

Interrogative Investigations: The Form, Meaning, and Use of English Interrogatives. By Jonathan Ginzburg and Ivan A. Sag. Stanford, CA: Center for the Study of Language and Information, 2000. xii + 449. ISBN: 1-57586-277-8.

DOI: 10.1177/0075424204264854

Reviewed by Mark Honegger

University of Louisiana at Lafayette

As their title suggests, Jonathan Ginzburg and Ivan Sag's 449-page account of English interrogatives brings together syntax, semantics, and pragmatics (and some limited phonology) in a Head-Driven Phrase Structure Grammar (HPSG), an approach to language that takes seriously the need to explain how all these components fit together in this grand thing called human language. It does not deal with syntax in isolation, an important move when the field of linguistics does not agree on where syntax ends and semantics begins.

The scope of the book is broad, and the explanations are detailed. The first four chapters provide Ginzburg and Sag's theoretical apparatus. Chapter 1 lays out their overall approach to linguistics. Chapter 2 provides a fairly thorough introduction to Ginzburg and Sag's version of HPSG. Chapter 3 argues for the semantic ontology that underlies the book. Chapter 4 lays out the various semantic representations *wh*-phrases may receive. The last four chapters provide the book's empirical coverage. Chapter 5 discusses unbounded dependencies. Chapter 6 covers interrogatives with fronted *wh*-phrases and exclamatives. Chapter 7 deals with in situ *wh*-phrases. Chapter 8 finishes with extensions of Ginzburg and Sag's theory to sluicing, negative questions, and the selection properties of predicates. There are three appendices at the end that present the formal apparatus of the theory.

In the first half of the book, Ginzburg and Sag are concerned with comparing and contrasting HPSG accounts to Principles and Parameters accounts. This includes defending why grammars should be based on constraints rather than derivations, especially against claims that HPSG undercuts strong versions of universal grammar (although they themselves do not assume a strong version of universal grammar). HPSG also depends heavily on grammatical constructions; their prominent role in the theory is demonstrated by the presence of many diagrams like the following one, which details how various Maximal Interrogative Clauses are linked in an inheritance schema (371). The labels in italics represent types and subtypes of constructions that are organized in a multiple inheritance hierarchy, such that lower

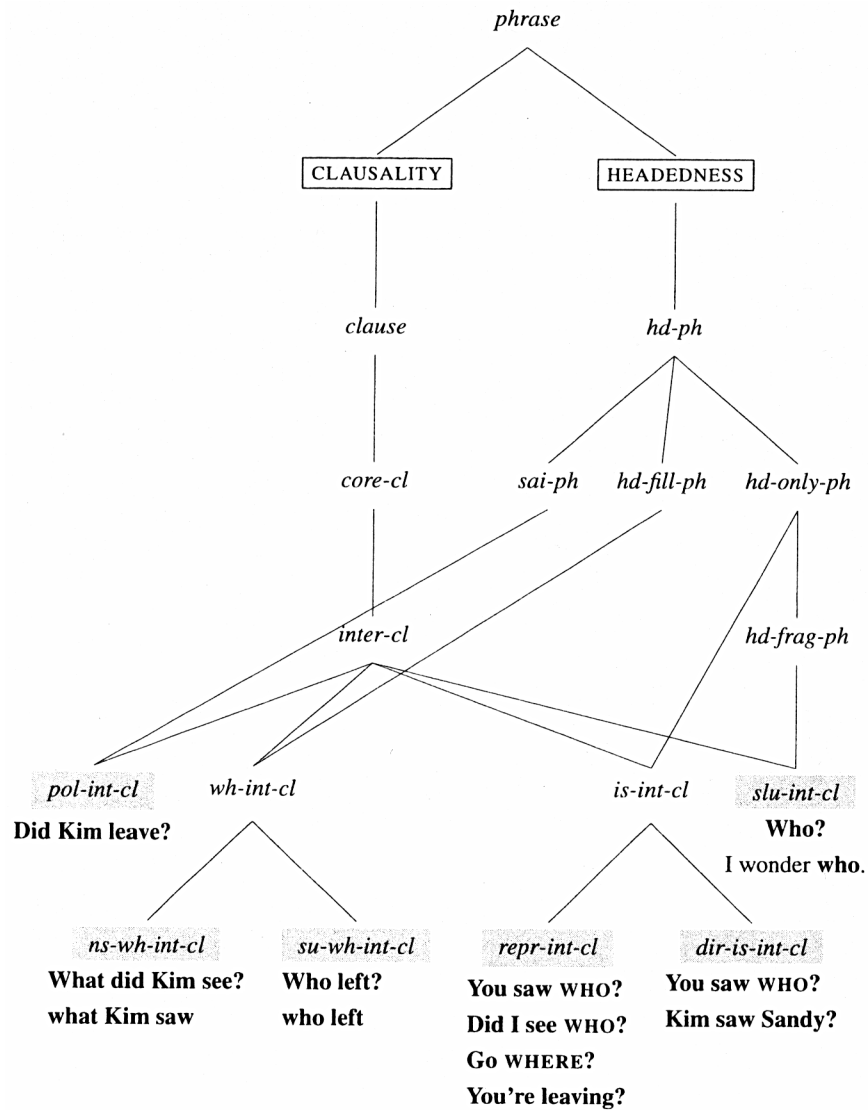


Figure 1: Maximal Interrogative Clauses

level constructions inherit all the constraints applicable to those constructions higher in the diagram. For example, *inter-cl* (interrogative clause) inherits all the constraints applicable to *core-cl* (core clause). This includes aspects such as the following: core clauses cannot be modifiers, and they must be headed by clausal verbs (finite verbal forms or the auxiliary *to*). *Pol-int-cl* (polarity interrogative clause) in-

herits constraints pertaining to both *inter-cl* and *sai-ph* (subject-auxiliary inversion phrase). In addition, there are numerous constraints that hold of both lexemes and words as well as between mothers and dependents, some of which are construction-dependent and some of which cut across categories.

The philosophy here runs directly counter to work done in principles and parameters/minimalism, whose tradition long ago eschewed construction specificity in the hope of capturing significant generalizations that could interact in a principled way to account for the idiosyncrasies of constructions. Ginzburg and Sag's approach makes a strong case for the reality of constructions. They are at pains to show that their approach is no more stipulative than minimalist approaches by arguing that the seeming additional complexity of their diagrams matches the greater number of empirical details their framework accounts for. Their view takes away much of the ad hoc feel of individual constructions: various constructions are linked to construction supertypes in the language, and their idiosyncrasies are not simply left as unexplained stipulations. This approach highlights the family resemblance among constructions that languages seem to have, and it avoids the core-periphery division of grammar that is notoriously difficult to pin down. The reaction of readers from a formal linguistic perspective to Ginzburg and Sag's overall theory will probably hinge on their response to the authors' heavy reliance on constructions, and the challenge for this kind of grammar is to show how constructions can be explanatory rather than stipulatory.

Chapter 3 presents Ginzburg and Sag's version of Situation Semantics, which was developed by Barwise and Perry (1983) partly in response to the impoverished ontology of Montague Semantics. One of Ginzburg and Sag's concerns also is to determine an ontology adequate for English clauses, and the gauntlet is taken up in this chapter. To this end, they posit four semantic types for clauses: questions, facts, outcomes, and propositions. The payoff for this division is that they show classes of predicates that subcategorize for each semantic type. For example, *wonder* and *ask* select for questions; *discover* and *forget* select for facts; *prove* and *believe* select for propositions; and *demand* and *require* select for outcomes. The authors acknowledge that their proposal will need additional fine-tuning because of the existence of verbs like *hope*, which do not appear to select for propositions (1). However, this verb does select for declarative clauses, and this precludes the argument from being an outcome (2).

(1) #Bo hoped (for) the claim/hypothesis/forecast.

(2) Bo hoped that Mo survived the yachting accident. (121, fn. 108)

Since the verb does not select for questions, this leaves facts as the remaining possible category; however, facts are not consistent with the meaning of *hope*, and so Ginzburg and Sag acknowledge that they might need to introduce *possibility* as a

semantic type into their framework. Furthermore, verbs may also select for more than one semantic type. For example, the verbs *intrigue* and *astound* can select for questions, facts, or outcomes. However, the authors claim that only eight of the fifteen possible combinations are instantiated in English, which opens up an area of study to account for the missing cases.

Ginzburg and Sag's other major point in this chapter is the claim that questions are *propositional abstracts*, a position that they defend against the view that questions can be defined in terms of their exhaustive answers. This move allows them to capture why questions and propositions are similar in some respects (e.g., some verbs subcategorize for both [3]) and why they are different in other respects (e.g., stand-alone questions are not assertions [4]).

- (3) Jamie forgot that/whether the Pope likes stuffed cabbage. (64)
 (4) I want to make the following claim. #Who did that?

In chapter 4, Ginzburg and Sag depart from most treatments of *wh*-phrases by treating them as nonquantificational and by scoping them wider than generalized quantifiers. Based on their treatment of questions as propositional abstracts, each *wh*-word contributes a parameter to a potential proposition. This parameter links an abstracted argument to an argument position inside the proposition. It also introduces restrictions on that argument position (e.g., animacy is connected with the *wh*-word *who*).

Ginzburg and Sag analyze all sentences where the *wh*-phrase does not take wide scope as having a functional reading (Engdahl 1986). Such a question does not seek as its answer an individual but rather a property of individuals:

- (5) Q: Which student does each lecturer find most impressive?
 A: The student who writes the shortest term paper. (152-53)

Hence, Ginzburg and Sag take pair-list readings as interpretations that enumerate functional readings and so are no different in principle from those readings.

The latter half of the book develops many of the interesting positions Ginzburg and Sag take on long-standing issues in the field. Chapter 6 shows their concern to present a unified framework as they account for polar and *wh*-interrogatives and *wh*-exclamatives. However, we see that *wh*-words in interrogatives and exclamatives have little in common. *Wh*-words introduce parameters in *wh*-questions and function as quantifiers in exclamatives. In exclamatives, the *wh*-word introduces the value *unusual-rel*(ation), denoting the unusual degree to which something is predicated. Thus,

- (6) How tall Kim is!

receives a semantic value that can be paraphrased as “Kim is tall to an unusual degree.”

Ginzburg and Sag’s treatment of multiple *wh*-questions brings together many of the mechanisms that characterize HPSG. The key assertion is that these sentences can have only one *wh*-specified word, a syntactic constraint. Moreover, the phrase containing the *wh*-word will always combine via a head-filler construction: *wh*-specified phrases will never occur on the argument list of a verb. Thus, in (7), *who* is *wh*-specified and a filler; *what* is not *wh*-specified but still contributes a parameter to its store (a feature which contains information related to quantification) that will become part of the parameter for the question.

(7) Who saw what?

One diagnostic Ginzburg and Sag use for this hypothesis is the distribution of *who the heck/hell/devil* phrases which occur in fronted positions but not in situ. According to the authors, such modifiers can attach only to *wh*-specified phrases and so are a good test for distinguishing the two categories of *wh*-phrases they posit.

(8) Who the heck/hell/devil does what around here?

(9) *Who does what the heck/hell/devil around here?

Ginzburg and Sag also use this kind of argument to account for the difference between (10) and (11-12), on the assumption that the lexical entry for *how come* is specified as *wh*{ }, or non-*wh*-specified.

(10) Why the hell did you do that?

(11) *How come the hell you did that?

(12) *How the hell come you did that?

The Ginzburg and Sag account of multiple *wh*-questions provides a good example of how HPSG combines syntax, phonology, and the lexicon in their argumentation. They criticize the D(iscourse)-linking analyses of Pesetsky (1987) and Hornstein (1995), who argue that superiority violations, violations that arise when one *wh*-phrase is moved over another *wh*-phrase (13), are allowed in sentences like (14) because the latter *wh*-phrase is made salient due to discourse factors:

(13) *What did who see ____?

(14) I wonder which book *which man* read _____.

Ginzburg and Sag suggest what is really at stake is that nonfronted *wh*-phrases are in focus, and they capture this hypothesis in their theory with the phonological generalization in (15):

- (15) In a multiple *wh*-interrogative, all *wh*-phrases except the first must be accented. (250)

They then specify lexical entries for interrogative pronouns whereby the *wh*-specified variety may be accented or unaccented but the variety that are not *wh*-specified (i.e., nonfronted *wh*-phrases) must be accented.

The authors devote chapter 7 to in situ *wh*-phrases, a welcome addition that has the merit of providing a unified account of fronted and in situ *wh*-phrases. Ginzburg and Sag make the case that in situ *wh*-phrases are not anomalous or outside core grammar but quite similar to other interrogatives. Furthermore, they offer nonreprise uses of in situ *wh*-words to solidify their argument that such examples are not outside of core grammar. The examples in (16-17) are used to argue against grammars that force the dislocation of *wh*-phrases in English:

- (16) [Stacy pokes head in office occupied by Jan, who is commonly known to be leaving the area shortly:]
Say, Jan, you're leaving WHEN exactly? (281, 70b)
(17) [Jan pokes head in office occupied by Rene. The two have previously committed to a joint activity of unspecified nature the following day:]
Jan: We're going out tomorrow, right?
Rene: I guess so. And we're going to do WHAT exactly? (281, 70c)

The three subjects in chapter 8 that Ginzburg and Sag deal with further demonstrate their overall view of language. They provide an approach to sluicing and short answers that relies on syntax, semantics, and discourse and so cannot be reduced to any one area. They next turn to negative questions. Approaches that treat questions as the set of exhaustive answers to those questions run into problems with positive and negative polar questions. In general, positive and negative versions of the same polar question can elicit the same set of answers. The sentences in (20-21) could answer either question in (18-19):

- (18) Is two an even number?
(19) Isn't two an even number?
(20) Yes, two is an even number.
(21) No, two is not an even number. (339, 91a-d)

Under exhaustive answerhood theories, this implies that the two questions are identical; however, there are well-known presuppositional differences between positive and negative polar questions. Thus, the sentence in (18) might be uttered by a young student learning about even and odd numbers for the first time. The sentence in (19) might be uttered by someone who assumed the number two to be even but is now unsure after listening to the arcane thoughts of a mathematician. With regard to syn-

tax, Ginzburg and Sag treat the negative element *not* as a complement rather than a modifier of the finite verb, and this distinguishes positive and negative polar questions from one another within the theory. With regard to the differences in meaning that arise in polar questions, the authors treat negation as a 0-ary quantifier that does not bind any variable. This allows a negative element either to be absorbed into another negative element, leading to a reading like (22b), or to take scope over the rest of the sentence, leading to a reading like (22c):

- (22a) No one likes no one.
 (22b) = Everyone dislikes everyone.
 (22c) = Everyone likes someone.

Finally, Ginzburg and Sag give a brief discussion of coercion, an issue that arose earlier with regard to the semantic representation of embedded *wh*-clauses. They treat all *wh*-clauses as questions and then stipulate that factive verbs coerce their complements so that a *wh*-clause in this position denotes the fact that answers that question. Thus, in (23), Jesse did not discover a question but rather the answer to a question:

- (23) Jesse discovered what was for dinner.

Coercion then is a means of unifying lexical entries for verbs that take different kinds of complements: the verb *ask* is one example.

- (24) Jo asked a question.
 (25) Jo asked where the office was.

Ginzburg and Sag unify such lexical entries by proposing a new phrase type, a *nominalized-interrogative phrase (nom-int-ph)*, which is nonbranching and takes a daughter whose content is a question. Hence, both the NP in (24) and the interrogative clause in (25) have the right semantic content to qualify for this phrase designation. They posit another nonbranching phrase, *concealed-question-np (cq-np)*, that applies to noun phrases in sentences like (26):

- (26) Jo investigated the source of Berlusconi's wealth. (= Jo investigated what the source of Berlusconi's wealth is.)

Ginzburg and Sag's account of English interrogatives is a welcome addition to the field of linguistics because of the breadth of phenomena they cover in a unified framework. The volume does not consist of just theory-internal theorizing but pays genuine attention to a wide range of empirical phenomena. The authors specifically note in their prolegomena the tendency of current research to pick and choose iso-

lated phenomena from various languages. With limited phenomena to account for, it is much easier to devise beautiful and clever explanations. However, the field is left with a plethora of isolated explanatory fragments which are not consistent with one another. It is only as we seek to account for larger portions of language that we can really see the big picture and test the grammars that we write. This Ginzburg and Sag have admirably done within a Head-Driven Phrase Structure Grammar that increasingly is indebted to Construction Grammar.

References

- Barwise, Jon, and John Perry. 1983. *Situations and Attitudes*. Cambridge, MA: MIT Press.
- Engdahl, Elisabet. 1986. *Constituent Questions*. Dordrecht, the Netherlands: Reidel.
- Hornstein, Norbert. 1995. *Logical Form*. Oxford, UK: Blackwell.
- Pesetsky, David. 1987. *Wh-in-situ: Movement and unselective binding*. In *The Representation of (In)definiteness*, edited by E. Reuland and A. T. Meulen, 98-129. Cambridge, MA: MIT Press.

Mark Honegger is an associate professor in linguistics in the Department of English at the University of Louisiana at Lafayette. His current research focuses on uniting the approaches to meaning embodied in cognitive linguistics and formal semantics.