In generative theory the analysis of the syntax of adverbial expressions has lagged behind that of other aspects of syntax, but in recent years more attention has been focused on this area. In this book, Thomas Ernst defends and develops the traditional view that adverbial expressions are adjuncts. The view he critiques is that of Cinque (1999) and others, according to which adverbial expressions are specifiers of functional projections. Cinque’s view, in turn, is based on Kayne’s (1994) assymetrical view of syntax, by which all languages are left-headed, and all adjunct phrases are specifiers and are on the left. Ernst, on the contrary, assumes that languages may be left-headed or right-headed, and that adverbial phrases may sometimes be base-generated to the right of the verb.

In this review I do not plan to give a critique of Ernst’s theory, but intend to point out some of what I consider to be its insights. As mentioned above, this theory predicts that differences in the placement of adverbial phrases will depend in part on the head parameter. Left-headed languages are predicted to allow both right-adjunction of adverbials, and Heavy Shift of material across adverbials to the right of the verb, whereas right-headed languages are predicted to have only left-adjunction, and Heavy Shift to the left. Ernst makes an important distinction between right-adjunction and Heavy Shift on the one hand, which are claimed to be before Spell-Out, and the kind of PF movement that creates parenthetical expressions on the other hand. There is no pause with right-adjunction or Heavy Shift, whereas there is with parenthetical expressions. In (1), for example, there are three right-adjointed adverbial phrases and no pause. In (2) there is likewise no comma necessary, even though part of a phrase has been shifted to the end of the sentence. In (3a), however, a pause is necessary (cf. 3b), because the adverb has been moved from its scopal position. When it is in its scopal position as in (3b), there is no pause.

(1) Miranda woke up slowly yesterday because she had taken a decongestant.
(2) George brought yesterday in his pickup all the painting equipment we’d ordered.
(3a) She had missed, {apparently / frankly}, her sister’s birthday.
(3b) *She had missed {apparently / frankly} her sister’s birthday.
(3c) {Apparently / frankly} she had missed her sister’s birthday.

I research Jarawara, an Arawan language of Brazil, which is right-headed (for example, it has O-V and V-Aux orderings), and some of these predictions appear to be borne out in this
language. For one thing, although various kinds of material may follow the verb (usually clarification phrases, but often adverbal expressions), there is typically a pause between the verb and the other material. And it may be that Heavy Shift may explain some anomolous orderings of subject and object NPs in a minority of Jarawara main clauses.

The language Ernst discusses most is English, but a good deal of space is devoted also to other languages, including French, German, Japanese (which is right-headed), Mandarin Chinese (which is mixed), and others.

Another syntactic phenomenon which Ernst claims to have an effect on the placement of adverbials is the richness of inflection. Although Ernst does not assign to verb movement the same importance that Cinque does, he does agree with Vikner (1995) that verb movement is possible, and that it is correlated with the richness of inflection of a language. This idea is used to explain a three-way contrast in the placement of adverbs between English, Romance, and Chinese. On a continuum of richness of inflection, Romance has the richest and Chinese almost none, and English is in the middle. Covarying with this, Romance is posited to have the greatest degree of overt verb movement, English less, and Chinese none. This is used to explain the fact that, whereas the English sentence *students can often run up to the mountaintop* is ambiguous because *often* may take scope over *can* or not (because *can* has moved), in Chinese two different sentences are required to express the two meanings, with the equivalent of *often* in two different positions. And in Romance, an adverb may follow two auxiliaries and yet have scope over both, whereas in English this may only occur with one auxiliary, and Chinese with none.

Although Ernst thus points to certain syntactic facts that affect the placement of adverbials, he assigns greater importance to semantic factors, in particular scope, and so he devotes most of the book to delineating the semantics of adverbs. Central to this effort is what he calls the FEO Calculus. FEOs (Fact-Event Objects) are different kinds of propositions and events that are selected by different kinds of adverbs. While there is not a one-to-one correspondence between types of FEOs and specific maximal projections, there is a relationship between the two, and it is largely responsible for the placing of some kinds of adverbs. According to Ernst, there are three broad kinds of adverbs with respect to scope: “those without scope requirements (participant adjuncts), those with tight scope requirements (for a particular FEO: predicational adjuncts), and those with somewhat looser scope requirements (functional adjuncts)” (p. 143). Participant adjuncts are prepositional phrases such as locatives, instrumental, and benefactives; functional adverbs include adverbs of time (*now*), negation (*not*), and frequency (*sometimes*); and most of the kinds of predicational adverbs are listed in (4), along with an indication of their ordering among themselves and in relation to negation.

\[
\begin{array}{cccccc}
\text{(4)} & \text{discourse-oriented} & \Rightarrow & \text{evaluative} & \Rightarrow & \text{modal} & \Rightarrow & \text{(negative)} & \Rightarrow \\
& \text{briefly} & \Rightarrow & \text{surprisingly} & \Rightarrow & \text{maybe} & \Rightarrow & \text{not} \\
& \text{evidential} & \Rightarrow & \text{subject-oriented} & \Rightarrow & \text{(negative)} & \Rightarrow & \text{manner} \\
& \text{obviously} & \Rightarrow & \text{stupidly} & \Rightarrow & \text{not} & \Rightarrow & \text{tightly}
\end{array}
\]

There is one more kind of predicational adverb not listed in (4), exocomparatives (*similarly*); these are ordered anywhere to the left of manner adverbs.
These are the highlights of Ernst’s theory. It was refreshing to me as I read to see that Ernst is quite up front about disagreeing with previous analyses of his own, and he also does not hide the fact that his theory does not establish finally the distinction between arguments and adjuncts, a continuing vexing puzzle for generative theorists. As I mentioned above, I cannot provide a critique of this theory. I will mention a couple disappointments I had with the book, though. For one thing, Ernst concentrates mostly on adverbs and says very little about phrases with adverbial meanings that do not contain adverbs. In English, prepositional phrases may be arguments or adjuncts, and when they are adjuncts they are adverbials. It happens that in Jarawara, there are no adverbs, but adverbial phrases similar to English prepositional phrases are common. I suspect that there must be many other languages in the world which do not have adverbs and yet have phrases of other structural types that have adverbial meanings. Also, in Jarawara there are many verb suffixes that have adverbial meanings, which makes me wonder whether verb movement to an adverb head is possible. But Ernst does not discuss this possibility either positively or negatively.

References

