

REVIEWS

Form and meaning in language, vol. 1: Papers on semantic roles. By CHARLES J. FILLMORE. Stanford: CSLI Publications, 2003. Pp. viii, 311. ISBN 1575862867. \$25.

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This volume consists of seven papers originally published between 1968 and 1978 that deal with the relationships among syntax, semantics, and pragmatics. Each is presented with brief introductory reflections by Fillmore; an even shorter preface introduces the volume as a whole. F's extraordinary sensitivity to nuances of linguistic expression make these papers a pleasure to reread, both in content and presentation. While many of his ideas have attained the status of common knowledge, these papers also contain many insightful observations that had been forgotten (at least by this reviewer).

Reading the papers—particularly the earliest ones—brings home the transience of grammatical theories. What F has to say about the formal machinery of grammar is of primarily historical interest. But these papers are rich in examples and informally stated generalizations, which remain relevant to current research. Thus, republishing these papers was worthwhile.

The papers in the volume are divided into two groups, with a gap of five years separating their publication dates. 'Toward a modern theory of case' (1969), 'The case for case' (1968), 'The grammar of hitting and breaking' (1970), and 'Types of lexical information' (1969) are all primarily concerned with what is now called LINKING THEORY, that is, the complex mapping between thematic roles (like agent or instrument) and syntactic structure (including word order, morphological case, agreement, and adpositions). The later papers, 'The case for case reopened' (1977), 'Topics in lexical semantics' (1977), and 'On the organization of semantic information in the lexicon' (1978) address a wider range of issues on the syntax/semantics interface. They make a case for the heterogeneity of linguistic meaning, illustrating in various ways how pragmatics and world knowledge influence the way we formulate and interpret utterances. Both sets of papers were influential in significantly broadening the range of phenomena that theoretical linguists attend to.

Central to the first four papers is the observation that when a given verb is used to denote a particular situation, the speaker may have considerable freedom regarding how the participants in the situation are expressed syntactically. Thus, the examples in 1 can all refer to the same event.

- (1) a. Someone opened this door with that key.
- b. That key opened this door.
- c. This door was opened with that key.

Early generative grammar had posited a common underlying structure for 1a and 1c, with transformations accounting for the different surface forms. F extended this type of analysis to examples like 1b.

These early papers develop the theory of CASE GRAMMAR, whose central claim is that '[t]he sentence in its basic structure consists of a verb and one or more noun phrases, each associated with the verb in a particular case relationship . . . [and] each case relationship occurs only once in a simple sentence' (45). In 'The case for case', F identifies six cases; in 'Types of lexical information', he lists seven. Five are common to the two lists: agent, object, result/factive, instrument, and experiencer/dative. Verbs' cooccurrence restrictions are stated in terms of cases. In English, the cases are marked in underlying structure by prepositions, some of which (e.g. those marking what would surface as subject and direct object) are deleted transformationally. No explicit formulation of the requisite transformations is provided, though a number of sample derivations are included.

What is best remembered about case grammar is, as F puts it in his preface, the 'plan to present almost everything that had to do with meaning in a single initial level of representation and to take care of everything else, such as surface form and grammatically related paraphrasings,

by means of a generous variety of transformations: including movement, reattachment, deletion, substitution, copying, lexical insertion, and magic' (vii). A rereading reveals that there is much more, including quite a bit of discussion of earlier, nontransformational literature addressing some of the same issues.

Of particular interest are some typological speculations in 'The case for case'. Drawing on ideas of Edward Sapir, F identifies what he calls 'three basic sentence types': 'intransitive sentences with active "subjects"', 'transitive sentences with agents', and 'intransitive sentences with inactive "subjects"' (83). He uses this classification of sentences, together with some clever use of diagrams, to characterize a variety of morphological case systems. The discussion anticipates later work on the issue of ergativity and recognizes the distinction between intransitive clause types that has come to be labeled 'unergative' vs. 'unaccusative' (see e.g. Rosen 1984).

This is not the only place where papers in this early group presage ideas that became influential years later. For example, there are passages that foreshadow the ideas of a hierarchically structured lexicon (see Flickinger et al. 1985 and Briscoe et al. 1993, among many others; 136–37), of construction grammar (see e.g. Fillmore et al. 1988 and Goldberg 1995; 157), and of the currently fashionable idea (see e.g. Culicover & Jackendoff 2005) that many widely accepted syntactic analyses can be greatly simplified in the context of detailed semantic and pragmatic analyses (168).

The early papers also anticipate the attention to the subtleties of lexical meaning that is the dominant topic of the later group of papers. One example is the observation that 2a differs from 2b in that the former suggests that the result of the smearing was that the fender was covered with mud.

- (2) a. He smeared the fender with mud.
b. He smeared mud on the fender.

This difference, first noted in 'Types of lexical information', is discussed again in 'The case for case reopened' and 'Topics in lexical semantics'. It has also been extensively discussed by others, notably Anderson (1971, 1977) and Pinker (1989).

The first group of papers has many subtle observations of this sort, but their density is far greater in the second group. Here is a sampling from the latter:

The verb *autograph* is one with the notion of signature built in. In the case of *sign* you can say 'He signed his name' but not 'He signed his signature'; with *write* you can say either 'He wrote his name' or 'He wrote his signature'. In the case of *autograph*, however, there is no way of expressing the nature of the product, but only the name of the object onto which the signature was written. (214–15)

At least two situations provide for the use of the word *cash*. In one of these, the contrast is between paying in currency as opposed to paying by some other means. In this setting, the word *cash* rules out the possibility of payment by personal check. In other situations, the term opposed to *cash* is *credit* . . . ; here the word *cash* can be taken as including the possibility of payment by check. (236)

We get clearly different interpretations from the sentences 'The fly was on the wall' and 'The cat was on the wall', just because we know different possibilities for stable positions for these two kinds of animals and because we know that the same word—*wall*—can be used to refer to a vertical surface of a room or building and to a high-relief boundary around a place. (257)

In the *Encyclopedia Britannica* . . . , I came across the following context for the word 'conception': 'Many of the simpler peoples see no causal connection between conception and childbirth.' It doesn't make sense to ascribe to a people the concept 'conception' without at the same time attributing to them an understanding of this event as a stage in the creation of a new living being. (264)

[T]he English verb *climb* has a 'clambering' component, . . . and an 'ascending' component. A monkey climbing up a flagpole satisfies both of these conditions. The monkey climbing

down the flagpole satisfies the clambering component only, but is nevertheless engaged in an action that can be properly called climbing. A snail climbing up the flagpole satisfies the ‘ascending’ condition and can still be said to be climbing. But the snail is not privileged to *climb down* the flagpole. (267–68)

But there is much more to the second group of papers than clever observations about the nuances of word meaning in English. F introduces facts like those above in the course of considering what kind of semantic representation would be rich enough to encode all the distinctions that influence grammatical form. The earlier papers have a similar goal, but their focus is on a small subpart of meaning, namely, semantic argument structure—who did what to whom. In the course of the 1970s, F evidently came to realize that the rather spare underlying structures he had posited in his earlier papers would require extensive enrichment to capture the full range of meanings we express in language.

In ‘Topics in lexical semantics’, he develops a representation system for what he calls ‘scenes’. The representations involve sequences of nested boxes, with annotated elements inside; F repeatedly likens them to comic strips, though most do not have any sort of iconic representations in them. He makes no attempt to provide a syntax or semantics for this representation system, but they do a good job of conveying to the reader the complexity of the relationships that must be encodable if a system is to represent natural language meanings.

Later papers (presumably to be published in a second volume) extended ideas from the work in this volume into a theory known as frame grammar. This became the basis for a large ongoing project known as FrameNet (<http://www.icsi.berkeley.edu/~framenet/>) dedicated to encoding the information about word meaning needed for various natural language processing applications (e.g. machine translation) and testing those encodings using corpora. Thus, the papers in the present volume should be of interest not only to historians of linguistics and those working on linking theory, but also to computational linguists who want to understand the theoretical underpinnings of FrameNet.

In short, despite the age of the papers in this book, its publication is welcome. It is useful to have these papers collected in one place and extremely interesting to read F’s current reflections on his own research. Their brevity is somewhat disappointing, and he should be encouraged to write longer commentaries in the second volume.

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