

undesirable consequences and predictions that Kahnemuyipour's system makes, and suggest a modification of Kahnemuyipour's framework in order to avoid these shortcomings. All this said, Kahnemuyipour's book is a remarkable contribution because of the breadth of its empirical coverage and because it links recent syntactic developments with longstanding issues in phonology.

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Luis López, *A derivational syntax for information structure* (Oxford Studies in Theoretical Linguistics 23). Oxford: Oxford University Press, 2009. Pp. xii + 293.

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When generative linguists became interested in structures related to Information Structure (IS), they sought explanations by considering sentences in isolation, and tried to derive IS properties by means of computational rules. However, this way of proceeding is problematic: IS properties concern the relation between a sentence and its linguistic and extralinguistic context, and computational mechanisms are not expected to be driven by external (discourse) properties. Chomsky (2000 and subsequent work) proposes that multiple spell-outs are possible at fixed points in the derivation,

the so-called phases. When a phase is reached, the derivation is visible to the external systems, and interface rules apply. In the present book, Luis López exploits the new theoretical notion of phase to solve the problem of IS-related syntactic phenomena. His proposal is that at phase edges, the derivation is able to access discourse rules, with the result that IS properties can be assigned. In other words, in López's proposal, IS features are not assigned by the computational system (C_{HL}), but by the independent module that he calls pragmatics. The C_{HL} makes available feature checking operations that trigger movement to the edge of a phase, and hence provides derivations that are readable by the interpretive module. Unlike many previous approaches where IS properties (e.g. Focus and Topic features) are the trigger for movement, López's analysis exempts the C_{HL} from accounting for discourse-related phenomena. The role of the C_{HL} is only to create derivations that are able to interface with the external systems.

López's theoretical assumptions (mostly argued for already in López 2007) are presented in the introduction of the book. Concerning phrase structure, he takes the C(omplementizer)P(hrase) to be split into a Finite and a Force Phrase (Rizzi 1997), but rejects Topic and Focus Phrases (in fact, he rejects the very notions of topic and focus that are behind these projections). As for syntactic dependencies, he assumes a strictly local probing mechanism of unvalued features, which are carried by the moving item. The introduction also previews the constructions that will be the object of study, in particular Clitic Left and Right Dislocations (CLLD and CLRD) and Focus Fronting (FF). López's data are taken mostly from Catalan, but his proposal is meant to be valid for all southern Romance languages.

López's view of IS is presented in Chapter 2, 'Information structure'. IS involves those aspects of the grammar that are relevant for the integration of sentences into discourse. The IS of a syntactic object is that same object augmented with the features assigned by the independent module of pragmatics (cf. the independent module of IS in Vallduví 1992).

It is sensible that López addresses the question of defining IS categories before proposing any syntactic analysis of IS-related constructions. He first deconstructs the notions of topic and focus often used in the syntactic literature on IS. For him, topic is about 'aboutness' and focus provides resolution of a variable left open in the discourse. He then proposes two different notions: anaphoricity and contrast.

For dislocated elements, López makes the original claim that they are strongly anaphoric, that is, they require a local antecedent in the discourse and must be in a relation of structural asymmetry with their antecedent. Adopting a Segmented Discourse Representation Theory (SDRT) approach (Asher & Lascarides 2003), structural asymmetry means that dislocations must occur in a subordinated discourse segment, while their antecedent must occur in the superordinate one. Thus the appropriateness of dislocations in discourse is predictable by discourse structure.

CLLD and CLRD are both assigned the feature [+a(naphoric)] by the interpretive module pragmatics. The difference between the two constructions lies in their relationship with the antecedent: for CLRD it must be identity, for CLLD it can be a subset–superset, set–membership, or part–whole relationship. In other words, the CLLD opens up a variable and closes it. That means that a CLLD is assigned the additional feature of [+c(contrastive)], while a CLRD is [–c]. However, it is not so clear that CLLDs always open a quantificational domain (see Brunetti 2009a), which casts doubt on the validity of an approach that assigns a unique interpretation to a syntactic derivation, as this book attempts to do.

The problem with a definition of focus as providing a resolution for a variable left open in previous discourse is that it cannot account for the displacement of focus material to the left periphery (Focus Fronting, or FF). For López, FF both opens up a variable and provides an element to resolve it. All focus is [–a], but the relevant feature to distinguish FF from in-situ focus is [+c]. In Brunetti (2009b), I have shown that FF may answer a question (i.e. resolve a variable in the discourse) if the question is implicit or no longer salient. This analysis is compatible with López's claim if we specify that FF not only occurs when a variable is not in the discourse, but also when it is not easily or not anymore accessible. Ultimately, however, my proposal differs from López's in that I relate the interpretation of FF to the fact that a fronted focus is unambiguously narrow, rather than to a feature [+c] assigned to a particular derivation.

At the end of Chapter 2, the book contains a section dedicated to the relation between stress and focus. López argues that focus projection rules do not always explain deaccenting in English. The corresponding Catalan data, on the other hand, reveal that syntactic structure always matches IS: the item corresponding to an item deaccented in English is dislocated only when it is anaphoric, otherwise it is not. López concludes that deaccenting (hence intonation) is not always related to anaphoricity and hence to IS.

In Chapter 3, 'The syntax of dislocations and focus fronting', López discusses the syntactic position of CLRD, CLLD and FF. He argues for pragmatic features to be assigned at the edges of two phases: [\pm a] is assigned at ν , and [\pm c] is assigned at Fin.

As for CLRD, López shows that the dislocated item undergoes A-movement, is lower than a CLLD, and occupies a position that is between the specifier of the T(ense)P(hrase) and the in-situ subject. He proposes that this position is a higher Spec ν P (multiple specifiers are possible in his model). Displacement is related to the presence of a resumptive clitic. The clitic spells out a feature matrix X that merges in ν and causes the argument to move to Spec ν P, where it forms a dependency with ν and agrees with X. Since ν P is a phase edge, the argument is assigned the interpretive feature [+a]. In short, [+a] is assigned to a constituent that: (i) is in Spec ν P and (ii) agrees with X. If one of the two conditions is not met, no [+a] feature is assigned (this

prevents, for instance, external arguments from being assigned [+a]). The complement of *v* is assigned [−a], as far down as the following *v*P. In order to explain linear order, López proposes an analysis based on linearization constraints that apply at the PF interface. It is important to note here that pragmatic features are assigned before the PF interface, so PF reads pragmatics and not vice versa.

Assuming that *wh*-phrases, FF and CLLD all involve contrast, López argues for a unity of all A'-dependencies: these movements are all triggered by the same formal feature and their landing site is always SpecFinP, where the pragmatic feature [+c] is assigned by the interpretive module. CLLD is also [+a], so the dislocated constituent has to move to Spec*v*P to acquire that feature before moving on to SpecFinP. Evidence in support of this analysis comes from the fact that in CLLD, a floating quantifier can be stranded in Spec*v*P. Moreover, like a CLRD, a CLLD reconstructs to a position that c-commands the postverbal subject but is c-commanded by the preverbal subject.

As for FF, there is mixed evidence on whether or not it is movement via Spec*v*P, even if this movement has no pragmatic consequences since the focus constituent does not agree with a clitic. A question that arises is how López would account for a fronted focalized pronoun in a French sentence like *MOI j'ai appelé Pierre* 'I called Pierre', if *MOI* 'me' moved to Spec*v*P. Since the moved element agrees with a clitic, it should be [+a], contrary to what López assumes for FF.

Finally in this chapter, López discusses D-linked *wh*-phrases. They have no resumptive clitic and can reconstruct; yet, they are [+a] (as generally claimed in the literature). López proposes that the [+a] feature is in fact assigned to the *wh*-word in the lexicon.

Rizzi (1997) uses occurrence restrictions of A'-moved items as evidence for different A'-positions. However, López argues that occurrence restrictions are due to interpretability problems. While this approach strikes me as desirable in principle, anaphoricity and contrast are not always sufficient or adequate to account for the data. By assuming that CLLD is [+a], multiple CLLDs are straightforwardly explained: there is no limit to the number of anaphoric expressions in a sentence. To account for the fact that FF must be unique, López argues that it is odd to have a double correction in the same utterance. However, it is not clear why two items that are [+c] and [−a] incur incompatibility, but not two items that are [+c] and [+a]. The incompatibility between FF and a *wh*-phrase is argued to be due to the fact that contrast implies assertion, and that it is not possible to make an assertion and a question at the same time. Finally, López claims that the ordering of A'-moved items depends on a restriction in the linearization of [+a] and [−a] constituents: the former have to be linearized before the latter.

López then turns to the long-debated question as to whether subjects are always dislocated or not. He argues that they are not, because SVO order is

possible in an all-focus sentence, which is not expected if the subject is dislocated and hence [+a]. Addressing the question why subjects are preverbal in all-focus sentences, López proposes that they check an interpretable feature indicating the beginning of a new discourse. I think López here misses the well-established link between sentence-initial position and topic, claimed to hold in many languages. Preverbal subjects and CLLDs would be unified by this property, but since topic is not a relevant interpretive notion for López, he cannot pursue this kind of analysis.

In Chapter 4, 'The derivation of information structure', López provides further data in support of his phase-based analysis of IS-related phenomena. The main piece of evidence is sub-extraction. Sub-extraction data provide arguments against two alternatives to López's account: one based on a model where interpretation of syntactic structures takes place only when the derivation is completed, and one based on a model in which interpretation takes place each time an operation applies, rather than at specific points. The former model is too rigid and cannot explain why two parts of the same constituent can get two different values of the same feature. The latter faces the opposite problem: it cannot explain why in certain constructions, two parts of the same constituent cannot get different values. A phase-based model can explain both situations, because it distinguishes between sub-extraction taking place within a phase, when the pragmatic feature has not yet been assigned, and sub-extraction across a phase boundary, which takes place after the feature has been assigned.

In his book, López attempts to account for all constructions that are related to IS and have been the object of debate in the literature. Chapter 5, 'Moving objects', is concerned with P-movement (a reordering of verbal arguments), Accusative A (a Spanish construction in which animate accusative complements are introduced by the preposition *a*), and Clitic Doubling (CLD), as well as scrambling and object shift in Germanic.

P-movement involves the reordering of the indirect and direct object or, alternatively, the reordering of subject and object, and was analyzed by Zubizarreta (1998) as being prosodically motivated. López shows that, at least for Spanish, it is triggered by the same formal feature as CLRD. The item moves to SpecvP and is assigned the feature [+a]. P-movement occurs in place of CLRD whenever the feature X is not spelled out as a clitic.

For Accusative A, López shows that it is a structural phenomenon triggered by a formal feature and that its interpretation can be optionally anaphoric and specific. He proposes that the targeted position is SpecVP. This position is not the edge of a phase, so it does not interface with any interpretive module, which explains why there is no obligatory interpretation. In some varieties of Spanish, Accusative A combines with Clitic Doubling (CLD) of the direct object. While the accusative object occupies the same position (SpecVP) as in 'pure' Accusative A, the object is obligatorily interpreted as specific. López accounts for this difference by

proposing that the clitic of CLD is of a special nature and inherently specific. This explanation is not very convincing, as it obfuscates the clear opposition between items that are at the edge of the *v*-phase and are always interpreted as [+a], and those that are not and do not receive any obligatory interpretation. Once again, these data raise doubts about whether a one-to-one match between syntax and interpretation is possible and desirable.

Finally, López briefly discusses scrambling and object shift in Germanic in this chapter. He shows that the scrambled or shifted object must be specific and anaphoric, and provides evidence for movement to Spec v P.

The proposal made in Chapter 3 concerning the syntax of CLLD, CLRD and FF is refined in the last chapter of the book, 'Dislocation debates'. Arguing against proposals made in the literature, López reaffirms that CLLD and CLRD involve movement. The chapter also discusses the landing site of CLRD. Many different and often contradictory proposals have been made in the literature concerning the position of CLRD in Romance. López contributes to this discussion by providing new data; yet only the licensing of negative polarity items provides some further evidence that the CLRD is located in the middle field.

To conclude, López's work contributes to a line of research that recognizes the importance of context in the interpretation of IS-related constructions and acknowledges that they cannot be explained by internal mechanisms only. The role of the C_{HL} is to displace items to phase edges, where they can be assigned interpretive features. Even this reduced role of C_{HL} , however, seems questionable, given data which cast doubt on the possibility of a one-to-one match between syntax and interpretation.

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