

Adjective ordering restrictions and the interface between meaning and form

Adjective ordering restrictions have been widely discussed (Sproat and Shih 1991, Svenonius 1993, Bernstein 1993, Cinque 1994, Bouchard 1998 among many others), but they are still not very well understood. For example, there is still no explanation for why in some languages SHAPE adjectives have to precede COLOR ones, but not vice-versa (1). Is it the syntactic component that determines these orderings or the semantic one? This paper contributes to the debate by arguing that semantics does play a role in the grammar of adjective orderings: it doesn't determine *what* the adjective ordering restrictions are, but it determines *when* these apply. More specifically, I propose that adjective ordering restrictions apply only to sequences where different orders yield different semantic interpretations.

According to Sproat and Shih 1991, modifying adjectives that cannot be derived from relative clauses are subject to ordering restrictions; those that can are freely ordered, since the grammar contains no principle for ordering (relative) clauses with respect to each other function of the predicate inside. I would like to add to this discussion by observing that in modification structures involving at least one operator adjective like *former* or *alleged* (i.e. of type $\langle\langle s, \langle e, t \rangle \rangle, \langle e, t \rangle \rangle$), adjective ordering restrictions do not apply. In (2) and (3) both the (a) and (b) orders are possible. In contrast, in (4), where there is no operator adjective, only one order is acceptable, namely the one in (4a). In the absence of special intonation, all the other word orders are ungrammatical (4b-d). The question is why do adjective ordering restrictions apply in one case but not the other?

A possible account is that there is a syntactic distinction between non-intersective adjectives and intersective ones. If we assume that non-intersective adjectives occupy the Specifier position of dedicated functional projections as in Cinque 1994, we would then expect the ordering in (2) and (3) to be fixed, which is not the case. Alternatively, we could assume that non-intersective adjectives are actually adjuncts, which would consequently capture the free order effect. However, this is not the right account.

Proposal: I would like to propose a model of grammar in which the syntactic component imposes ordering restrictions only on semantically equivalent structures. It may not be that all such structures are subject to ordering constraints, but it is only these that *can* be. Under this view, if two sequences $A_1 A_2 N$ and $A_2 A_1 N$ have different denotations, the syntax will always allow both orders. This is the case in examples (2) and (3) where the (a) and (b) sequences contain one or more operator adjectives and have thus different interpretations, as shown by their respective paraphrases. Reversely, if only one ordering is possible the prediction is that the sequences $A_1 A_2 N$ and $A_2 A_1 N$ are semantically equivalent and that the ordering attested is the one imposed by the syntax, as in example (4).

An interesting argument for this approach comes from so-called non-definite superlatives like (5) discussed in Herdan and Stateva 2005. In the absence of an operator, structures with multiple intersective adjectives are subject to ordering constraints, as shown by the contrast between (6a) and (6b). Remarkably however, when a degree operator is present, such as the *-est* morpheme, different interpretations arise and the adjectives are freely ordered with respect to each other (7a vs. 7b).

Conclusion: This paper provides further support for a theory of grammar where the form of linguistic structures is determined at the interface with the semantic component (Fox 2000). Adjective ordering can be seen as another domain where semantics restricts the application of syntactic operations.

- (1) Quality > Size > Shape > Color > Provenance (Sproat and Shih 1991)
- (2) *sequences with 1 operator adjective:*
 a. a famous former actor (#who is now forgotten)
 MEANING: someone famous who is no longer an actor
 b. a former famous actor (who is now forgotten)
 MEANING: someone who is no longer famous or no longer an actor
- (3) *sequences with 2 operator adjectives:*
 a. an alleged former thief
 MEANING: someone who is alleged to have formerly been a thief
 b. a former alleged thief
 MEANING: someone who is no longer alleged to be a thief
- (4) *sequences without an operator adjective:*
 a. a beautiful small black purse
 b. #a beautiful black small purse
 c. #a small beautiful black purse
 d. #a small black beautiful purse
 etc.
- (5) This class has a shortest student. (“non-definite superlative”, Herdan and Stateva 2005)
 MEANING: there is a unique student in this class who is shorter than
 all the other students in the class
- (6) a. a short Italian student
 b. #an Italian short student
- (7) Every class in this school has a shortest student.
 a. My class has [a shortest Italian student].
 MEANING: an Italian student who is shortest among the Italian students in my class
 b. My class has [an Italian shortest student].
 MEANING: the shortest student in this class is Italian

Selected references:

- Cinque, G. 1994. “On the evidence for partial N movement in the Romance DP”. In G. Cinque, J. Koster, J.-Y. Pollock, L. Rizzi and R. Zanuttini (eds.), *Paths Toward Universal Grammar*, 85–110. Georgetown: Georgetown University Press.
- Fox, D. 2000. *Economy and Semantic Interpretation*. Cambridge, MA: MIT Press
- Herdan, S. and Sharvit, Y. 2005. *Definite and Non-definite Superlatives and NPI Licensing*. Ms. University of Connecticut
- Sproat R. and C. Shih. 1991. “The Cross-linguistic Distribution of adjective ordering restrictions”. In C. Georgopoulos and R. Ishihara (eds.), *Interdisciplinary Approaches to Language. Essays in Honor of S.-Y. Kuroda*, 565-593. Dordrecht: Kluwer Academic Publishers