

## REVIEWS

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**Barbara Citko**, *Symmetry in syntax: Merge, Move and labels* (Cambridge Studies in Linguistics 129). Cambridge: Cambridge University Press, 2011. Pp. xii + 276.

Reviewed by ARTHUR STEPANOV, University of Nova Gorica

This is a monograph in Minimalist syntax. It brings readers' attention to those aspects of the Minimalist sentence-building procedure that can conceivably be said to involve some notion of symmetry, though symmetry may be realized in different ways in different parts of that procedure.

Considerations of (a)symmetry in syntax have long been a point of interest in mainstream generative syntactic theory, receiving strong impetus from the influential work of Kayne (1994), whose basic statement, the Linear Correspondence Axiom (LCA), proposes a direct mapping between syntactic structure and linear precedence. In Kayne's theory, a symmetric relation of c-command between two nodes in a syntactic tree results in contradictory instructions concerning linearization of terminals under those nodes (the terminals would end up both preceding and following each other) and is hence to be avoided. In order to be successfully linearized, two nodes must instead stand in an asymmetric c-command relation. It is thus with Kayne's proposal that symmetry-related concerns were first accorded prominent status in modern approaches to generative syntax.

Kayne's LCA clearly demonstrates that if we are to consider symmetry in its most rigorous, formal sense, we need to adopt a mathematical conception of symmetry and understand it as a property of relations (in this case, c-command). An approach to symmetry not couched in strictly relational terms tends to bring about a more informal, intuitive sense of symmetry with no single across-the-board definition thereof. The latter, intuitive approach

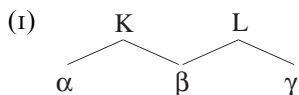
appears to be the one pursued in Barbara Citko's *Symmetry in syntax*. On the one hand, this may be a methodologically beneficial move since it allows the researcher to widen the scope of investigated phenomena while keeping it under a uniform conceptual umbrella. On the other hand, it invites possible controversy as to what is and is not a relevant component of structure building for investigating sources of symmetry.

In Chapter 1, 'Rationale', Citko tries to head off such controversy by pinpointing the domains that she considers relevant for investigating symmetry and asymmetry. According to Citko, symmetry can be found in (i) the workings of the operation Merge, (ii) mechanisms of movement (Move), and (iii) Labeling, that is, the procedure determining labels of syntactic objects. The bulk of the book is thus devoted to the discussion of these three mechanisms.

In Chapter 2, 'Asymmetry in syntax', Citko reviews the existing syntactic models that bear on what she considers to be asymmetrical aspects of Merge, Move and Labeling, and provides examples of apparently asymmetric structures. Among the theories reviewed are Kayne's Antisymmetry, Moro's (2000) Dynamic Antisymmetry, which builds on Kayne (1994), and Di Sciullo's (2002) Asymmetry theory in morphology. Double object constructions provide an example of asymmetry in Merge, with the indirect object c-commanding the direct object. Relativized Minimality is taken to be a sign of asymmetry in movement: if there are two or more candidates for movement, only the highest one in the structure is allowed to move, others are not. Finally, Minimalist Labeling is a typically asymmetric procedure because the label of the object created by Merge is determined by only one of the participating objects, not by both.

In the remaining chapters, Citko argues that, alongside their asymmetric properties, each of Merge, Move and Labeling also shows symmetric characteristics. Chapter 3 deals with 'Symmetry in Merge'. Citko distinguishes three varieties of Merge: (i) External Merge, which combines two distinct syntactic objects, (ii) Internal Merge, which combines two syntactic objects, one of which is contained within the other (this mechanism is behind usual movement transformations), and (iii) Parallel Merge, which is like External Merge in that it targets two distinct syntactic objects, but resembles Internal Merge in that it combines one object with a subpart of the other. While (i) and (ii) are standard structure-building mechanisms in Minimalism, (iii) is Citko's own proposal.

Parallel Merge results in multidominant structures with shared pivots of the kind shown in (1).

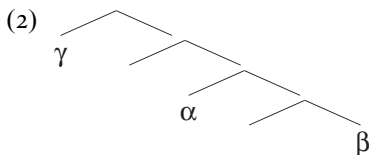


The symmetry inherent in the structure in (1) can actually be seen as a property not of Merge itself, but of the c-command relation; that is, the pivot

$\beta$  stands in a symmetric c-command relationship with respect to two other nodes. Multidominant structures have been used for some time in pre-Minimalist and Minimalist generative analyses of a gradually increasing set of empirical phenomena, including across-the-board movement, coordination, gapping, and free relatives (Goodall 1987, Muadz 1991, Moltmann 1992, van Riemsdijk 2006, among others; see also Stepanov 1997 for further applications). Interestingly, most of these constructions involve multidominance configurations at the clause level. Citko reviews the existing accounts of these phenomena in terms of multidominant structures and offers novel Minimalist analyses. For instance, she argues that across-the-board *wh*-movement structures (as in *What<sub>i</sub> did John lose t<sub>i</sub> and Bill find t<sub>i</sub>?*) involve three pivots or sharing points: a *wh*-pronoun, a T(ense) head and a *v* head. Similar solutions are offered for constructions involving gapping and right node raising. Citko also discusses interesting examples of serial verb constructions that lend themselves to a multidominant analysis. The chapter's section on free relatives (94–106) builds on van Riemsdijk's (2006) work and lays out a multidominant analysis where the *wh*-pronoun (for example, *whatever* in *I read what(ever) Mary wrote*) is a pivot between two C(omplementizer)P(hrase)-chunks (for the example above, [<sub>CP</sub> *I read whatever*] and [<sub>CP</sub> *whatever<sub>i</sub> Mary wrote t<sub>i</sub>*]). Citko then extends this analysis to transparent free relatives (for example, *John read what he took to be Bill's new novel*).

Multidominant structures raise a number of non-trivial questions that so far have been addressed with only a limited degree of success. One such question concerns a possible linearization algorithm, which by necessity requires more complex mapping statements than those for the usual 'two-dimensional' structures. Although a number of such statements have been proposed in the literature, at present they continue to retain a large degree of stipulation, reflecting our current limited understanding of the underlying mechanisms. In Chapter 3, Citko reviews the previously proposed linearization algorithms, but does not explicitly commit to any particular algorithm.

Chapter 4, 'Symmetry in Move', discusses symmetry in movement. For Citko, symmetric movement is movement that targets either candidate  $\alpha$  or  $\beta$  on its way to  $\gamma$  in the familiar configuration in (2):



Most of the relevant empirical data presented in this chapter involve passive movement in double object constructions in languages in which the canonical word order is subject – indirect object – direct object. The indirect object ( $\alpha$ )

asymmetrically c-commands the direct object ( $\beta$ ) in these constructions, as in (2), and passive movement targets one of these objects on its way to the subject position ( $\gamma$ ). Relativized Minimality suggests that only indirect objects may raise, and indeed many languages with subject – indirect object – direct object word order allow just this option. Other languages, however, seem to allow passivization of the lower object across the higher one, even in cases where no alternative subject – direct object – indirect object word order is available (see, for example, McGinnis 1998 and Anagnostoupoulou 2003 for comprehensive discussion). Previous Relativized-Minimality-based accounts postulated a so-called high applicative head  $v$ , a phase head to which the direct object first moves in order to become closer to the target. In contrast to these previous accounts, Citko argues that symmetric movement in passives does not depend on the presence of a high applicative head, showing that languages like Chichewa or Russian may have a high applicative head in their clausal structure but allow only the indirect object to passivize. In contrast, languages like British English lack high applicative heads (as evidenced by the unacceptability of, for example, *\*John held Mary the door*, with the intended meaning of ‘John held the door for Mary’), yet passivization of the direct object (which Citko terms ‘symmetric passive’), is possible (for example, *A book<sub>i</sub> was given John t<sub>i</sub>*).

According to Citko, passivization of a lower object may happen in one of two ways. Following what she terms a ‘locality-based’ strategy, the direct object may first move to some position higher than the indirect object (not correlated with applicative heads), thereby becoming closer to the target to which it will move in the next step. If this movement is optional, then the indirect object can also passivize. The result is symmetric movement, targeting either candidate. The second, ‘Case-based’ strategy involves the higher object first moving to a Case-licensing position below T (more precisely, to the specifier position of a ‘light applicative’ head), where it is frozen for further movement. Movement of the higher object does not block movement of the lower object, which in a second movement step raises past the higher object. Citko provides an extensive argument from Polish, a language with subject – indirect object – direct object word order which allows passivization of direct but not indirect objects, implementing the Case-based strategy. This approach entails that indirect (for example, Dative) objects in languages that utilize this strategy are ‘quirky’ in the same sense as well-known quirky subjects in Icelandic: both have lexical case and structural Case features. The consequences of this implication may be non-trivial and deserve further exploration.

Symmetric movement is thus possible whenever either locality-based or Case-based strategies are at work. We may presumably expect similar strategies to apply in other manifestations of the configuration in (2), for example, in multiple *wh*-movement languages if these also have symmetric movement.

Chapter 5, ‘Symmetric labels’, deals with symmetry in Labeling. Building on Baker & Stewart’s (1999) work on serial verb constructions, Citko examines some empirical consequences of their suggestion that a symmetric label of an object composed of  $\alpha$  and  $\beta$  is possible if the two elements do not conflict in syntactic features. If each of the two objects has the same feature specifications, a symmetric label is the union of features of  $\alpha$  and  $\beta$ :

$$(3) \quad \begin{array}{c} \gamma_{\{-F, +G, -F, +G\}} \\ \swarrow \quad \searrow \\ \alpha_{\{-F, +G\}} \quad \beta_{\{-F, +G\}} \end{array}$$

Labels such as  $\{V, V\}$ ,  $\{DP, DP\}$ ,  $\{CP, CP\}$  are possible if the labeled objects are composed of identical categorial components. Another possibility for symmetric Labeling are label-less structures, such as Moro’s (2000) bare small clauses consisting of two DPs. A typical property of the symmetrically labeled nodes, according to Citko, is that any of their daughters can be targeted for movement. Citko provides a detailed analysis of comparative correlatives (for example, *The more I read, the less I know*), which for her are structures symmetrically labeled as  $\{CP, CP\}$ , in contrast to standard correlatives in languages such as Hindi, which are typically analyzed as clausal adjunction structures (see, for example, Dayal 1996). Citko shows that in a number of languages, comparative correlatives allow *wh*-extraction out of either CP-conjunct, whereas in standard correlatives extraction is possible only out of the matrix clause (TP), not out of the adjunct clause (CP). Since comparative correlatives may be symmetrically labeled, symmetric across-the-board movement is also expected in these contexts, but not in standard correlatives. This establishes an important distinction between the two types of correlatives, which have sometimes been treated in the literature on a par. Citko proceeds to inspect cross-linguistic variation with respect to extraction patterns in both types of correlatives, and concludes that the correspondence between symmetric/asymmetric and comparative/standard correlatives is not one-to-one: comparative correlatives, which involve Merging two CPs, may project either a symmetric label or an asymmetric label; standard correlatives only have the asymmetric option because of a categorial mismatch of their structural components (one clause is a CP, the other a TP).

The book abounds with empirical data from various languages, including the author’s native Polish. It offers a careful systematization of theories and accounts of ‘non-standard’ movement and deletion patterns (such as right node raising, across-the-board movement, gapping, etc.), including their Minimalist analyses. The book is a good point of reference for those interested in these topics, but it will also be of value for readers interested in ‘good design specifications’ in language – a difficult and fascinating area of research, where the issues of symmetry and asymmetry naturally enter into consideration.

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**John Frampton**, *Distributed Reduplication* (Linguistic Inquiry Monographs 52). Cambridge, MA: MIT Press, 2009. Pp. xiv + 228.

Reviewed by JESSE SABA KIRCHNER

In this book, John Frampton sets out to reclaim the field of reduplication for derivational phonology. Using an impressive trove of data and detailed case studies, he presents a novel theory of reduplication (Distributed Reduplication or DR) and demonstrates how it can analyze a wide range of patterns of reduplication. He also exposes serious shortcomings in previous analyses, especially those in the framework of Optimality Theory (OT; Prince & Smolensky 1993/2004). Frampton's monograph makes the strongest and most persuasive case to date for a derivational analysis of reduplication, which is likely to be fully developed in the near future. Overall the author succeeds in pointing out serious inadequacies of many previous analyses, and convincingly demonstrates that DR can provide clever and elegant solutions for a wide range of problems.

However, *Distributed Reduplication* does not attain all of its goals. Important empirical problems remain, with some patterns escaping analysis,