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by Edith Moravcsik

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 ISBN: 978-3-88405-676-9
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SOURCE
 PAGE 544 - 547
 HANDBOOK OF MEREOLOGY Edited by
 Hans Burkhardt † (Founding Editor),
 Johanna Seibt, Guido Imaguire,
 Stamatios Gerogiorgakis
 131 Contributions, Bibliographical remarks,
 References and further readings,
 Index, 629 pp. Library Binding.
 ISBN 978-3-88405-090-3 Print
 ISBN 978-3-88405-736-0 E-Book
 © 2017 by Philosophia Verlag GmbH
 Munich (DE)
www.philosophia.de

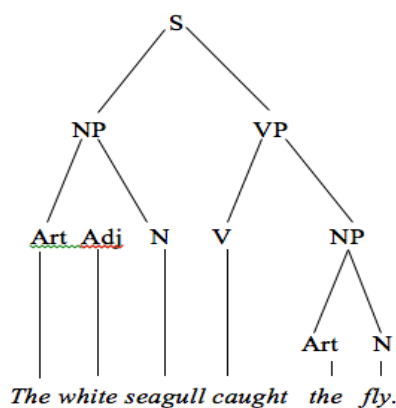
Syntax

The conceptual tool of part-whole relations resolves a paradox: it allows for something to be viewed as both 'one' and 'many' at the same time. On the one hand, it enables us to analyse one thing as more than one by decomposing it into parts. On the other hand, it allows us to view many things as one if we posit a single whole that they are parts of. Both analytic steps facilitate generalisations: wholes that appear distinct may turn out to be similar by sharing some of their parts, and assemblages of different things may form wholes that are in some respects alike.

Both directions of mereological analysis have found abundant application in the description of sentence structure. First, it is useful

to break sentences into words: the two sentences *Bill arrived* and *Bill left* are distinct as wholes but similar in that they both include the word *Bill* as their subject. Second, sequences of words can act jointly as single units, such as when an entire clause functions as the subject of the sentence [*That he arrived*] *surprised me*.

All syntacticians posit sentences as wholes and words as their parts and most will posit clauses and phrases in between as well (cf. Jackendoff 1991). Mereological structure in syntax is called constituent structure or phrase structure. (1) shows a traditional phrase structure tree of a sentence complete with category labels.



(1)

Symptoms of syntactic wholes - phrases or clauses - include joint recurrence in and across sentences, joint non-occurrence (replaceability or omissibility), and adjacency of the parts. These properties of

mereological structure are illustrated in (2) for the noun phrase.

(2)(a) Recurrence in and across sentences

(i) [The guests]_{NP} read [the book]_{NP}.

(ii) [The guests]_{NP} are tired.

(b) Joint replaceability by a pro-form

[**The guests**]_{NP} arrived and **they** left immediately.

(c) Joint omissibility

[**The guests**]_{NP} arrived and ___ left immediately.

(d) Adjacency

(i) [The guests]_{NP} arrived.

(ii) ***The** arrived **guests**.

The utility of positing such wholes is shown by what happens if we do not posit them. Without the concept of noun phrase, rules of which word sequences can be subjects and objects and which can be replaced by pronouns or left out would have to be stated by listing all the parts over and over again, as in (3). The concept noun phrase simplifies these rules, as in (4).

(3) (a) A subject must be a noun, or an article and a noun, or an article and an adjective and a noun, etc.

(b) A pronoun may replace a noun, or an article and a noun, or an article and an adjective and a noun, etc.

(4) (a) A subject must be a noun phrase.

(b) A pronoun may replace a noun phrase.

(c) A noun phrase is a noun or an article and a noun or an article and an adjective and a noun, etc.

While the mereological analysis of sentences enhances the generality of descriptions, it introduces problems of its own. On the one hand, not all syntactic part-whole relations are simple; on the one hand, criteria for wholeness may be in conflict.

Complexity. Simple partonomic systems would involve only two sister parts for each whole, no parts within parts, parts that are equal, each part uniquely assigned to a single whole, and wholes that are compositional (i.e., their properties are the sum of the properties of the parts and their relations) (cf. Moravcsik 2006; 2009). There are, however, syntactic constructions that violate one or the other of these simplicity criteria. For example, in a noun phrase like *the ripe cherries*, the adjective *ripe* and the noun *cherries* are not on equal footing in that the noun phrase is grammatical without the adjective (*the cherries*) but not without the noun (**the ripe*).

Another complex syntactic mereological pattern is a part simultaneously belonging to two wholes. Thus, in *Jill expects him to succeed*, the pronoun *him* belongs both to the main clause *Jill expects him* and to the subordinate clause *him to succeed*. Such instances of what is called multiple motherhood have

been dealt with differently in various syntactic theories. In Word Grammar, *him* is represented as simultaneously dependent on both verbs: *expects* and *succeed* (Hudson 1984: 112). Other approaches in turn solve the problem by an additional application of paronymy: rather than assuming a single structure, they assign two constituent structures to each sentence. Thus, in some versions of transformational grammar, *him* is the subject of the subordinate clause in underlying structure and is subsequently “raised” into the main clause by a transformation (Postal 1974).

Conflicting criteria. A common way in which wholeness criteria are in conflict involves adjacency: words of what otherwise appears to be a phrase or a clause may not be contiguous. For example, (5) and (6) show that the English noun and relative clause may or may not be adjacent.

(5) (a) The man that came to see me is German.

(b) The man is German that came to see me.

Yet, for purposes of replaceability, noun and relative clause form a phrase whether they are adjacent or not.

(6) (a) **The man that came to see me** is German. **He** was kind.

(b) The man is German that came to see me. He was kind.

Discontinuous constituency has been a central problem in syntactic theorising (Huck & Ojeda 1987).

One solution is once again by splitting a single structure into two layers. For sentences like (5b), surface structure would have the relative clause separated from the noun but in the underlying structure, the clause is adjacent to the noun, just as in (5a). Underlying structure thus regularises the linearly deviant construction (see for example Jacobs & Rosenbaum 1968). Other analyses (e.g. Sadock 1987) assume that the non-adjacent noun and relative clause do not form a phrase in syntax but they do so in semantics.

In sum: mereological analysis solves some problems in syntax and poses others. Many of the differences among syntactic theories boil down to varying attempts to represent the exact nature of constituent structure and to resolve its complexities and contradictions.

See also > *Grammar, Linguistic Structures, Paradoxes, Possessives and Partitives, Structure*.

Bibliographical remarks

Huck, G. & Ojeda, A., 1987. Papers on discontinuous constituents.

Jacobson, P., 1996. A synopsis of theories of syntactic constituent structure.

Jackendoff, R., 1991. A partonomic analysis of semantic and syntactic structures.

Langacker, R., 1997. A less constrained concept of constituent structure.

Moravcsik, E., 2009. A general overview of part-whole relations in syntax.

Tversky, B., 1990. An overall analysis of partonomic structures in language

References and further readings

Bergs, A., 2003, "Holismus und Individualismus in der Linguistik: ein Überblick", in Bergs, A.; Curdts; S. I. (eds.), *Holismus und Individualismus in den Wissenschaften*, Frankfurt a. M.: Lang, 143-161.

Huck, G.; Ojeda, A. (eds.), 1987, *Discontinuous Constituency. Syntax and Semantics* 20, Orlando, FL: Academic Press.

Hudson, R., 1984, *Word Grammar*, Oxford: Blackwell.

Jacobson, P., 1996, "Constituent Structure", in Brown, K.; Miller, J. (eds.), *Concise Encyclopedia of Syntactic Theories*, Oxford: Elsevier, 54-67.

Jackendoff, R., 1991, "Parts and Boundaries", *Cognition* 41, 1-3: 9-45.

Jacobs, R. A.; Rosenbaum, P. S., 1968, *English Transformational Grammar*, Waltham, MA: Blaisdell.

Langacker, R., 1997, "Constituency, Dependency, and Conceptual Grouping", *Cognitive Linguistics* 8:1, 1-32.

Leffel, K.; Bouchard, D. (eds.), 1991, *Views on Phrase Structure*, Dordrecht: Kluwer.

Moravcsik, E., 2006, *An Introduction to Syntax, Fundamentals of Syntactic Analysis*, London: Continuum.

Moravcsik, E., 2009. "Partonomic Structures in Syntax", in Vyvyan, E.; Purcell, S. (eds.), *New Directions in cognitive Linguistics*, 269-285. Amsterdam/Philadelphia: Benjamins

Postal, P., 1974, *On Raising. One Rule of English and its Theoretical Implications*, Cambridge, MA: MIT Press.

Sadock, J. M., 1987, "Discontinuity in Autolexical and Autosemantic Syntax", in Huck & Ojeda, ed. 283-301.

Tversky, B., 1990, "Where Partonomies and Taxonomies Meet", in Tsohatzidis, S. L. (ed.), *Meanings and Prototypes. Studies in Linguistic Categorization*, 334-344, London: Routledge.

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