

**Joybrato Mukherjee.** *Form and function of parasyntactic presentation structures. A corpus-based study of talk units in spoken English* (Language and Computers: Studies in Practical Linguistics 35). Amsterdam: Rodopi, 2001. viii+163 pp. ISBN: 90-420-1295-1. Reviewed by **Ilka Mindt**, Universität Würzburg.

This book is Mukherjee's PhD thesis. The study is based on a 55,000 word corpus which has been put together from parts of the London-Lund Corpus (LLC) and parts of a corpus compiled by Jürgen Esser (JEC). The author has selected monologues and dialogues from LLC; JEC consists of monologues only.

This review is divided into two parts. In the first part, I will briefly summarize the seven different chapters of Mukherjee's thesis. The second part will relate to some general issues in corpus research, intonation and presentation.

### ***I. Synopsis***

In Chapter 1, Mukherjee presents the aim of his study, which is to outline a model of parasyntactic presentation structures. Basically, he is interested in analysing and describing prosodic and syntactic features at the end of tone units. These tone units are then grouped into larger units, so-called "talk units", a term which has been borrowed from Halford (1996). It is these talk units which Mukherjee's research concentrates on. Talk units as units of spoken language consist of one to several tone units, which are interpreted as information units. Information units are ranked in a hierarchy according to their syntactic and prosodic status.

The theoretical considerations outlined in the first chapter are largely based on the theory developed by Jürgen Esser, who was also the supervisor of this thesis. Most of it was presented in Esser (1998), which Mukherjee refers to. The theoretical approach can be outlined as follows: for the prosody at tone units, the author makes a three-fold distinction between falls, rises and levels. The so-called complex nuclear tones are subsumed under their last pitch movement; i.e. fall-rises are subsumed under rises, rise-falls under falls.

For syntax, he distinguishes between syntactically final and syntactically non-final structures. A non-final syntactic pattern at a tone unit boundary is assigned to it when a grammatical prediction is not yet fulfilled, a final syntactic pattern when no further grammatical predictions have to be satisfied.

An example (31) illustrates the approach:

LLC 12.7

143	^neverthel=ess# .	/<=n
144	one ^can't ig"!n\ore# .	/↑
145	^public o'pinion alto" g\ether# .	/↓f§>

The first column lists the text category and the tone unit number. In the second column, the annotated corpus fragment is given, while the third column shows the parasyntactic presentation after the slash. The brackets '<' and '>' indicate the beginning and the end of a talk unit, respectively. The prosodic analysis is reflected by '=' representing a level tone, '↑' for a rise/fall-rise/fall + rise, and '↓' for a fall/rise-fall/fall + rise. The letters designate the syntactic status at each tone unit, where 'n' refers to a non-final pattern and 'f' to a final pattern. The symbol '§' means that the syntactic status is complete and a new beginning can be found in the following tone unit.

Chapter 2 gives a theoretical background of "Parasyntactic elements and configurations in corpus linguistics" (p. 33). The author thereby elaborates on the medium-dependence of the talk unit; that is, the talk unit is restricted to spoken language. He further explains the theoretical approach used in his study.

Chapter 3 discusses the corpus data which Mukherjee has used for his study. He describes the corpus texts, the annotation of the corpora and states the rules he applied when analysing the corpus data.

Chapter 4 is the first empirical chapter, where the author introduces five stylistic factors on which his quantitative analysis is based. These stylistic factors are: a) distinction between monologue and dialogue, b) degree of planning, c)

social distance of participants in dialogue, d) level of formality, and e) orientation: subject-orientation vs. hearer-orientation.

The author starts with presenting basic quantitative data, such as the number of tone units in the different texts, the number of talk units, the average number of tone units per talk unit and the number of minor talk units. This is done both for monologues and dialogues. The author correlates the average length of the talk units (length here denoting the number of tone units per talk unit) with the degree of planning found in the different texts. He shows that the more planned a text is, the longer the talk units are.

After that he proceeds to compare the frequencies of different parasyntactic patterns found at tone unit boundaries. The absolute figures are recalculated in percentages on the basis of the number of tone units. Mukherjee only concentrates on those parasyntactic patterns which occur with a frequency over 5.0 per cent. He correlates the parasyntactic patterns of monologues and dialogues with different stylistic factors.

Based on Egon Werlich's model of text types, Mukherjee assigns different categories to the corpus texts and incorporates them into a system of coordinates with four quadrants. This system consists of the x-axis, which represents the syntax and reaches from the left, which stands for non-final syntax to the right, representing final syntax. The y-axis stands for the prosody where the lower quadrants refer to falls, the upper to rises. He thereby shows a clear correlation between different text types and the prosody-syntax interface.

Chapter 5 is entitled "Functional analysis I: information structure". Here, Mukherjee concentrates on the communicative function of talk units. This communicative function is conveyed by structuring information, which in turn is achieved by information packaging and by an information hierarchy. Information packaging refers to the chunking of speech into tone units, and the information hierarchy is set up by the parasyntactic patterns found at tone unit boundaries. Mukherjee has based his description of information structure on the work of Lambrecht (1994).

In this chapter he concentrates first on the information hierarchy. Highest information is conveyed after a non-final syntactic status and an open prosody which equals a rise. Other parasyntactic patterns are ordered accordingly, where syntax is considered to override prosody. Next in the information hierarchy comes a non-final syntactic status and a falling tone, then a final syntactic status and a rising tone, etc. Mukherjee presents a few corpus examples which corroborate his theoretically deduced status of information hierarchy. Unfortunately he does not give statistics, which could show that his model is also supported by quantitative evidence. If the highest information value follows with very high

frequency (80%–100%) after a non-final syntactic status and an open prosody, then his model would not only be theoretically deduced but also based on quantitative facts.

Mukherjee also elaborates on information packaging, where he considers the segmentation into tone units. He shows that a different segmentation can lead to different parasyntactic presentations and therefore to different values in the information hierarchy. This comes as no surprise. What is missing, however, is a theoretically based discussion of the tone unit and the segmentation procedures. There exists a vast literature on this problem, and it is by no means clear on what grounds tone units should be segmented (see for example Cruttenden<sup>2</sup> 1997: 29–37).

The third part of Chapter 5 deals with the “explanatory power of the talk unit model”. Here, Mukherjee discusses the function of pauses, automatization in reading, and turn-taking. Focussing on the last aspect, the author states that “turn-taking frequently takes place at talk unit boundaries” and he presents some corpus examples. He distinguishes between “polite turn-taking”, “less polite turn-taking”, and “very impolite turn-taking” and gives corpus examples as well as short lists where corresponding samples can be found in the LLC. The scale of politeness refers to parasyntactic structures and talk unit boundaries at turns. If a talk unit boundary occurs and somebody takes the turn, then a polite turn-taking has taken place. If the talk unit is not finished and furthermore an incomplete syntax and rising prosody occur, then an impolite turn-taking occurs. Mukherjee’s deductive description is convincing. It would have been even more convincing if he could have presented frequencies for the phenomenon of turn-taking. A table with all parasyntactic patterns at all turns would suffice to convince the reader. But as it is, the reader can only believe the theoretical description, which is supplied with appropriate examples.

Chapter 6 also concentrates on the functional analysis of the talk unit but this time on speaker interaction. Here Mukherjee again takes up the topic of turn-taking. He tries to argue that parasyntactic patterns reveal potential places for turn-taking. The author summarizes several models of turn-taking found in the relevant literature and compares the most important features of these models with his model of the talk unit. He thereby shows that his model can be readily applied to conversation, because it can point to potential places of turn-taking. Again, as in Chapter 5, the theoretical presentation of his model is supplemented by some corpus examples. But – as before – no frequencies which would corroborate the theoretical foundations are given.

Mukherjee also incorporates pragmatic principles in his model. He draws on Grice's principle of cooperativeness and Leech's principle of politeness and includes them in his parasyntactic model.

He finishes this chapter by presenting an overview of talk units. Mukherjee assigns his model to Halliday's three functions of language: the textual function, the ideational function, and the interpersonal function. The textual function refers to the realisation of speech in tone units and talk units. The textual function enables both an interpersonal function and an ideational function. The interpersonal function of talk units by the interaction of speakers (turn-taking), the ideational function by the information structure.

Chapter 7 summarises the most important results, formulated throughout Chapters 5 and 6, in seven so-called parasyntactic principles. A list of research questions for the future concludes the thesis.

## ***II. Comments***

Mukherjee's PhD thesis is an impressive piece of work. The strength of the book lies in Chapters 5 and 6, which deal with the functional analysis of the parasyntactic presentation structure. Esser's model of closure is substantially developed and set in a wider framework of language functions in general.

One word of caution has to be said. Mukherjee claims that he has analysed empirically authentic language use. What he has analysed empirically is not the actual spoken language but the transcription and annotation of authentic language use. This makes a big difference. Whenever an analysis is not based on actual language data but has to rely on transcribed and annotated data, the principles of the transcription and annotation have to be stated clearly. Especially with spoken language, researchers should – whenever possible – try to go back to the most basic level, the actual spoken language. Every annotation reflects an underlying theory and is only as good as the annotators have applied it. Quite often, when listening to the actual spoken recordings, different annotations seem applicable as well.

Two caveats would seem to apply to Mukherjee's model of parasyntactic presentation structures: first, the model is generalized by restricting it to only three intonation contours and by subsuming fall-rises under rises and rise-falls under falls. From a phonetic point of view this has to be put in question. From a phonological point of view this generalization is probably reasonable. However, a better approach would have been to include the other nuclear tones – such as fall-rises and rise-falls – into the model and to dispense with them only if there is evidence that they fulfil the same function as the simple tones. Second, the

syntactic status – as Mukherjee states himself – “often had to be assigned intuitively” (p. 151). This procedure is highly subjective and could render some analyses doubtful. In Chapter 3, Mukherjee comments on the rules for his analysis of corpus data. It has to be mentioned that some rules are only dealt with very briefly, so that it is impossible for the reader to follow Mukherjee’s line of analysis accurately. He explains that for example “tone unit boundaries at which the syntactic status cannot be determined (e.g. after tone units containing a filler such as *em* as the only element)” (p. 56) have not been analysed. Unfortunately, other reasons for not analysing tone unit boundaries have not been given, although that would have been very useful, especially in the light of the quantitative data presented in Chapter 4. Some of the quantitative findings are used as an explanatory device for the theoretical foundation of talk units. When ordering the different texts according to their degree of planning in terms of the ratio tone unit vs. talk unit, a different picture emerges when the actual number of tone group boundaries is considered. For the dialogue text LLC 5.8 (my count: 920 tone units, JM: 825) and the monologue text LLC 12.7 (my count: 825, JM: 823), I have calculated more tone groups than Mukherjee lists in Table 4–5 on page 67. More tone groups lead to a different ratio and to a different ordering of the texts. Thus, it would have been highly desirable to know what other syntactic reasons led the author to exclude certain tone groups. I would also have liked to know why backchannels in dialogues were not included in the analysis. Furthermore, it would have been interesting to know what instances are considered to be backchannels – overlapping speech, or incomplete questions, etc.?

In Chapter 4, Mukherjee presents percentages of parasyntactic patterns according to the different text types. Mentioning Butler (1985:71) he states that he follows “generally applied significance levels in linguistics” (p. 72) and considers “frequencies of  $\geq 5$  per cent to be significant” (p. 72). Butler, however, refers to statistical significance tests, such as the chi square test (1985:71). Significance tests compare at least two sets of data and test whether the variation between the sets occurs by chance or is due to systematic alterations. Mukherjee does not compare different data sets but simply uses the 5 per cent level for the exclusion of data which do not reach this level.

In Chapter 6, the author assigns parasyntactic presentation structures to Halliday’s three functions of language. What is missing in Mukherjee’s model is a semantic level which interacts with the syntactic, prosodic and pragmatic presentation structures. In Halliday’s model, a semantic component is implicit in the ideational function. Mukherjee’s ideational function of talk units is realised by information structure, which in his model is only based on syntactic and prosodic features.

All in all, Mukherjee has presented a convincing application of Esser's (1998) theoretical model of syntactic and prosodic closure. He has analysed a 55,000 word corpus and has proved that this model indeed has a high potential. The quantitative data he presents are to a large extent convincing. Furthermore, he develops the model by including in it the concepts of information packaging and information hierarchy. He also adds a pragmatic dimension to the model, which comprises cooperativeness and politeness. For those interested in phonology, the book is a must.

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