

## REVIEWS

**A syntax of substance.** By DAVID ADGER. (Linguistic Inquiry monographs 64.) Cambridge, MA: MIT Press, 2013. Pp. x, 189. ISBN 9780262518307. \$32.

Reviewed by CARLO CECCHETTO, *University of Milan–Bicocca*

This book by David Adger results from the investigation of two separate, yet overlapping, issues in the theory of syntax in the generative tradition. The first one is the hypothesis, which goes back to Chomsky 1970, that there is a tight structural parallelism between the verbal and the nominal domains. This builds on the assumption that nouns can take complements as verbs do, so the core part of the NP would be the noun plus its complement, much like the core part of the VP would be the verb plus its complement. Other modifiers to the noun or to the verb (adjuncts) would be peripheral to this core nucleus.

The second main question A's book deals with is what determines the label of a phrase. For example, how is that a verb phrase receives its label from the verb and not from the category the verb combines with (say, its direct object)? There must be general mechanisms (or labeling algorithms, as they have been recently called) that govern label determination, and a significant amount of work in recent years in the theory of syntax has been devoted to their identification.

When tackling these two issues, A decides to challenge the received views. On the one hand, he denies that there is a close structural parallelism between nominal and clausal structures. On the other hand, he deals with the labeling issue by rejecting the view endorsed by many authors that labeling is connected to structure-building operations. What links the two parts of A's book is the fact that the analysis of the nominal domain where the NP/VP parallelism is abandoned becomes the main empirical motivation for the new approach to his theory of labeling. In particular, Chs. 2 and 3 discuss labeling and phrase structure theory, while Chs. 4–6 focus on NP structure.

Before turning to a short description of the content of the book and to a general evaluation, a preliminary consideration is in order. A's book is a typical work in the generative tradition, which may raise some eyebrows. This is so because this book, as is not unusual in the generative tradition, seems to put into question fundamental tenets of the received theory, instead of building on them. Therefore, it might appear that generative linguists need to reinvent the wheel each time they write a new book. In turn, this may be taken as an indication of the weakness of this research tradition, since it might seem that, after decades of research, generative linguists have not been able to reach a stable consensus on the vocabulary of their own theory (Daniel Everett's (2014) review of A's book is representative of this reaction). Understandable as this reaction may initially seem, it is not justified. First, a high level of innovation is characteristic of hard sciences, and being suspicious of innovation is more typical of premodern science (although, admittedly, it is always very difficult to compare methodologies, styles of argumentation, and ways the knowledge progresses across different fields). However, the main reason why I think that this reaction is not justified, at least as far as A's book is concerned, is that such a reaction would reveal a cursory reading and a superficial understanding of its contents. Indeed, if one reads the book carefully, it is easy enough to see the 'standing on the shoulders of giants' situation and even a strong continuity with the preceding tradition in some fundamental aspects. Let us take a representative example. As I said, A denies that NPs and VPs have a parallel organization. He does not deny, however, that both have a hierarchical organization. In fact, that sentences, clauses, and phrases are organized hierarchically has been a main tenet of the generative tradition from its beginning sixty years ago, and no generative linguist has ever denied this. Even more telling, it is instructive to see how A motivates the differences between NPs and VPs. One classical diagnostic to probe whether a certain category is hierarchically superior to (technically, *c-commands*) another category involves binding. For example, in the clausal domain in English a quantifier binds a pronoun only if the former *c-commands* the latter, linear precedence not playing a crucial role. So, the

reading in which *his* depends on *every* (the bound reading) is available only in 1; its absence in 2 shows that linear precedence is not relevant.

- (1) Every boy bought a picture of his mother.
- (2) Every boy's friend bought a picture of his mother.

One argument that A uses to probe the internal organization of the NP in a variety of languages is exactly the bound-variable test. Therefore, A is not starting from scratch or revealing an alleged weakness of the tradition he refers to. Rather, he presents new findings emerging from the application of a consolidated methodology of research that require the revision of some assumptions in the framework within which that methodology has been invented. A may be right or wrong, but there is no reinventing the wheel here. On the contrary, it seems to me that there is significant innovation, but within a consolidated tradition.

With regard to the content of the book, after a short introduction in Ch. 1, Ch. 2 is devoted to the labeling issue. Here A rejects approaches claiming that labeling is dependent on structure-building operations. This rejection is mainly motivated by the fact that these approaches would not be able to explain how a label is determined in symmetrical configurations, namely, when two phrases are first merged (as opposed to when a lexical item is merged with a phrase). Here A offers a very compelling criticism of Chomsky's (2008) treatment of symmetrical structures, which allows them to remain temporarily unlabeled under the condition that they are destroyed soon enough in the derivation. But if labels do not come from Merge, where do they come from? A's answer is that any structure is labeled based on its position in a set of universal sequences of functional categories that are pre-given (these roughly correspond to Grimshaw's (1991) extended projections).

The version of phrase structure theory proposed by A is too complex to be summarized in a few lines, but two aspects should be stressed. The first is that, by the way his system is built, lexical roots cannot take complements. This applies both in the verbal and in the nominal domain. For example, what is traditionally analyzed as the internal argument of an unaccusative verb is never the sister node of the verb. The most local an internal argument can be with a verb is when it is the specifier of a category that takes the verb root as its complement. Given this approach, a head and its complement are never in a strictly local (sisterhood) configuration, and in principle some other category might hierarchically intervene between them. My understanding is that A does not think that this possibility is systematically exploited in the verbal domain, so, although technically the verb and its internal argument are not in a sisterhood relation, they still remain the internal nucleus around which the rest of the clause is built. A devotes Chs. 4 and 5 to his claim that a relational noun and its alleged complements are not local even in this derived sense, since some categories (notably adjectival phrases) combine with the relational noun before its alleged complement does.

In A's terms, the 'complement' PP of a relational noun is peripheral, while the complement DP of a verb is not. Three considerations motivate his distinction between the verbal and nominal domains. The first is that the alleged complement of the noun is optional, while the presence of the complement of the verb is lexically determined. A discusses and dismisses some apparent exceptions to this generalization, such as complex event nominals. The second consideration is that an in-depth investigation of nominals in a sample of languages (Hawaiian, Romance varieties, Semitic varieties, and Gaelic) shows that when the alleged complement and an adjectival phrase both occur to one side of the noun, the former is separated from the noun by the latter. These word-order facts are shown to derive most straightforwardly from the hypothesis that the alleged complement is structurally (not just linearly) more peripheral to the noun than the adjective. The third diagnostic for the peripheral status of the alleged complement is the binding tests mentioned above.

A further consequence of the version of phrase structure theory proposed by A is that it makes impossible a certain type of roll-up movement, namely movement of part of an extended projection to some position within the same projection line. This is important because available ac-

counts of the word-order facts identified in Ch. 5 heavily rely on roll-up movement. Ch. 6 is devoted to showing that roll-up movement approaches cannot satisfactorily account for the observed pattern, and A interprets this as indirect evidence in favor of his framework, which excludes roll-up movement to begin with.

I have to declare a conflict of interest here since I am the coauthor of a book in the same Linguistic Inquiry monograph series (Cecchetto & Donati 2015) that reaches in one case a conclusion similar to A's (nouns do not take complements the way verbs do), and in another case the opposite conclusion (labeling is not pre-given but is decided step by step when the structure is built). So perhaps it does not come as a surprise that I find A's criticism of the research tradition stemming from 'Remarks on nominalization' quite powerful, while I still think that, if tenable, a system in which labeling directly depends on the basic structure-building operation (Merge or Probe) is preferable to assuming that labels are pre-given in a universal sequence of functional categories, since this leaves little space for cases where labeling attribution is ambiguous. Another general concern is that the proposed system, by abandoning the requirement of sisterhood between verb and complement, in principle might allow cases of 'peripherality' in the verbal domain analogous to the identified cases of 'peripherality' in the nominal domain. Are these cases attested? If not, what blocks them?

A final note on readability. The book is hard to follow even for linguists who are acquainted with the topics it covers. This is partly unavoidable since one goal of the book is to shed light on complex linguistic patterns by forcing readers to adopt a sophisticated theoretical apparatus that is innovative and therefore unfamiliar to them. Still, the book would have been more accessible were it not for some editing faults. For example, there is an exaggerated use of newly introduced acronyms, which add to the already significant set of acronyms used in the field. In order to read the book without needing to regularly flip back to the places where they are defined, I had to make a manual list of the meanings of the following acronyms: REP, RLex, CI, CLex (in capital letters), LTFs, OGRE, and UEP. In addition, in at least one case, an acronym (CI, not to be confused with CLex!) is used before it is defined (CI is mentioned on p. 21 and defined on p. 23). Additionally, the index is quite slim for a book as complex as this.

I have mixed feelings about the title. It is a reference to a quotation from Aristotle and alludes to the claim that no noun is really relational, relationality being imposed on the noun from the structure it is inserted into. Therefore, all nouns would denote undifferentiated substance, not relations. The title is certainly eye-catching. It might incorrectly suggest, however, that the book is about the count/mass noun distinction, a topic that is not covered here.

Putting these editorial issues aside, there is no doubt that this is a very ambitious book written by a brilliant linguist. The combination of technical insight and close attention to the data, including some from underdescribed languages, is impressive and is attested on virtually every page. This is certainly a very important contribution to the theory of syntax, and my guess is that its impact on the field is likely to be permanent and significant.

## REFERENCES

- CECCHETTO, CARLO, and CATERINA DONATI. 2015. *(Re)labeling*. (Linguistic Inquiry monograph 70.) Cambridge, MA: MIT Press.
- CHOMSKY, NOAM. 1970. Remarks on nominalization. *Readings in English transformational grammar*, ed. by Roderick Jacobs and Peter Rosenbaum, 184–221. Waltham, MA: Ginn.
- CHOMSKY, NOAM. 2008. On phases. *Foundational issues in linguistic theory: Essays in honor of Jean-Roger Vergnaud*, ed. by Robert Freidin, Carlos P. Otero, and Maria Luisa Zubizarreta, 133–66. Cambridge, MA: MIT Press.
- EVERETT, DANIEL L. 2014. Review of *A syntax of substance*, by David Adger. Waltham, MA: Bentley University, MS. Online: <http://ling.auf.net/lingbuzz/002351/>.
- GRIMSHAW, JANE. 1991. Extended projections. Waltham, MA: Brandeis University, MS. [Published in *Words and structure* (CSLI lecture notes 151), Stanford, CA: CSLI Publications, 2005.]

[carlo.cecchetto@unimib.it]