

REVIEW

KLAUS J. KOHLER, *Communicative functions and linguistic forms in speech interaction* (Cambridge Studies in Linguistics 156). Cambridge: Cambridge University Press, 2018. Pp. xiv + 305.

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Is contemporary phonetic science a truly communicative enterprise concerned with speech interaction? In *Communicative Functions and Linguistic Forms in Speech Interaction*, Klaus Kohler doubts this is the case. According to Kohler, phoneticians do not seem to pay as much attention to the communicative functions of human spoken interactions as they should. Moreover, he regrets the field's evolution in his lifetime from a 'holistic approach in speech communication to a diversification of labs attached to a great variety of superordinate subjects' (p. xiv). The monograph is, then, a step towards a new paradigm, a truly Communicative Phonetic Science as envisaged by the author. Its main aim is to develop a framework of universal core communicative functions and describe their language-specific formal (prosodic-phonetic and lexical-grammatical) manifestations. This is carried out with examples from English and German throughout the book and, in the last chapter, Mandarin.

The book contains six chapters, preceded by an Introduction. These can be seen as falling into three sections, although the book does not make this explicit. The first section includes the Introduction and the first two chapters, which ground speech communication in spoken interaction and describe the Kiel Intonation Model (KIM), which the author has worked on for decades.

The Introduction (pp. 1–17) presents the principles of Kohler's Communicative Phonetic Science and provides a short historical account of the study of prosody and intonation, from the London School of Phonetics to more recent phonological approaches such as Autosegmental Metrical (AM) Phonology which typically eliminate the expressive and attitudinal component of spoken language, thus reducing prosody to 'the status of the maid of syntactic structure' (p. 2). Kohler criticizes AM Phonology's focus on form – which he also sees as a caveat in much of the recent Laboratory Phonology framework – for its insistence on measuring speech signals to substantiate phonological form and not relating this to communicative functions. As an alternative, Kohler introduces his functional (or function–form) approach, which does not filter the communicative component of speech to arrive at a phonological form (even if substantiated by phonetic analysis), but rather relates signals in communicative acts to types of interrelated functions in human interaction.

In Chapter 1, 'Speech communication in human interaction' (pp. 18–70), Kohler presents Karl Bühler's *Sprachtheorie* (1934) as a point of departure for his own approach. Kohler uses two central concepts from Bühler. The first one is the *Organon Model*, which relates linguistic signs to the Speaker, the Listener, and the world of Objects (physical and abstract) and Factual Relations in the three basic communicative functions of REPRESENTATION, APPEAL, and EXPRESSION (functions are symbolized in small capitals in the book while formal categories are shown in italics). The second concept is the deictic and symbolic fields of speech communication whereby speakers send listeners either here-and-now or situationally-free coordinates specifying the position of interlocutors and objects. After presenting the *Organon*

Model, Kohler focuses on how deictic communication is structured in English and German with reference to speakers, listeners, distant objects and very distant objects. Kohler finishes the chapter by providing an overview of prosodic paradigms including the London School of Phonetics, Halliday's Intonational Phonology, and AM Phonology.

The overview at the end of Chapter 1 serves Kohler to prepare the ground for the presentation of his functional framework in Chapter 2, 'Prosody in a functional framework: The Kiel Intonation Model (KIM)' (pp. 71–164). This chapter is by far the longest in the monograph and Kohler presents in it KIM alongside its labelling system PROLAB – also introduced at the end of the Introduction. KIM and PROLAB are the basis for the discussion of data in the subsequent chapters. The model's categories (e.g. prominence, sentence accent, declination, downstep, upstep, lexical stress, intonation, prosodic phrasing, etc.) are developed with reference to data from perception experiments in functional contextualization.

After the Introduction and the first two chapters, a second section comprises three chapters, each of which deals with one of the three core functions of Bühler's model: REPRESENTATION (Chapter 3), APPEAL (Chapter 4), and EXPRESSION (Chapter 5). Kohler elaborates on those core functions, allowing for the combination of different communicative functions (e.g. distinctions in the QUESTION APPEAL depending on the presence of different types of EXPRESSION in Chapter 4). In the three chapters, Kohler describes the morphology and syntax of utterances expressing the subfunctions at hand as well as their prosodic-phonetic patterns, mostly referring to German and English. In doing so, he stresses the fact that communicative functions should be separated from their formal manifestation, although they may overlap to various degrees. As a case in point, QUESTION and STATEMENT are communicative functions, differentiated from *interrogative* vs. *declarative* syntax, while COMMANDS and REQUESTS have to be differentiated from *imperatives* and *interrogative* syntax, respectively.

Chapter 3, 'The REPRESENTATION function' (pp. 164–187), deals with Bühler's REPRESENTATION of Objects and Factual Relations and subfunctions such as STATEMENT and, with an overlay of the APPEAL function, RECOMMENDATION as well as APOLOGY. The chapter also introduces the functional scale of INFORMATION SELECTION AND WEIGHTING and their formal manifestation in terms of accentuation and a *reduced to elaborated* formal articulatory precision scale. Kohler also makes a distinction between ARGUMENTATION – for the speaker's view of objects and relations – and INFORMATION STRUCTURE – for the factual world. ARGUMENTATION is discussed under the categories FINALITY, OPENNESS, CONTRAST, and EXPECTEDNESS. Chapter 4, 'The APPEAL Function' (pp. 188–253), deals with three different subcategories of APPEAL, namely DEIXIS, QUESTION APPEAL, as well as COMMANDS and REQUESTS. DEIXIS – or the pointing function – is related to the formal system of stepping pitch patterns in many languages. The QUESTION APPEAL – or the response-soliciting function – is further divided into INFORMATION QUESTION, POLARITY QUESTION and CONFIRMATION QUESTION. Chapter 5, 'The EXPRESSION function' (pp. 254–266), elaborates on Bühler's model by developing the subfunction of EXPRESSIVE EVALUATION of communicative action – which Kohler distinguishes from INFORMATION WEIGHTING – graded along a LOW-TO-HIGH KEY scale – and that of SPEAKER ATTITUDES TOWARDS THE LISTENER along a scale from AUTHORITY to SUBORDINATION. Regarding EXPRESSIVE EVALUATION, LOW KEY is the expression of the speaker's detachment from the communicative situation while HIGH KEY is the expressive reinforcement of ARGUMENTATION. The formal manifestation of EXPRESSIVE EVALUATION in terms of prosodic and segmental features along the *reduced to elaborated* formal scale is discussed in detail.

The last section of the book is made up of a single chapter, based on the author's previous assumption that the core communicative functions discussed in Chapters 3–5 are part of human behaviour across languages. Chapter 6, 'Linguistic form of communicative functions in language comparison' (pp. 267–287), discusses in some detail subfunctions such as ARGUMENTATION, QUESTION versus STATEMENT, INFORMATION SELECTION AND

WEIGHTING, and HIGH-KEY INTENSIFICATION. Kohler exemplifies these with a language typologically different from English and German: Mandarin Chinese. Kohler uses data from pilot studies conducted by himself and colleagues. The choice of Mandarin is certainly fortunate, insofar as contrastive comparisons are likely to provide valuable insights into the use of formal patterns when phylogenetically and areally unrelated languages are studied. The choice of Mandarin is also suitable since it allows the author to look into the formal realisation of communicative functions insofar as they are superimposed on lexical tone. As a case in point, Kohler shows how pitch lowering and raising work in Mandarin to express FINALITY and OPENNESS, as they do in English and German, but within the constraints of the lexical tones, with FINALITY strengthening low pitch in the low tone and OPENNESS high pitch in the high tone.

The monograph has many strengths, the main one probably being its very communicative approach to the study of prosody, which relates purportedly universal core communicative functions to their formal manifestations. The latter are typically language-specific, although Kohler does not exclude the possibility that there may be cases of very widespread or nearly-universal tendencies in the expression of specific communicative functions (e.g. high pitch in certain types of questions, or low- versus high-pitch register for the expression of authority versus subordination). His approach, then, allows for typological comparative studies and, since it relies on human interaction – the focus of interest of many different disciplines – it represents ‘the basis of a successful interdisciplinary linguistic science’ (p. 42). Moreover, Kohler’s discussion of the topics at hand, backed by research-driven prosodic-phonetic evidence, should make readers who are sceptical of the phonetic study of communicative functions appreciate such an approach. This scepticism often derives from acquaintance with some functionalist approaches that do not use acoustic evidence but rely exclusively on auditory analysis.

Related to the above strengths, the monograph can also be praised for suggesting ideas for conducting research and for stimulating researchers to carry out further studies on communicative (sub)functions whose prosodic-phonetic manifestations are less well-known. These include, among others, the formal (prosodic and segmental) manifestations of EXPRESSIVE LOW-TO-HIGH KEY in German or English (p. 256). They also include the cross-linguistic typological investigation of how EXPRESSIVE EVALUATION is expressed and its *reduced-to-elaborated scale* used in the world’s languages (p. 264). More generally, Kohler suggests researching communicative functions assumed to be common to speech interaction across all languages such as ARGUMENTATION or QUESTION versus STATEMENT, among others (p. 267).

Regarding methodological suggestions, it should be borne in mind that Kohler’s approach implies restoring the importance of auditory observation. This could make some readers raise an eyebrow. Yet Kohler claims that combining auditory and acoustic analyses may lead to communicatively more insightful analyses than mere acoustic observations. Moreover, and possibly to the relief of the most experimentally-oriented readers, he suggests, and provides examples of how, once function–form mappings in actual speech interaction (e.g. from speech corpora) have been described, a great deal of refinement is necessary. This includes well-designed listening tests with a proper contextualization of the material. As for suggestions for further research, Kohler even outlines a more ambitious goal than exploring specific manifestations of a given communicative function: the study of the formal mapping of communicative functions across the world’s languages so that a prosodic typology can be arrived at. In fact, this suggestion is the focus on a whole subsection at the end of Chapter 6 (6.2. ‘Universal prosody code and prosodic typology’).

Other strengths of the monograph are its graphic discussion and its reference to the multimodal aspect of speech interaction. In this respect, the book contains a substantial number of examples that illustrate the different functions and their formal manifestations. Some of these examples also derive from the author’s own anecdotes and experiences (e.g. while on public transport or in personal encounters) as well as from the media (e.g. broadcasts,

films, etc.). Finally, given the importance of gestures and gaze in speech communication and interactions (e.g. Kendon 2004), relating such features to phonetic-linguistic ones provides a broader understanding of the communicative functions being discussed and speech interaction more generally. It is true that further discussion of such features would have provided further insights. After all, a great deal of research in the cognitive sciences is currently looking into co-speech gestures, although none of this literature is referred to in the monograph. Yet, since most books that deal with intonation essentially neglect such features, Kohler's mention of them is no doubt valuable.

While the monograph is to be praised for aspects such as the above-mentioned, it also has some weaknesses. One surprising omission – which could be a reflection of the publisher's decision/formatting practice – is to be found in the Contents, where an indication of (first-level) headings is provided but subheadings are missing. Yet most chapters have various levels of subheadings (e.g. Chapter 4), which the reader encounters but are not previously mentioned. Another of the monograph's weaknesses – for some readers at least – is the lack of audio support. While the book is seasoned by seemingly countless examples and their prosody is notated – and sometimes visualized through stylized *f0* contours – they still have to be figured out mentally by readers. This would have been useful, for example, at some point in the discussion of microprosodic *f0* peak and valley distinctions (e.g. early, medial, and late) in Chapter 2 or subsequent ones. Given that the book explicitly claims (p. 14) that it may be of interest to a wide readership beyond that of linguists and phoneticians, it should have taken into account that many researchers outside the field of phonetics are less familiar with prosodic research and formalism. Thus, recordings of at least some key examples would have been useful either through an accompanying CD or through a related website (see Barth-Weingarten 2016 for a recent prosody book affording audio samples).

One final weakness that I would like to point out is the lack of balance between chapters and even occasionally between headings within chapters. While this seems only a formal downside, I believe it has an impact on the development of the monograph's function–form approach. This can be seen, for example, when comparing Chapter 2 with Chapters 3–5 on communicative functions (the second section identified in this review) or Chapter 2 with the different chapters in that section.

On the one hand, the three chapters on Bühler's functions amount to 100 pages and are, thus, only slightly longer than Chapter 2 on the KIM model, which amounts to 94 pages. It would seem that, since the main aim of Kohler's monograph is the development of a communicative framework 'by putting a network of communicative functions first and then relating formal exponents to them' (p. 3), more emphasis could have been given to the communicative functions themselves and less to the detailed discussion of the inventory of formal prosodic phenomena through which the functions are expressed – or even to the labelling system. After all, communicative functions could be discussed and researched with prosodic models other than KIM and, while all the readership will presumably be interested in the framework of core communicative functions and subfunctions, they may be less enthusiastic about KIM and/or its PROLAB symbolization (and possibly even daunted by the symbolization of examples such as those on pages 104–105). This may apply in particular to researchers interested in multimodal communication who do not consider themselves to be phoneticians.

The contrast is even more noticeable between Chapter 2 and the specific chapters on communicative functions, with the sharpest contrast between Chapter 2 (94 pages as mentioned above) and Chapter 5 on the EXPRESSION function (only 13 pages). Is Chapter 2 too long or Chapter 5 too short? Probably both. Chapter 2 is dense at times; the discussion of the experiments in peak and valley synchronization (Section 2.8, pp. 108–134) is rather long-winded, somewhat digressive, and may contribute to making Kohler's function–form approach less attractive to those readers who are less familiar with prosodic research. In contrast, Chapter 5 barely discusses one of the two expressive subfunctions addressed. While EXPRESSIVE EVALUATION and its related LOW-TO-HIGH KEY scale take up most of the chapter (pp. 254–265), SPEAKER EVALUATION TOWARDS THE LISTENER, which deals

with the expression of authority and dominance, only receives ‘a few words’ (p. 256) by Kohler’s own admission – two half pages, to be precise (pp. 265–266). This may seem surprising, since Kohler also states that the communicative function ‘that plays a central role in human interaction is the expression of authority and dominance versus subordination and compliance’ (p. 265). Further discussion of the EXPRESSION function, including prosody and gesticulation (possibly postures and gaze as well), would have been a valuable addition to the chapter for researchers interested in multimodal communication.

By way of conclusion, I believe that, despite its excessive reliance on KIM/PROLAB, the monograph comes close to being an integrative approach to communicative functions in speech interaction. Moreover, the intellectual stature of the author – former Editor of *Phonetica* between 1979 and 2013, and President of the IPA between 1999 and 2003 – as well as his lifelong relationship with the study of speech communication – highlighted in the preface to the book – make his attempt worthy of attention. Researchers can use Kohler’s function–form approach as a roadmap in the study of communicative functions and their prosodic-phonetic manifestations in a broader linguistic-pragmatic framework. This may benefit phoneticians less familiar with the study of communication and communicative functions in speech. Similarly, the book can offer linguists and, more generally, any researcher interested in communicative spoken interaction valuable information on prosodic-phonetic correlates of communicative functions, even though they may not consider KIM and/or its symbolization attractive or suitable to their own frameworks.

References

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