be responsible for the absolute (or intersective) readings of adjectival modification. In red flower, white wall; four-legged animal; drowsy policeman, etc., the entities described by the combination adjective+noun belong both to the set denoted by the adjective and to the set denoted by the noun. With absolute adjectives, which exclusively discharge their θ-roles through θ-identification, the following implication holds:

(14) x is a(n) Det Adj Noun entails x is Adj and x is a(n) Noun

1.4 Autonomous Theta-Marking

Now, adjectival ambiguity (like that in (2a)) results from that, in addition to θ-identification, adjectives can discharge open positions through autonomous θ-marking (ATM, for short). Take for example a good toaster. Unlike the red-flower case, it is not simply a thing that is both good and a toaster. Yet the semantics of a good toaster must overlap with that of a red flower, i.e., both must involve some notion of conjunction, since it can be said of a good toaster that it means 'this is a toaster, and it is good (as a toaster)'.

What Higginbotham suggests is that in nominals like a good toaster the adjective good would have two thematic positions: one is discharged by identification (with the open position in toaster) and the other is discharged by θ-marking of the very phrase-marker of the noun itself (autonomous θ-marking). The latter open position is the attribute position: it determines the attribute with respect to which the adjective is evaluated—this toaster is good with respect to the 'toaster' attribute.

What distinguishes autonomous θ-marking from non-autonomous θ-marking like (8)? In (8c), it is the referent of the argument John that assumes the role associated with the position 2 in the θ-marker's grid. In contrast, in ATM, it is the reference of the θ-marked argument that plays a role in interpreting the combination.

6The operation of θ-identification is reminiscent of that of equating variables in certain formulas in first-order predicate calculus. Assume that the following formula holds: P(a) AND Q(b). If we also know that a = b, then we can deduce: P(a) AND Q(a) (which is equivalent to [P AND Q](a)). Replacing P by red and Q by flower, θ-identification of their argument would give: [red AND flower](a), that says of a thing z that it is both red and a flower.

7Not to be confused with ATM — automated teller machines.
John is a good teacher and but a bad researcher

(18) contains further examples from Vendler. There, we have the following characteristics for the pertinent adjectives: beautiful may or may not take an attribute — a beautiful dancer may be either someone who is beautiful (only) as a dancer or a dancer who happens to be beautiful; slow takes an attribute — 'she is slow as a dancer'; and blonde does not take an attribute — # 'she is blonde as a dancer'.

Interestingly, the following patterns emerge: in (18b), non-attribute-taking blonde is coordinated with beautiful and forces the latter to be interpreted as non-attribute-taking; in (18c), attribute-taking slow is coordinated with beautiful and forces the latter to be interpreted as attribute-taking; and in (18d), non-attribute taking blonde cannot be coordinated with attribute-taking slow.

(18) a. She is a beautiful dancer, however she is not beautiful
   b. She is a blonde and beautiful dancer
   c. She is a slow and beautiful dancer
   d. * She is a blonde and slow dancer

Summing up what we have so far: The main feature of Higginbotham’s work that we want to import is the thematic differences that exist internally to the class of adjectives: the absolute vs. relative readings — or referent- vs. reference-modification. These differences result from the possibility exhibited by certain adjectives to autonomously θ-mark an accompanying NP (for some, but not all, ATM occurs together with θ-identification11). This accounts for why red in (1) is not ambiguous — it only has one open position to discharge, through θ-identification — and for why adnominal old in (2) is ambiguous — it may or may not take friend as an attribute.

In addition to straightforward X-bar theoretic modifications to Higginbotham’s proposal (see (11b) and (13b)), we further claim, as alluded to above, that ATM is structurally more constrained than θ-identification: the latter requires only government whereas the former also requires a head-complement configuration12 (this will explain the non-ambiguity of old in (2b) and the distribution of mere as in (3); see Section 3). In supporting this claim, we will add another building block to our layout, namely, Bernstein’s proposal regarding the structure of Romance adjectival modification.13

2 The (Dual) Structure of Adjectival Modification

Following Bernstein (1992), we assume the following: An adjective may project either:

(19) a. to an AP which is adjoined to XP (adjoining adjectives); or

b. John is a good teacher and but a bad researcher

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10ATM adjectives are, in some sense, relative adjectives, relative with respect to the property whose label fills up their attribute position.

11For example, a good dancer is both a dancer and is good (as a dancer) — both θ-identification and ATM occur — but a future president is not a president: only ATM occurs.

12In effect, this forces the attribute position to be saturated at the A' level, i.e., the attribute position does not percolate up.

13Bernstein’s paper is couched in purely structural terms, completely divorced from the thematic mechanisms put in place by Higginbotham.
b. to an AP within which it requires a complement under $A'$ (adjectival heads).

Some adjectives (like old in (2a) and (20a) and poor in (20b)) ambiguously allow both (19a) and (19b), resulting in interpretive ambiguity; whereas others, like mere in (3a) (= (20c)), allow (19b) exclusively — the latter are the strict adjectival heads.

(20) a. This is our old friend ‘friend whose friendship is old’ or ‘aged friend’
b. That is a poor man ‘pitiable man’ or ‘impoverished man’
c. The mere fact that they’re negotiating does not imply that they will agree

We adopt the structures in (21) proposed by Bernstein for representing the ambiguity in (20a) — and that in (20b).

(21) a. 
```
                  DP
                 |   |   |
                D'   D'   D'   D'
               /     /     /     /   /
              D0    D0    D0    D0
             / |   / |   / |   / |   /
            NP  AP AP  AP NP
             |   |   |   |   |   |
            'our our our AP AP'
            'friend friend friend'
            'who is old' "friend"
```

b. 
```
                  DP
                 |   |   |
                D'   D'   D'   D'
               /     /     /     /   /
              D0    D0    D0    D0
             / |   / |   / |   / |   /
            NP  AP AP  AP NP
             |   |   |   |   |   |
            'our AP AP AP AP'
            'friend friend friend'
            'friend'
```

In Bernstein’s paper, the ambiguity of adjectives like old and poor in adnominal position is derived on strictly structural grounds, along the configurations in (21). She enlists solid Romance distributional facts to support her account (see Section 4). However, unlike ours, her account makes no reference to the thematic properties of head vs. adjoining adjectives and to their interaction with the distributional facts she describes.

3 A Thematic Analysis of Adjectival Structures

We, on the other hand, want to show that, given our adaptation of Higginbotham’s various modes of thematic discharge, Bernstein’s posited structural ambiguity naturally predicts the differences in interpretation. Putting the works of Higginbotham and Bernstein (and Stowell, Burzio, Couquaux, etc.) together, we hope to give a deeper account of the data at hand.

Specifically, the structural distinction schematized in (21) coupled with the structural conditions on $\theta$-identification — government — and on autonomous $\theta$-marking — head-complement — allows us to derive two consequences: (i) adjectives (of the mere-type; cf. (15)) which autonomously $\theta$-mark (some of them in addition to $\theta$-identifying) are adjectival heads and do not occur in predicate position (and in Romance they do not follow the head noun; see Section 4); (ii) adjectives (of the red-type; cf. old and poor in their ‘aged’ and ‘impoverished’ readings, respectively) that, because of their semantics, may solely $\theta$-identify, are free to adjoin to nominal projections (they are adjoining adjectives) and can behave as predicates.

A corollary of these consequences is that the ambiguity of the adjectives in (20a) and (20b) does not extend to their occurrences as predicates in (22) (and 22b) i.e., the ‘old as a friend’ sense of old and the ‘pitiable’ ‘lying poorly’ sense of poor are blocked in (22).

(22) a. Our friend who just walked in is old
b. That man/friend is poor

But prior to deriving the consequences of our approach, we need to show that, assuming Bernstein’s structures for adjectival modification, Higginbotham’s theory of thematic discharge (plus our home-made extensions) applies to adjectival heads and adjoined adjectives in much the same way as described in his 1985 discussion.

3.1 Adnominal Adjectives

Actually, the application is quite direct: the modes of thematic discharge are as follows: (i) with adjoining adjectives (cf. (19a) and (21a)), only $\theta$-identification occurs since the head-complement condition for autonomous $\theta$-marking is not met; (ii) with adjectival heads (cf. (19b) and (21b)), we have at least autonomous $\theta$-marking and in some cases simultaneous $\theta$-identification. Some adjectives (as in (20b) and (2a)) ambiguously allow both (i) and (ii); others, like mere, allow (ii) exclusively (the strict adjectival heads).

Adding thematic-discharge information to the structures in (21) produces the following trees:

(23) a. 
```
                   DP
                  |   |
                D'   D'
               /     /   /
              D0    D0
             / |   |   |
            NP  AP AP
             |   |   |
            'our AP AP'
            'friend'
            'friend'
            'friend'
```

b. 
```
                   DP
                  |   |
                D'   D'
               /     /   /
              D0    D0
             / |   |   |
            NP  AP AP
             |   |   |
            'our AP AP'
            'friend'
            'friend'
            'friend'
```

In (23a), at one level below the maximal NP, there are two open positions: one in NP, percolated up from $N^0$, and the other from AR, percolated up from $A^0$. These two
open positions are θ-identified, giving rise to the conjunctive reading of 'aged friend'. As a result of θ-identification, the maximal NP contains only one open position. This remaining open position is θ-bound by the determiner, and thus discharged at the D' level. Crucially, the adjoining adjective old in (23a) cannot autonomously θ-mark the NP friend because old and friend are not in a head-complement relationship.14

In (23b), the adjectival head selects a complement NP which it autonomously θ-marks under A'. The phrase-marker NP dominating friend fills the attribute position 2 in old. Simultaneously, at the level at which ATM occurs (i.e., under A'), the open positions, labeled 1, of A and NP are θ-identified. ATM plus θ-identification give rise to the reading 'our friend whose friendship is old', i.e., 'old as a friend' with 'friend' naming the attribute along which 'oldness' is measured.

Thus far, we have taken into account the ambiguity of adnominal old. We have reduced this ambiguity to a thematic one (with structural correlates). In one of its readings, (23a), old<1> 'aged' has a single open position to discharge (through θ-identification), and the AP headed by old is joined to the NP headed by friend. In the other reading, (23b), old<1,2> discharges one extra position (the attribute position), by autonomous θ-marking, A0 selecting NP as a complement. The same dichotomy holds of poor 'impoverished' and poor 'pitable' / 'lying poorly', as in poor man and poor liar.

3.2 Predicate Adjectives

We are now back to a series of questions that were posed at the beginning: Why is it that old and poor, although ambiguous when adnominal, are no longer ambiguous when in predicate position; see (22)? Why is it that only the 'conjunctive' (i.e., 'intersective' or 'absolute') readings of these adjectives survive in predicate position, instead of the relative reading? In more theory-internal jargon, why is it that the reading due to θ-identification (of adjoining adjectives) persists in predicate position, but not the ATM (adjectival-head) reading? Witness (24).

(24) a. Our friend is old 'aged'; 'old-friendship' reading is excluded
   b. That man is poor 'impoverished'; 'pitable' reading is excluded

Also, why is it that certain adjectives, like those in (25), cannot occur in predicate position?

(25) * The fact is mere; * This senator is former; * This suspect is prime; * That disaster is utter; * That fraud is sheer; That person is other

This is where our third building block — Stowell + Burzio + Couquaux + ... — enters the ongoing construction.15

Consider the examples in (22), repeated in (26):

(26) a. Our friend who just walked in is old (i.e., 'aged', not 'old as a friend')
   b. That man is poor (i.e., 'impoverished', not 'pitable' / 'lying poorly')

The adjectives are separated from the nominal they modify by the copula. However, the interpretations of old and poor above are similar to those resulting from θ-

14 Similarly, a verb's direct object is under V', not adjoined to VP.
15 At this point, please put your hard-hats on, if you haven't done so yet.

identification when the adjective is in adnominal position: the interpretation of old and poor as predicates is absolute, i.e., not relative to a particular property. How are these readings achieved, given that at S-structure in (26) the noun phrase and the adjective are not in a government relation parallel to (13b)? Answer: At D-structure, the subject noun phrase enters a government relation with a projection of the adjective. There, the adjective does predicate over the noun phrase within a Small Clause headed by the adjective. At S-structure, the subject moves from within that Small Clause into the surface subject position (Spec(IP)). We now give the details of this analysis, much of it is borrowed from Stowell (1978, 1983), Burzio (1986) and Couquaux (1981).

Assuming for example Stowell (1983), the subject DP is in the specifier of AP at D-structure, as shown in (27).

(27) a. [IP [VP be [AP [DP our friend [A old]]]]]
   b. [IP [VP be [AP [DP that man [A0 poor]]]]]

Following Stowell & Co., let us further assume that be can function as a raising verb. Hence the subject DP raises from the subject, or specifier, position of AP to the specifier position of IP to receive Case, and thereby assume its S-structure position.

How is thematic discharge effected in these cases? It must be by θ-marking at D-structure. Suppose we have the D-structure in (27a), shown schematically in (28) with thematic-discharge information:

(28) The open position <1> from old is carried up from A0 to A'. The DP our friend sister to A' has no open position to be identified with that from A': within DP, the open position in the NP friend is already θ-bound by the determiner our, as argued in 1.2 above. Neither can DP (autonomously) θ-mark A' old, nor can it be autonomously θ-marked by A0 old: DP our friend and A0 are not sisters. Thus the only mode of thematic discharge available in (28) is θ-marking: DP our friend in Spec(AP) is θ-marked by A' old, very much like a VP-internal subject which is θ-marked by
V' (Koopman & Sporich 1988). Once the thematic role carried by A' has been discharged, the Small-Clause subject is free to move from Spec(AP) to Spec(IP), its surface position.

Thus, a Small-Clause analysis of predicate adjectives explains the overlap in meaning between adnominal and predicate occurrences of adjectives. But now, what about adjectives that are not allowed to occur as predicates (with certain meanings), as those in (25) (= (29))? 

(29) *The fact is mere; *This senator is former; *This suspect is prime; *That disaster is utter; *That fraud is sheer; *That person is other; 

Strict adjectival heads, i.e., these adjectives which invariably contain an attribute position, obligatory select complements which they autonomously \( \theta \)-mark through their attribute position. Such adjectives — mere, former, prime, utter, sheer, other, etc. — cannot occur in predicate position, separated by the copula from the NP they modify. 

Given the picture in (28), the explanation is straightforward. We have seen how thematic discharge operates in sentences like Our friend is old. What prevents ATM in The fact is mere? Because of the head-complement condition on ATM, the DP the fact in Spec(AP) at D-structure (and in Spec(IP) at S-structure) cannot be autonomously \( \theta \)-marked, in a fashion parallel to (non-autonomous) \( \theta \)-marking in (27) and (28). ATM cannot occur between either Spec(AP) or Spec(IP) and A'. Furthermore, the selection requirements of mere would not be satisfied at D-structure.

There is another option though. What if fact in The fact is mere were, at D-structure, a complement of mere, as in (30)? This D-structure would satisfy mere's selectional requirement for an NP complement:

(30) \[ IP \\{ VP be \{ DP \{ \theta \} \{ Lo the \} \{ AP LA \{ LA mere \} \{ NP fact \} \} \} \]

And, of course, when NP fact is a complement to a strict adjectival head, the relevant attributive thematic role can be discharged, with A' autonomously \( \theta \)-marking fact. But, from (30), the string the fact is mere needs to be derived, and as a pre-requisite the and fact need to combine as one constituent. This is rather problematic: there is no non-ad hoc way in which the and fact in (30) can join into a constituent. Hence the derivation is unacceptable.15

It is then no longer a mystery why the ambiguity of certain adjectives, like old 'aged' or 'old as ...', poor 'impoverished' or 'pitiably'/'poor as ...', and certain 'sure' or 'particular', disappears in post-copula position:

15There is yet a third option: to generate the whole DP the fact as a complement to mere, moving the DP to Spec(IP) at S-structure. To prevent such a derivation, we must assume that autonomous \( \theta \)-markers select NP (or perhaps Num(mber)); see Bernstein 1992) as complement, but not DP; cf. the mere fact vs. mere the fact; the imperfect solution vs. the imperfect solution. Accordingly, phrases like How utter an accident! and so total an idiot! would be derived by movement. (Thanks to Mark Baltin for pointing out these examples.)

(31) a. Our friend is old (i.e., 'aged', not 'old as a friend') vs. Our old friend (ambiguous)
b. That man\(ll\)ar is poor (i.e., 'impoverished', not 'pitiably'/'poorly') vs. That poor man\(ll\)ar (ambiguous)
c. This cure is certain (i.e., 'sure', 'unfailing', not 'particular'/'unspecifed') vs. A certain cure (ambiguous)

The adjectival meanings which are excluded in predicate position in (31) are exactly those which obtained under ATM — which we know by now cannot occur when the adjective is in predicate position with the subject originating as subject of an AP Small-Clause. 

As promised at the start, we now address cross-linguistic evidence for our account. 

4 Romance Adjectives

The above thematic and structural distinctions among English adjectives receive support from the Romance data in Bernstein (1992). Bernstein explains the order of adjectives in Romance via the structural distinction in (21). She derives the position of pre- and post-nominal adjectives by assuming that adjectives are generated pre-nominally and that the head noun moves across the AP projection to a higher (inflectional) head, thus deriving the noun-adjective surface order. Interestingly, certain adjectives, because they are heads, categorically block movement of the head noun across (and out of) AP; such movement would violate the Head Movement Constraint (Travis 1984; Chomsky 1986). Thus these adjectival heads only occur in the order noun+adjective.

Now, what's striking about Romance adjectives (and makes us optimistic about the fate of this paper) is that their pre-/post-nominal occurrences correlate with the same thematic properties manifested above in the English case. Specifically, post-nominal adjectives (i.e., adjoining adjectives17) do not entail relative meanings, i.e., they do not have those meanings which would be derived through ATM — recall that ATM requires a head-complement configuration. These post-nominal (i.e., adjoining) adjectives only have absolute meanings, which we take now to be derived through \( \theta \)-identification; see Spanish simple in (32b), Italian povero in (33b) and French certaine in (34b).

Among adjectives which appear pre-nominally, there are two classes: those which always appear pre-nominally (like Spanish mero in (32e), Italian mero in (33e) and French autre in (34e)) and those which may also occur post-nominally (like Spanish simple, Italian povero and French certaine). Significantly, the adjectives in the first class always have relative (or, perhaps more cautiously, non-absolute/non-intersective) readings; therefore, they are ATM adjectives and are, naturally, heads blocking movement of the head-noun they govern. These adjectives, like their English ATM counterparts, cannot occur in predicate position (for the same reasons that English mero could not occur as a predicate); see (32d), (33d) and (34d); also see

17These adjectives must head APs which adjoin to NP: being adjoined to NP, they do not govern the head noun and do not block movement of the latter to a higher head. They thus allow the order noun+adjective.
Milner (1967). The adjectives in the second class carry a thematic ambiguity parallel to that of old, poor and certain. Like for English adjectives which may or may not have an attribute position for ATM, the ambiguity of Spanish simple, Italian povero and French certain is thematically derived and structurally constrained. Indeed, their ambiguity disappears when they occur post-nominally (i.e., when they are adjoining adjectives, having allowed head-movement across them) and when they are predicates (being in a configuration where they cannot select a complement to autonomously 6-mark). In both these configurations, the only available readings are absolute. 18

(32) a. El simple hombre ... 'The simple/man man ...' (Spanish) 19  
  b. El hombre simple ... 'The simple/minded man man ...'  
  c. El hombre es simple ... 'The man is { simple-minded | mere }'  
  d. * El accidente es mero ... 'The accident is mere'  
  e. El mero accidente ... vs. * El accidente mero ...  

(33) a. Il pover uomo ... 'The pitiable man ...' (Italian)  
  b. L'uomo povero ... 'The impoverished man ...'  
  c. L'uomo è povero ... 'The man is { impoverished | pitiable }'  
  d. * L'accidente è mero ... 'The accident is mere'  
  e. Un mero accidente ... vs. * Un accidente mero ...  

(34) a. Une certaine chose ... 'A certain (i.e., particular) thing ...' (French)  
  b. Une chose certaine ... 'A certain (i.e., sure) thing ...'  
  c. La chose est certaine ... 'The thing is { sure | particular }'  
  d. * La maison est autre ... 'The house is other'  
  e. L'autre maison ... vs. * La maison autre ...  

Hence our thematic/structural analysis of English adjectives also applies to Romance adjectives. The thematic arguments supporting the structure of English adjectival modification naturally extends to the Romance case where the structural implications of thematic properties are visible in the surface order of adnominal adjectives. 20

5 More Romance (French)

Milner (1967) provides further data from French which seem related to the thematic (and structural) characteristics of adjectives. These data involve ellipsis and adjectival order.

In (35), French simple either means ‘mere’ when it is an ATM adjectival head (pre-nominal) or ‘simple’ when it is a-identifying adjoining adjective (post-nominal). As of petit ‘small’ as in cette petite robe ‘this small dress’, by its semantics, it is an adjoining adjective with no attribute position to discharge. 21

(35) Cette simple robe ‘This mere dress’ vs. Cette robe simple ‘This simple dress’ vs. Cette robe est simple ‘This dress is simple’ (Milner 1967)

Now, knowing that, in French, pre-nominal simple is ATM (and obligatorily selecting an NP complement), and that pre-nominal petit ‘small’ is not ATM, it is not surprising that the NP co-occurring with simple resists ellision unlike the NP occurring with petit may. 22

(36) a. Quelle robe voulez-vous? — { La petite. | * La simple. }  
  which dress want-2sg  
  the small  
  the mere  
  (adapted from Milner 1967)

6 Conclusion

Our account of adjectives’ interpretation and placement implies that their structural ambiguities originate from the distinct configurations under which thematic roles are discharged. Indeed, we have shown that Higginbotham’s modes of thematic discharge support the distinction between the two types of adjective attachment aduced in Bernstein (1992): (i) adjunction to NP for APs headed by adjectives like red in red flower that give rise to conjunctive readings and can occur in predicate position (and in post-nominal position in Romance), 23 and (ii) adjectival heads like mere in the mere fact selecting an obligatory NP complement and giving rise to non-conjunctive (relative) readings — these adjectives do not occur in predicate position (nor in Romance post-nominal position). 24 In addition, we have shown potential ATM adjectives. For us, what gives the nominal big elephant its relative reading ‘big for an elephant’ is not an attribute position present in big’s thematic grid. Instead, the relative reading is achieved via the class with respect to which big is evaluated. Consider a big elephant and the (fictitious) set of elephants. If we know that the set of elephants is exactly the set of ballots, then we can deduce that a big elephant is a big ballot. However, consider a good dancer, and further imagine that only linguists are dancers and that only dancers are linguists. Now, even if we know that our friend Titl is a good dancer, we cannot deduce from that that Titl is a good linguist — actually, for all we know, Titl might be the worst linguist on earth precisely because she spends too much time practicing the lambdas. Thus, ATM adjectives are ‘intentional’ in the sense that they take properties as arguments (a good dancer is good with respect to the dancer property) whereas adjectives like big are ‘extensional’ in the sense that they are evaluated with respect to the extension of the NP they modify (a big elephant is big as compared with other members in the set of elephants). See Siegel (1976) for further detailed arguments in favor of a similar distinction.

Another possibly related fact concerns the order within adjectival sequences. In French (as in English) an adjectival head (French simple, English mere) must precede an adjoining head (French petit, English little):

(i) Une simple petite robe ... (Milner 1967)

(ii) * Une petite simple robe ...  

A mere little dress A little mere dress  

(See Waugh (1976) and Bernstein (1992) for additional interesting facts about Romance adjectives.)

22For reasons not quite clear to us, certain conjunctive adjectives, like petit ‘small’, seem reluctant to occur post-nominally and others, like color adjectives, seem reluctant to occur pre-nominally. But see Milner (1967), Waugh (1976) and Bernstein (1992) and references therein for relevant observations.

24A caveat is in order: At this point what we have done is propose only a coarse thematic division within the class of adjectives. Of course, many semantic and syntactic nuances will not be captured at that level — in much the same way that verbal distinctions like intransitive/transitive,
that a Small-Clause analysis allows a natural extension of Higginbotham’s thematic analysis to predicate adjectives: the subject originates in Spec(AP) where it is $\delta$-marked by $A'$. This also provides an explanation for the correlation noticed in Bernstein (1992) between the relative readings of certain adjectives and their unavailability in post-copular position.25

Final pat on our backs: Our proposal refines the interaction between syntax and semantics originally proposed by Higginbotham. These constraints on the syntax/semantics interface appear to hold (somewhat) cross-linguistically.

References


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accusative/unaccusative or ergative/unergatives (say) will not capture all the richness of verbs.

Bolinger, Vendler and Siegel, among others, amply document the subtleties of adjectives — we have only scratched the surface of these subtleties (although we’re still scratching our heads).

25Russian adjectives are remarkable in that they have long and short forms, as in (i) and (ii), from Siegel (1976). Short-form ‘adjectives’ do not inflect for Case and occur only in predicate position; Siegel views them as verbs. Long-forms are more ‘typical’ adjectives: they inflect for Case and occur both in predicate and pre-nominal position.

(i) Siademiia mnajja (long form) “The student is intelligent” (relative)

(ii) Siademiia mnaj (short form) “The student is intelligent” (absolute)

With respect to the thematic properties we have been considering, short adjectives (verbs?) have absolute meaning whereas the long adjectives express relative meanings (via ATM?). Could it be the case that Russian has taken the ATM vs. $\delta$-identifying properties to an extreme in that the grammar distributes these thematic properties across separate lexical categories (adjectives and verbs, respectively)? Siegel provides much more data and illuminating observations toward answering this question.
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