subdisciplines. However, and fortunately, chapters were often short and focused, rich with citations, and a number backed away from the details to summarize and discuss generalizations and models. Frustratingly, some of the generalizations are that there are few generalizations. Emotions may be profitably viewed as discrete or in a more continuous way, and how sounds (or other communicative signals) map onto them vary quite a bit across taxa and contexts.

I wanted a unified set of marching orders that would help structure the chapters and was surprised that although the editors ultimately called for an ethological approach to studying the topic (and the book wonderfully illustrated this), Niko Tinbergen's four questions approach was not called out as being an integrative framework to advance knowledge. I was also surprised that the editors let the authors define emotional communication in a variety of ways and only in the last summary chapter came up with a synthetic definition of emotional communication.

Notwithstanding these minor points, I learned a lot reading the book and believe that it will appeal to a broad audience interested in emotional communication and why (and how) we respond emotionally to music, as well as anyone broadly interested in neuroscience of emotions.

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NATIVE LISTENING: LANGUAGE EXPERIENCE AND THE RECOGNITION OF SPOKEN WORDS.
By Anne Cutler. Cambridge (Massachusetts): MIT Press. $50.00. xvii + 555 p.; ill.; name and subject indexes. ISBN: 978-0-262-01756-5. 2012.

This book provides an overview of research into speech perception over the last two decades. The central thesis is that all listening is native listening: in other words, all speech perception is fundamentally dependent on the knowledge of language that the listener already has. The volume demonstrates the absurdity of the implicit assumption in early speech perception research, namely that the language used for the speech perception task was relatively irrelevant, because the speech perception process was universal. In fact, speech perception is a flexible process sensitive to a wide range of variations and regularities within and between languages. For example, English is a stress-timed language with frequently unclear syllable boundaries (due to ambisyllabicity). In contrast, French is a syllable-timed language. Cross-linguistic research suggests that French speakers rely on syllable-level information for word recognition to a much greater degree than English speakers do. This is only one small example of the many differences described in this book.

This volume is aimed at researchers and students, especially those new to the field, who need an overview of the area as a starting point to carrying out their own research. As such, there is a very useful emphasis on experimental design and how different studies have been carried out. I will certainly recommend this book to my own students and refer to it myself when considering research in the area. This is an excellent addition to any psycholinguistics library.

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THE BIOLINGUISTIC ENTERPRISE: NEW PERSPECTIVES ON THE EVOLUTION AND NATURE OF THE HUMAN LANGUAGE FACULTY. *Oxford Studies in Biolinguistics.*
Edited by Anna Maria Di Sciullo and Cedric Boeckx. Oxford and New York: Oxford University Press. $150.00 (hardcover); $55.00 (paper). xv + 559 p.; ill.; index. ISBN: 978-0-19-955327-3 (hc); 978-0-19-955328-0 (pb). 2011.

PHONOLOGICAL ARCHITECTURE: A BIOLINGUISTIC PERSPECTIVE. *Oxford Studies in Biolinguistics.*
By Bridget D. Samuels. Oxford and New York: Oxford University Press. $125.00 (hardcover); $55.00 (paper). xii + 252 p.; ill.; author, language, and subject indexes. ISBN: 978-0-19-969435-8 (hc); 978-0-19-96936-5 (pb). 2011.

The Biolinguistic Enterprise is a collection of papers rooted in the tradition of generative grammar. Its chapters are organized around three classical Chomskyan themes: What is the nature of the human faculty of language (FL)? How is FL compatible with variation among the vast number of human languages? And, how could FL evolve in our species? Among the six chapters directly addressing this latter question, the one by cognitive biologist W. Tecumseh Fitch deserves particular attention. In expert fashion and clear language it familiarizes noninitiate readers with relevant essentials from genetics and comparative evolutionary biology. In addition to exposing the pitfalls of exclusive concentration on primate research, Fitch lays out a grid of options for "deriving" FL, some more gradualist, some more "saltationalist." The much-discussed FOXP2 is taken as one language-related example of "deep homology" involved in an evolutionary convergence guiding vocal learning in both birds and humans. The chapter by Piattelli-Palmarini and Uriagereka adds a comprehensive discussion of the literature on FOXP2 and a cautionary note on how to avoid misinterpretations of its function based on simplistic linguistic assumptions.

Since the 1980s, the Chomskyan answer to variation among languages has been the postulation of parameters, to be set by children on exposure to data during language acquisition. The chapter by Charles Yang (published 2010. *Lingua* 120:1160–1177), one of six chapters grouped under the theme of variation, is a good example of new thinking about parameters: their fixation is taken to depend on a frequency-sensitive mechanism of grammar competition in an abstract syntactic core of FL. More peripheral and irregular phenomena are delegated to rule learning. Longobardi and Guardiano devote their contribution to showing that batteries of syntactic parameters are useful tools for capturing genealogical relations among languages.

The remaining seven chapters, which may be less accessible to nonlinguists, are grouped under the theme of computation. This is in line with the "minimalist" approach to the nature of FL, according to which a "narrow" core of FL (FLN) can be characterized as a feature-driven computational system responsible for generating structured expressions (sound-meaning pairs) "interpreted" at the sensorimotor and conceptual-intentional interfaces (cf. M. D. Hauser et al. 2002. *Science* 298: 1569–1579). Three contributions reflect on the syntax-semantics mapping in the areas of intensionality (Larson), (temporal) indexicality (Giorgi), and general thought representation (Hinzen). Another two address sensorimotor aspects of language, asking how expressions get "externalized." Evidence is drawn from studying the interaction of phonological short-term memory with syntactic processing (Cecchetto and Papagno) and from developing an underlyingly uniform model for metrical stress assignment in human language and rhythmical properties of birdsong (Berwick).

The monograph *Phonological Architecture* by Bridget Samuels is entirely devoted to matters of externalization in that it outlines an ambitiously broad and formally explicit theory of phonology compatible with a minimalist computational system. Of particular interest to a wider audience will be its third chapter (Phonology in Evolutionary Perspective), where the thesis about the species- and language-specificity of phonology (S. Pinker and R. Jackendoff. 2005. *Cognition* 95:201–236) is confronted with conflicting empirical and conceptual evidence.

Together, these books make up the first two volumes of the new series Oxford Studies in Biolinguistics (edited by Cedric Boeckx). If asked to choose among the two, I would go for *Phonological Architecture* due to its originality. Although it provides a substantial food for thought, *The Biolinguistic Enterprise* does contain a work that is available elsewhere in one form or another and there are rivaling publications on the market—e.g., R. K. Larson et al. 2010. *The Evolution of Human Language: Biolinguistic Perspectives.* Cambridge (United Kingdom): Cambridge University Press; M. Tallerman and K. Gibson. 2012. *The Oxford Handbook of Language Evolution.* Oxford (United Kingdom): Oxford University Press; and C. Boeckx and K. K. Grohmann. 2013. *The Cambridge Handbook of Biolinguistics.* Cambridge (United Kingdom): Cambridge University Press. Also, as a formal linguist I cannot but worry about casual editing at places where Di Sciullo and Boeckx's volume is meant to take a wider audience through formal details of syntactic mechanisms, the explanatory role of asymmetry, and computational (parsing) efficiency. On the other hand, as a reviewer I got both books for free and I learned a lot from both of them.

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The Folly of Fools: The Logic of Deceit and Self-Deception in Human Life.

    By Robert Trivers. New York: Basic Books. $28.00. xvi + 397 p.; index. ISBN: 978-0-465-02755-2 (hc); 978-0-465-02805-4 (eb). 2011.

We live in a world of deception and self-deception. But how did this come to be? In his book, aptly titled *The Folly of Fools: The Logic of Deceit and Self-Deception in Human Life,* Robert Trivers argues that self-deception exists as an unconscious instrumental tool.

From an evolutionary perspective, would-be deceivers have advantages, as long as deception is not matched by detection. This is illustrated by the cuckoo bird, which lays an egg in a host bird's nest, and the host raises the mimic as its own. This is the ultimate deceptive, evolutionary triumph.

But there is an arms race, as Trivers points out, between deception and detection. Deception takes the lead and detection plays catch-up. In the case of the birds, the deceiver makes the first move in evolutionary time by developing the trait of laying eggs in the victim's nest. This move selects for the victim bird's ability to recognize and reject unfamiliar eggs.

So how, Trivers asks, does the arms race play out for humans? Evolutionary pressure is in favor of deception-produced self-deception, such as self-inflation, false personal narratives, and biased perceptions of power, morality, and biased social theories, all of which aid deception of *others*. Of course, "the general cost of self-deception is the misapprehension of reality" (p. 28). But this misapprehension runs on an unconscious, selfish, and deceptive system, which allows us to more easily bypass detection by others *via* the general attributes of lying (nervousness, facial signs, and cognitive load). In