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**Caroline Féry**, *Intonation and prosodic structure* (Key Topics in Phonology). Cambridge: Cambridge University Press, 2017. Pp. ix + 374.

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Caroline Féry's *Intonation and Prosodic Structure* is a state-of-the-art survey of the relationship between prosody, morphosyntax and information structure. The book contains highly didactic introductions to the relevant topics such that it can also serve as a textbook for graduate-level courses, and possibly for advanced undergraduate courses. Each chapter is complemented with discussion questions and

refers the reader to seminal literature discussed in each of the topics treated in each of the chapters.

The author does not discuss the literature in prosodic phonology in an uncritical fashion but argues for specific assumptions about the way prosodic structure and intonation interact with other parts of grammar. These assumptions can be summarized as follows: (i) Indirect reference theory: Phonological processes do not index morphosyntactic structure directly but make reference to the prosodic hierarchy; (ii) Prosodic hierarchy hypothesis: All languages have a fixed set of phonological constituents that are built from mapping principles that refer to morphosyntactic structure; (iii) Recursive prosodic layer hypothesis: Prosodic layers (can) display recursion; (iv) Autosegmental metrical hypothesis: Tones are assigned to a hierchically organized metrical structure and syllables not specified with tones receive their pitch via interpolation; and (v) Alignment theory of phonology information structure interactions: Information structural categories such as focus and topic relate to alignment constraints at the syntax-phonology interface rather than directly to phonetic content. These assumptions are more or less explicitly argued for in the text. In the review below, I will lay out a few additional assumptions that I think are implicit in Féry's presentation.

Chapter 1 is an introduction to the book and clarifies its basic structure and scope. Chapter 2 introduces articulatory and acoustic phonetics as they relate to intonational phonology. An introductory discussion of computer assisted pitch analysis is provided including a discussion of errors in pitch track generating algorithms.

Chapters 3 and 4 are broadly concerned with phonological categories and constituents and their relationship to morphosyntax. A historically grounded discussion of the prosodic hierarchy is provided, from the first version where prosodic domains were constrained by the strict layer hypothesis to the much weaker version of the theory adopted today that allows recursion and layer skipping. Chapter 3 deals with the relationship between moras, syllables, feet, and prosodic words. The author treats prosodic words in English and Japanese in detail. This section does not do justice to the typological variation in prosodic wordhood phenomena and the problems such phenomena might pose for some of the assumptions adopted by the author (e.g. Bickel et al. 2007, Hildebrandt 2007, Woodbury 2011, van Gijn & Zúñiga 2014, Zúñiga 2014, Tallman 2020), but one could argue that such considerations are outside the scope of the volume.

Chapter 3 also introduces the distinction between direct reference theory, which assumes that phonological processes directly index morphosyntactic structure, and indirect reference theory that assumes that phonological processes relate to layers of a universal prosodic hierarchy which are projected on the basis of mapping rules that relate to morphosyntactic structure. Without getting in to too much detail, mapping rules are required because the span of the application of phonological processes that index layers of the prosodic hierarchy are structurally close, but not identical to corresponding morphosyntactic levels. Therefore, there must be some set of functions that maps a prosodic domain from a

corresponding morphosyntactic constituent ( $\omega \leftarrow X^0$  / morphosyntactic word;  $\phi \leftarrow XP$  / syntactic phrase etc.).

The mapping rules are not discussed until Chapter 4. In this section the case for recursive prosodic domains is made more forcefully as the author argues that one can only maintain that prosodic domains are not recursive insofar as one ignores prosodic phenomena under conditions of complex sentence structure. The author also mentions *en passant* that positing recursive structures can result in ambiguity in the assignment of layers (62), because for a set of hierarchically organized phonological domains it is unclear whether we are dealing with different layers of the prosodic hierarchy or the same layer recursed. Féry also adopts a potentially controversial assumption regarding how recursed prosodic domains relate to empirical phenomena. For Féry, successive layers of a recursed prosodic domain need not have the same empirical signal. This is illustrated in Féry's analysis of weak affixes in English, which are conjectured to be prosodic words despite not bearing stress (see Vogel 2019 for more details and criticism). Another example comes from Japanese, where the minimal domain of  $\phi$ -phrases is defined on the basis of pitch-accent culminativity, but the maximal domain of  $\phi$ -phrases conditions catathesis (240–241).

Chapter 5 introduces different models of intonation contrasting the parallel encoding of target implementation model (PENTA), the nuclear tone model, and the tone sequence model. The chapter also includes an overview of some of the tonal phenomena in African languages (Mende, Igbo, Ewe) that partially propelled the autosegmentalization of phonology in the 1970s. This provides the reader with the historical context and empirical motivation underlying the assumptions of the tone sequence model. The tone sequence model, ostensibly favored by the author, is described in much more detail than that of the PENTA or nuclear tone tradition. I found Féry's overview of the PENTA model too superficial to justify the author's dismissive tone towards it (132, 260). Specifically, I think the author missed an important opportunity to highlight some pitfalls of the tone sequence model with regard to how one goes about discovering where and what precisely the underlying tones are over an intonational contour (see Ladd 2008: 134–138 for discussion), a weakness that advocates of the PENTA model have highlighted and addressed on the basis of a different set of assumptions about prosodic structure (e.g. Xu et al. 2015).

Chapter 6 deals with the relation between meaning and intonation and is the most difficult chapter because of the large number of interacting variables involved. Féry shows that one has to minimally consider the following variables: (i) focus type/strength; (ii) givenness type/strength; (iii) topicality; (iv) theticity; (v) position in relation to the focused constituent; (vi) sentence position; (vii) NP realization type; (viii) position in the  $\phi$ - or  $\iota$ -phrase; and (ix) presence versus absence of nuclear stress. Despite the complexity and difficulty of the problem, Chapter 6 is the best chapter of the book for two reasons. First, the information-structural categories are teased apart with a high degree of granularity such that they can be distinguished cross-linguistically without ambiguity. For example, at least six types of focus are

motivated (brand new > brand new anchored > inferable > containing inferable > evoked > situationally evoked) all discussed in relation to empirically verifiable diagnostics. Secondly, the author reviews the accumulated knowledge in the literature such that testable hypotheses can be distilled from the discussion. For instance, Féry argues that for a given constituent, as it increases its focus strength, it is more likely to be realized with a pitch accent.

Chapters 7 and 8 are organized around overarching typological classifications based on the distribution of stress and tone at different levels in the prosodic hierarchy. Chapter 7 is organized around classifications at the level of the prosodic word. Chapter 7 presents a discussion of word-level prosody organized around four linguistic types that fall out from the presence or absence of lexical tone or lexical stress. Languages with neither lexical tone nor lexical stress are French, Bella Coola, Berber, Indonesian, West Greenlandic, Finnish, and Hungarian. Languages with just lexical stress are English, Danish, Dutch, German, Spanish, Russian, Greek, and Slavic. Languages with just lexical tone are Chinese and Vietnamese. A perhaps controversial aspect of the chapter is that Féry's presentation implies that pitch-accent languages, which are defined as displaying lexical tone AND lexical stress, are a legitimate cross-linguistic type in some sense. For Féry, pitch accent languages include Swedish, Norwegian, Danish, Japanese, Basque, and Turkish. It is not entirely clear whether these language types are pigeon-holes posited for expositional purposes or whether Féry intends the classification to be informative beyond what falls out of the classification (presence or absence of lexical tone and stress). It is unclear, for instance, what pitch-accent languages have in common beyond the classification itself (see Hyman 2006, 2009).

Chapter 8 presents a cross-linguistic overview of intonation partially organized around the prosodic word types described in the previous chapter. The chapter reviews phrase and intonation-level prosody for a subset of the languages discussed or mentioned in the previous chapter. Féry explicitly points out that tone languages are a 'heterogeneous group' (257). Lexical stress languages such as English are identified as 'intonation languages' (227). Chapter 8 also discusses phrase languages which are a 'new category' that 'resemble intonation languages in that their tonal specifications are mostly assigned at the level of  $\phi$ -phrases and  $\iota$ -phrases. But contrary to intonation languages, specifications at the level of the word are sparse, absent or only weakly implemented' (270). Féry's description of phrase languages assumes that certain layers of the prosodic hierarchy need not have any empirical signal. If it were not assumed that some layers could be latent, 'phrase languages' would presumably need to be interpreted as counterexamples to the prosodic hierarchy (see Schiering, Bickel & Hildebrandt 2010). Alternatively, we could reinterpret the phonological processes that Féry associates with the  $\phi$ -level as indexes of  $\omega$ -words, which happen to map over XPs in some languages (Tallman 2020). Indeed, the author provides the reader with no mapping principles for word-level categories and thus it is unclear why such a proposal is ruled out.

Chapter 9 provides an overview of psycholinguistic studies on prosody, which describes studies on speech comprehension in relation to prosodic breaks and rhythmic alternatives and ‘implicit prosody’ (prosodic structure that a reader imposes on written forms). The chapter ends by emphasizing the need to conduct speech processing studies on a typologically broader set of languages. Chapter 10 summarizes the contents of the book with a focus on areas that require future research.

In my view the main weakness of the book lies in its failure to present the reader with any testable hypotheses that relate to indirect reference and the prosodic hierarchy theory. In the book, the historical trajectory of the prosodic hierarchy theory is presented as an incremental weakening of a more restrictive theory embodied in the strict layer hypothesis (see Vogel 2019 as well). Thus, the greater variety of arboreal structures that emerge from allowing recursion and layer skipping translate to a loosening of the predictive power of the prosodic hierarchy. I think, however, when one considers the consequences of this structural loosening, as it is presented by the author, we are left, not so much with a less restrictive theory, but an unrestricted one, i.e. a tautology. When one posits that successive layers in a recursed prosodic category, be they recursed  $\omega$  or  $\phi$ , can be indexed by distinct empirical signals, the result is that the prosodic hierarchy theory places no upper bounds on the number of nonconvergent phonological processes that are causally related to its layers. Conversely, if we assume that layers of the prosodic hierarchy need not bear an empirical signal to be latently present, as in the  $\omega$  of phrase languages, the result is that the theory places no lower bounds on what phonological processes it seeks to explain either. Thus, the prosodic hierarchy theory has no predictive power beyond what we arrive at by positing some form of indirect reference.

However, the arguments about recursive phonological structures in relation to complex syntactic structure actually weaken the claim that indirect reference theories are uniquely positioned to capture prosodic phenomena. This is because recursive prosodic structures are usually isomorphic with the syntactic constituents over which they map, suggesting that a minor change in one’s assumptions about the syntax might obviate the need to posit any indirect mapping principles. Furthermore, while indirect reference theories are supposed to be motivated because of non-isomorphy between prosodic domains and morphosyntactic constituency, scarcely any evidence for the morphosyntactic structures over which the mapping principles apply is presented.<sup>1</sup> Féry does not discuss how one establishes the boundaries between  $X^0$  and XP, etc. (contrast this with the clear discussion of diagnostics for information structural categories in Chapter 5), despite the fact that such decisions are crucial for establishing and testing mapping principles

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[1] The only exception is with reference to a coordination test for wordhood applied to demonstrate the stressless syllables are their own prosodic word (55). However, in this case, Féry assumes that prosodic words map directly over relevant morphosyntactic constituents thus providing, if anything, evidence in favor of direct mapping.

(e.g. Miller 2018: 134; Bennet & Elfner 2019: 162–163). Finally, Féry does not discuss any of the criticisms of the prosodic hierarchy (Scheer 2011: 332), nor research that suggests that prosodic structures might be better explained as emergent properties from language use and history rather than as causally related to a universal latent prosodic hierarchy (Bybee 2007; Woodbury 1992, 1998; Bickel, Hildebrandt & Schiering 2009; Schiering et al. 2010).

To conclude, the volume provides an in-depth and typologically responsible overview of prosodic phonology, which could usefully serve as a textbook for teaching current approaches to intonation and prosodic phonology. It is questionable, however, that the indirect reference-based theories that underlie the presentation constitute necessary additions to our conceptual framework for describing and explaining morphosyntax–phonology interactions.

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**Istvan Kecskes**, *English as a lingua franca: The pragmatic perspective*.  
 Cambridge: Cambridge University Press, 2019. Pp. viii + 259.

Reviewed by ALESSANDRO CHRISTIAN CAPONE, University of Messina

This is an outstanding book by Istvan Kecskes, a notable author in the area of intercultural pragmatics, a field founded by him and in which he has been very active for most of his life. Obviously, in dealing with the notion and uses of lingua franca, the author puts his knowledge of general pragmatics and intercultural pragmatics to use and hopes to extract useful considerations that have, in his opinion, implications for the general field of pragmatic studies and, in particular, the semantics/pragmatics debate. He also extracts useful considerations concerning the notion of intentionality/intentions and thus integrates the philosophical notion, according to which intention is an *a priori* notion, in order to embrace a more interactive notion, which sees intentions as being co-constructed in conversation, which may be called ‘emergent intentions’. Before going into greater detail, let us clarify the underpinnings of the book. Kecskes says:

All stages in the communicative process require the commitment of attention in order for successful communication to occur. Cognitive research ... has documented the interlocutors’ egocentric behaviour in the process of communication. However, ‘egocentrism’ is not a negative term as discussed earlier. It refers to the state of mind of the interlocutor, who can hardly control this phenomenon because it is the result of the individual’s prior experience and emergent present experience. *Egocentrism means that the interlocutors act under the influence of the most salient information that comes to their mind in the given actual situational context both in production and comprehension.* (120)

These notions are central in so far as all considerations in the book are motivated by them, for example, the notion of intentionality, the semantic/pragmatic debate, common ground, the relationship between the individual and cultures.