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Prosody and meaning. Ed. by GORKA ELORDIETA and PILAR PRIETO. (Interface explorations 25.) Berlin: De Gruyter Mouton, 2012. Pp. v, 383. ISBN 9783110260076. \$140 (Hb).

Reviewed by CAROLINE FÉRY, *Frankfurt University*

There have been few groundbreaking works on the meaning of intonation. Bartels's (1999) book or Pierrehumbert and Hirschberg's (1990) famous paper and the response to it by Hobbs (1990) are the most cited examples of such studies. Truckenbrodt's 2012 article on the semantics of intonation is too recent to be widely cited, but may well become another classical article on the meaning of prosody. Although not all ten papers of *Prosody and meaning* can compare to these, a few very useful and innovative studies are grouped together, and this renders the book important. Prosody and tonal structure are modules of linguistics that are lagging behind most others; this is

because they need phonetic analysis, and the technology necessary for their study has become accessible to a large number of researchers only recently. Moreover, as a part of linguistics, intonation is an interface discipline, in need of syntactic and semantic components. Only few linguists master all three domains sufficiently to explore meaning in prosody.

In their introduction to the book, the editors mention that papers with similar main themes or approaches could be grouped together, and the editors do an excellent job of summarizing the content of the papers, but a summary of the whole book or of the larger perspective behind the book is missing, as are connections among the contributions or to intonation research in general. Perhaps this is due to the way the book came into being in the first place: it grew out of a workshop held at the Institut d'Estudis Catalans in Barcelona, September 17–19, 2009, concerning the relation between prosody and meaning. Some of the papers presented there are included in the book plus a few additional ones. The book is not organized in sections, and the groups of papers mentioned in the introduction do not serve as a guideline for the order of the chapters. In my review, I follow the order of the book, and address each paper in turn.

As the editors put it in the introduction, 'Most of the papers devoted to the study of the production and perception of intonational contrasts related to information structure adopt a laboratory phonology methodology' (1). In this category, we find MARIAPAOLA D'IMPERIO, JAMES GERMAN, and AMANDINE MICHELAS's paper, 'A multi-level approach to focus, phrasing and intonation in French', in their own wording, a compilation of older studies by the same authors. It contains a very nice and informative review of the previous literature on French intonation. The authors assume that, besides the prosodic domains of intonation phrase and accentual phrase used by most researchers, French needs an additional prosodic domain, called the intermediate phrase. This is because all prosodic levels characterized by tonal structure have an initial tonal rise; this initial rise is larger and more likely to occur at the left edge of a contrastive focus domain and in longer phrases, although these two factors do not interact. It is the presence of this larger initial rise that motivates an additional prosodic domain. A number of alternatives that could account for the larger initial rise without losing the insight that long or focused phrases are often phrased independently come to mind, such as recursive prosodic domains or larger phonetic cues due to information structure, but none of these alternatives are discussed.

The second paper, 'Syntax-prosody mapping, topic-comment structure and stress-focus correspondence in Hungarian' by BALÁZS SURÁNYI, SHINICHIRO ISHIHARA, and FABIAN SCHUBÖ, reports on original research. The authors investigated the prosodic realization of Hungarian sentences containing two quantified phrases, QP1 and QP2, in preverbal position in three focus conditions: broad focus, narrow focus on QP1, and narrow focus on QP2. They ask the interesting question of how the need for nuclear stress to be preverbal is reconciled with the presence of two QPs in this position. The carefully analyzed phonetic results show that the speakers chose different prosodic patterns to realize a narrow focus that is not in the canonical preverbal position, thus on QP1. They also show what the speakers did with QP1 when QP2 was narrowly focused: some used the same intonation pattern as in broad focus, others changed the prosodic phrasing, and still others increased the height of the pitch accent on the narrow focus. This is the first—and thus highly valued—systematic experimental study on the prosody of Hungarian declaratives, and it fills the void of a much-needed investigation of the intonation of simpler Hungarian sentences.

The next two papers differ from the others in the book by investigating meaning primarily and prosody only secondarily. In 'On the prosody of German WH-questions', HUBERT TRUCKENBRODT discusses the status of WH-phrases and WH-words in German as accented or unaccented and shows that the focus or given status of such words is independent of the existential presupposition they trigger. WH-words, however, universally carry an inherent focus feature due to their intrinsically focused status, as visible in Japanese and in Turkish, and they also carry an optional information-structural feature 'focus' or 'given'. WH-words either move to Spec,FocP or they are accented (or both). In a default multiple WH-question, both options are present: the first one is moved to Spec,FocP and the second one is accented.

In 'Referential and lexical givenness: Semantic, prosodic and cognitive aspects', STEFAN BAUMANN and ARNDT RIESTER reexamine the concept of givenness and subdivide it into numerous very well-motivated and clearly illustrated categories. They introduce a basic distinction between

referential (context-given) and lexical (discourse-given) givenness, and revise older cognitive typologies of givenness on the basis of existing and invented examples. The proposed typology is very convincing and well argued for, but its implementation in prosody (shown only for German) is sketchy and needs more persuasive examples. Furthermore, the examples taken from a corpus do not always validate the typology.

In the nicely structured and wonderfully informative article 'A focus intonational morpheme in European Portuguese: Production and perception', SÓNIA FROTA uses two sentences from her dissertation (2000) and provides them with two different nuclear pitch accents: one has been shown to convey broad focus and the other one narrow focus. The paper sums up three expertly designed and presented perception experiments with the aim of eliciting perceptual categories. Native speakers of European Portuguese were asked to disambiguate between the two readings with the help of the two accents. The results were all highly significant. A slight concern remains, which can be eliminated in future research: since the same participants were involved in all three experiments, a learning effect cannot be excluded, especially since a learning session was included before each experiment.

In 'Meanings, shades of meanings and prototypes of intonational categories', BARBARA GILI FIVELA reports on two extremely well-designed perception and rating experiments, using elaborate phonetic and statistical evidence, and looking for the role of intonational categories as perceptual magnets in intonation. It is shown that prototypes are stronger magnets than nonprototypes. One main problem relates to the role of meaning, which does not make use of the usual semantic or pragmatic notions. H*+L is called 'correction/opposition' and may be understood as contrastive focus, but the meaning of the other accent, called 'continuation/(re)introduction', associated with H* and possibly translatable as topic, is not clear. Also unclear is what is meant by the 'strong and weak shades of meaning' that the categories are supposed to have.

JASON BISHOP'S 'Information structural expectations in the perception of prosodic prominence' reports on two simple and effective experiments on the perception of prominence in sentences embedded in contexts asking for different kinds of focus: broad focus, focus on the VP, and narrow focus on the object. The sentences used as answers were identical (the same recording) in all three cases. Nevertheless, the object was perceived as more prominent, and the verb was perceived as slightly less prominent, in the narrow-focus context. The results are very well motivated and presented within the context of a clear and helpful overview of the theoretical and experimental background in the introduction and conclusion.

In 'Can intonation contours be lexicalised? Implications for discourse meanings', SASHA CALHOUN and ANTJE SCHWEITZER defend the view that words and short phrases are often stored with their own specialized intonation contours. The authors did an impressive amount of work in organizing, normalizing, and statistically analyzing the data. They counted what they call 'intonational collocations', understood as exemplars, in the spoken corpus 'Switchboard' and found confirmation of their thesis in 34% of the cases (this number is explained by the fact that they did not look at words occurring only rarely in the corpus). A side thesis is that intonational collocations have their own meaning, and that 'lexicalised contours can then carry a more specific meaning than any abstract meaning associated with general pitch accent types' (309). Apart from anecdotal interpretation of what speakers could have meant in using a given contour, however, a precise and semantically founded definition of the meaning of the (abstract) contours is lacking (possibly because it does not exist). In my view, the presence of intonational collocations does not imply that tones are not morphemic, as is very often assumed in the relevant literature.

The book closes with two papers offering what the editors call a 'socio-pragmatic analysis of the meaning of prosody in naturally occurring interactive speech in both natural and sign languages' (1). The short paper by ANNE WICHMANN, 'Prosody in context: The effect of sequential relationships between speaker turns', consists of a summary of the literature on certain prosodic aspects of conversation analysis, more precisely on how two interlocutors adapt the timing, the intensity, and the melody of their utterances in the course of a conversation. The main topic is related to the relation of power and dominance. Even though it is interesting for its own sake, it is difficult to see in which sense this contribution relates to the others in the book. The last paper, 'Prosody in German Sign Language' by ANNIKA HERRMANN, discusses the role of prosody in

sign language. Two points are made in this paper: first, that DGS (*Deutsche Gebärdensprache* 'German Sign Language') uses prosodic levels comparable to those found in oral languages, showing that prosody is a crosslinguistic feature of language in general, and second, that prosody has meanings that are compositionally present, again comparable to what is found in oral languages. Like many papers on sign languages, it introduces a lot of general knowledge on the language first, leaving only little space for the detailed analysis of prosody and meaning.

As should have become clear from these summaries, in most of the articles the role of prosody is taken more seriously than the role of meaning. Only Truckenbrodt's and Baumann and Rieser's contributions use meaning as a point of departure and investigate how tunes express it, and in these two papers, the role of prosody is kept to a minimum. Most of the contributions use conventional information-structural categories and investigate how they are realized by prosody. Frota assumes that in European Portuguese a nuclear high tone is associated with narrow focus and a low tone with broad focus. Bishop is interested in the role of prominence in different focus contexts in American English. Surányi, Ishihara, and Schubö use a broad and narrow focus to investigate prosody in Hungarian, as does D'Imperio for German and Michelas for French. Calhoun and Schweitzer assume that meaning is associated with words in a one-to-one fashion and that it is a vain task to try to attribute meaning to tones independently of words. Gili Fivela uses her own categories in a way that is difficult to reconcile with standard semantics.

The meaning of prosody remains a largely unexplored field in linguistics, especially from a crosslinguistic perspective. Books like the one reviewed here testify that progress is being made, but that there is still a long way to go before standards in intonation as part of grammar can be established. Fortunately, the exceptionally high quality of the individual papers compensates for the lack of consensus on the main theme of the book.

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Phonological variation in French: Illustrations from three continents. Ed. by RANDALL GESS, CHANTAL LYCHE, and TRUDEL MEISENBURG. (Studies in language variation 11.) Amsterdam: John Benjamins, 2012. Pp. 397. ISBN 9789027234919. \$158 (Hb).

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This informative volume presents the results of twelve surveys of diatopic and social variation in French pronunciation from the *Phonologie du français contemporain* project (PFC) (<http://www.projet-pfc.net/>). The book is divided into three sections representing the continents under