María Jesús Pérez Quintero. *Adverbial subordination in English: A functional approach* (Language and Computers series 41). Amsterdam and New York: Rodopi, 2002. 216 pp. ISBN 90-420-1360-5. Reviewed by **Mitsumi Uchida**, Osaka Women's University.

This book presents a corpus-based study of adverbial subordinate clauses in English. As the subtitle implies, it is done within the Functional Grammar framework of S.C. Dik (FG hereafter). A significant aspect of this study is that it is based on an empirical analysis of corpus data: 3,722 examples of adverbial subordinate clauses retrieved from the LOB Corpus. The method of analysis is, as the author declares, "largely based on the typological study of adverbial clauses carried out by Hengeveld (1998)".

The principal aim of Quintero, and of Hengeveld, is to make theoretical contributions to FG, in a way that is viable cross-linguistically. In the book under review, Quintero endeavours to do this by showing systematic relations between

the semantic properties of adverbial subordinate clauses and the ways in which they are expressed in English.

In Chapter 1, a brief overview of the FG framework, in which the adverbial subordinate clauses are to be analysed is presented, and a hierarchical structure of the clause is posited. In this structure, five levels are distinguished, of which the zero (Relation or Property), 2nd (State of Affairs), 3rd (Propositional Content) and 4th (Speech Act) levels are relevant to the subsequent analyses of the adverbial subordinate clauses. From this underlying complex structure, the linguistic forms, along with the prosodic features of the sentence, are derived through application of *expression rules*. Quintero subsequently delimits the scope of the study by listing the kinds of clauses that are not to be taken as objects of her analyses, as well as descriptions of the objects to be analysed: adverbial subordinate clauses in the LOB Corpus that are first retrieved by pattern-matching and then chosen by a method of random selection.

Chapter 2 introduces a method of classification based on formal features of the adverbial subordinate clauses. Following the classification proposed by Hengeveld (1998), this study distinguishes *independent* forms from *dependent* forms, rather than adopts the conventional finiteness criterion: independent verb forms are the forms that can be used in main clauses; dependent verb forms are the forms that are used only in subordinate structures. The latter involve infinitival, *-ing*, and *-ed* forms. Examination of the distribution of the dependent and independent verb forms in relation to the semantic types of the adverbial subordinate clauses constitutes the main part of the book (Chapters 3–5).

Chapters 3 and 4 are presented in parallel. The semantic features of 32 types of adverbial subordinate clauses are described in Chapter 3; the 3,722 examples retrieved and chosen from the LOB Corpus are classified into the 32 types in Chapter 4.

In the semantic classification of adverbial clauses in Chapter 3, four parameters are presented as relevant to the semantic characterisation of the adverbial subordinate clause: *Entity Type*, *Time Dependency*, *Factuality*, and *Presupposition*. According to the four parameters, each of the enumerated 32 types of adverbial subordinate clauses can be assigned to one of the 16 different classes as having the same parameter value sets. For example, the types Anteriority, Addition, and Exception are regarded as members of a single class that has the parameter value set [2nd order entity, Dependent Time Reference, Factual, Presupposed]; adverbial clauses of Potential Epistemic Condition, Potential Epistemic Concessive-Condition, and Epistemic Purpose as having the set [3rd order entity, Independent Time Reference, Non-factual, Non-presupposed]. It is claimed that each of these four semantic parameters constitutes a hierarchy

which is a function of the formal features of the clause: assignment of the parameter values that are on the "left" end of the hierarchies – "Lower" orders in *Entity Type*, "Dependent" in *Time Dependency*, "Factual" in *Factuality*, and "Presupposed" in *Presupposition* – correlates with the use of dependent verb forms.

In Chapter 4, each of the 3,722 examples is first categorised into one of the 32 types according to semantic function. Each of the 32 types is then quantitatively examined to reveal the distribution of dependent and independent verb forms.

The analyses in Chapter 5 aim to establish the validity of the semantic hierarchies proposed in Chapter 3 by re-examining the results of the quantitative surveys presented in Chapter 4. The numbers of dependent and independent verb forms in the tables in Chapter 4 are summed up to show the different tendencies found among the 16 classes distinguished by their parameter values. The validity of the four semantic hierarchies introduced in Chapter 3 is claimed to be verified on the basis of the fact that the percentages of dependent verb forms actually vary in accordance with the parameter values of the classes: the more to the left the clause is located in the hierarchies, the more likely it is to be expressed by means of dependent verb forms. Quintero claims that "it was shown that there is a systematic relation between the semantic type of [an] adverbial clause and the verb form that it contains" (p. 133). It is also demonstrated that some hierarchies interact with each other and some do not, which is considered to be a known fact in FG.

In Chapter 6, the findings presented so far are examined in the specific framework of FG. Representations are given of the internal structure of the different semantic types of adverbial clauses. Chapter 7 summarises the book.

The overall claims of the book are quite clear: (i) adverbial subordinate clauses can be comprehensively characterised and classified by the four semantic parameters; (ii) quantitative surveys using a corpus have shown that specific parameter values tend to correlate with the occurrence of dependent verb forms, and therefore (iii) it is confirmed that there is a systematic relation between the semantic type of an adverbial clause and the verb form that it contains. The strength of this work lies in step (ii) above: the claims are demonstrated on the basis of an empirical analysis of the actual examples from a corpus. What is more, all the examples used in the analyses can be readily retrieved from the LOB Corpus by referring to the extensive list in Appendix II. This reinforces the clarity of the argumentation.

There are, however, some problems in the process of verification. First, there are some incorrect figures in the tables (Tables 5.2a, 5.4a, 5.6, 5.11, and

5.15, as far as I noticed), which disturbs the logical argumentation in Chapter 5. In Table 5.11, for example, the number of Factual-Dependent examples should be 48, instead of 52, and therefore the percentage of the dependent forms should be lower (5.4%), making the difference between Factual and Non-factual cases yet less distinct and reducing a statistically significant finding to one that falls just short of significance. This appears to weaken the claim being made.

Second, most of the tables in Chapter 5 do not carry subtotal and total numbers, which occasionally obscures the verification processes and makes them less amenable to replication. It is hard to know that the classifications in Tables 5.1, 5.6, 5.11, and 5.15 deal with different numbers of samples, let alone the reason why they are different. Table 5.1 deals with all of the 3,722 samples; Tables 5.6, 5.11, and 5.15 only with the subsets of the samples: 2,959, 1,528, and 3,542, respectively. The tables are intended to provide proof of the validity of the hierarchies Entity Type (Table 5.1), Time Dependency (Table 5.6), Factuality (Table 5.11), and Presupposition (Table 5.15), respectively. It is true that the theoretical motives for excluding certain subclasses of examples from the classifications are presented in Chapter 4. However, when drawing conclusions from the simple comparison of percentages, the existence of theoretical premises in the selection of types of clauses to be analysed should at least be cued. This could have been achieved simply by fulfilling the conventional requirements for constructing tables: show total numbers.

What makes the situation more complicated is that the figures in the latter three tables do not add up to the correct totals. The numbers in Table 5.6 – 1,196, 815, 865, and 70 – amount to 2,946, contradictory to the given percentages. This is due to a typo: "815" should be "828", to be consistent with the results shown in Chapter 4. A similar problem is found in Table 5.15: the sum of the numbers 324, 2,283, 138, and 197 does not match the percentages specified. This is because "197" is a typo for "797." In Table 5.11, the numbers 834, 624, 52, and 22 add up to 1,532, which contradicts the results presented in Chapter 4: the total number should be 1,528. This error arises from having provided an incorrect number of Factual-Dependent samples; as mentioned earlier, the correct number is "48", rather than "52." These errors would have been apparent, thus easily avoided, if totals had been included in the tables.

Third and more essential, the reasons for the delimitation of the populations to be analysed are not fully convincing. When verifying the Time Dependency Hierarchy, for example, only the classes of 2nd Order Entity are examined; for the Factuality Hierarchy only those which have Independent Time Reference constitute the population; and for the Presupposition Hierarchy three specific classes [Zero order, Non-presupposed, Factual], [4th, Presupposed, Factual],

and [4th, Presupposed, Non-factual] are excluded from the classification. The classes that are excluded from the comparative examination, it might appear, are excluded simply because, in the framework of FG, they should be excluded. Without the pre-analysis delimitation of the populations, the distributions of dependent and independent verb forms do not necessarily conform to the patterns drawn from the hypothesis proposed. If all the 3,722 examples had been consistently taken into account, a statistical analysis would signify a contradictory relation between the use of dependent verb forms and the Factual Hierarchy, and the relevance of the Presupposition Hierarchy would not be confirmed. Thus, although the total claim of the book is clear and appears well-supported by the results of the empirical analyses, it must be noted that the conclusions reached are specifically based on the theoretical premises of the FG framework.

Despite the problems pointed out above, this work offers firm basic data on the uses of adverbial subordinate clauses in English. Linguists interested in the actual use of human languages can make use of the results of the categorisation presented in this book, consulting the relevant contexts provided in the LOB Corpus when necessary. The compiled lists, thanks to the huge amount of manual work, thus have a practical value that will extend beyond the aims of the present book.

References

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