

subject index will ensure easy returns to the books' content. Finally, the text itself sends the reader to previously introduced or discussed topics.

In our view, the level of discussion and the reflections provoked by T&K's book during our lab meetings are an excellent indication of its value. We wondered, despite all of the anecdotal evidence presented, whether there are qualitative changes in orthographic knowledge as young children gain experience and learn to read. Perhaps children's phonological spelling is more linked to children's reading success than to spelling skill. That is, phonological spelling provides the analytic stance necessary to understand the alphabetic principle. It might be only once children begin to read that they start building precise orthographic representations of words or parts of words. Moreover, we pondered how many exposures to specific patterns would be needed to induce cooccurrences of orthographic patterns. Such problems should motivate researchers.

There are different ways to read a book such as this. There is the traditional linear route—the road my lab members and I took. After completing our reading, however, we all agreed that we would have preferred a nontraditional route. We would have started with children's unconventional spellings in Ch. 10, followed by Ch. 9 on letter names. The descriptions in these chapters then would serve as the backdrop for reading the book sequentially, motivating the nonlinguists to learn more about the phonemic structure of languages, and consequently, to understand more profoundly the book's content.

Department of Psychology
Carleton University
1125 Colonel By Drive
Ottawa, Ontario, Canada
[monique.senechal@carleton.ca]

Acquiring pragmatics. By SANDRINE ZUFFEREY. London: Routledge, 2015. Pp. 202. ISBN 9780415746441. \$49.95.

Reviewed by ELLY IFANTIDOU, *National and Kapodistrian University of Athens*

Zufferey's book is organized in five parts that cover pragmatics from its theoretical foundations to its mutual influence with language acquisition (Part 1), social skills (Part 2), and cognitive competencies required in acquiring pragmatic skills (Part 3). Pragmatic development in a second language and autism are examined, too (Part 4). Ten chapters, two under each part, discuss topics such as speech acts, the role of social relations and cultural norms in children's pragmatic development, metaphor, irony, scalar implicatures, referring expressions, and connectives. Z focuses on cognitive underpinnings on par with social interaction skills; she sidesteps early communicative abilities observed in conversational turn-taking and preschoolers' situated activities (see Slobin et al. 1996, Matthews 2014). Nevertheless, the book accomplishes the much-awaited unification of the major trends in the pragmatic development of children, that is, the social and the cognitive.

Ch. 1 traces popular topics within pragmatic theory back to their origins, namely speech-act theory and H. Paul Grice. This chapter can be a useful review for students who have had semantics and pragmatics courses and are familiar with the standardization hypothesis, nonliteral language in the Gricean framework, and generalized, particularized, and conventional implicatures. It is surprising that the introductory chapter to developmental pragmatics circumvents research on modality, spatial and evidential concepts (see Papafragou 1998, Matsui & Fitneva 2009, Quinn, Doran, & Papafragou 2011, Johanson & Papafragou 2014), and metaphor (see Vosniadou 1989, Pouscoulous 2011, 2014) by drawing on textbooks instead. Other areas where further qualifications are perhaps needed are Herbert Clark's principle of contrast, intention reading, and cultural learning that have been used to discuss the role of theory of mind (ToM) abilities (e.g. joint

attention, gaze direction, intentional behavior) and social interaction in word learning. Part 1 concludes with an overview of explicit and implicit measures used to assess children's production and comprehension.

Ch. 3 is on the acquisition of speech acts. Emphasis is on effects of age and order of acquisition, direct vs. indirect speech acts, and the use of conventional linguistic forms to convey indirect speech acts. Z introduces evidence on requests and promises, which argues that awareness of conventional rules (in the form of felicity conditions) and level of implicitness do not explain children's early ability to produce and understand direct and indirect requests. Instead, the data suggest that complexity of syntactic structures and of inferences that are required to retrieve the intended meaning can explain why young children understand indirect requests that tap into their developing ToM abilities better than indirect requests that rely on world knowledge they have not yet acquired.

Ch. 4 offers a comprehensive review of pragmatic competencies tapping into social behavior and cognitive growth. Z illustrates three- to four-year-old children's ability to adapt tone of voice, to shift from direct to indirect speech acts, and to add politeness markers depending on the social status of addressees and the context of conversation. She stresses the role of multiparty peer interaction in situations of conflict where discourse markers are used to mark power relations. In this process, children are exposed to culturally specific routines that forge pragmatic competencies on par with universal linguistic and cognitive traits (e.g. in acquiring requests, discourse markers, arguments in conflicts). On socialization practices, I would have preferred some discussion of current research on young children's conversational skills as these become manifest in turn-taking (see Cassillas & Frank 2012, Casillas 2014a,b) and on early social traits in infants as these become manifest in faithful imitation (Hilbrink et al. 2013). This would have been very relevant given Amy Kyratzis's (2007) work on peer group interactions.

Returning to the issue of ToM abilities in Ch. 5, Z contrasts evidence from four-year-olds' success in false-belief tests, earlier success in linguistic tasks, and eye-gaze infant studies. Children are capable of inferential communication required to process metaphors, resolve ambiguity, and understand hints at the age of two and a half years and long before they pass explicit versions of the false-belief task. In effect, preschool children's pragmatic competence is limited not by their ToM abilities but by contextual information, that is, world knowledge, linguistic and conceptual knowledge, and metalinguistic skills that they do not possess yet. The discrepancy between verbal communication and ToM abilities is offset by practice (Bloom 2002) or by access to a sub-module dedicated to verbal communication (Sperber & Wilson 2002).

Ch. 6 takes up children's inferential skills using irony and metaphor. Z compares the conceptual- and relevance-theoretic approaches to metaphor using the available empirical data in their support. Their complementary roles in accounting for conceptual mappings (e.g. *love is a journey*) and comparison metaphors (e.g. *Mary is a rose*) are discussed. The data reveal that three- to four-year-olds understand some metaphors in simple tasks (repetition, act-out tasks) when adequate context is provided and when they possess the relevant conceptual knowledge. The spontaneous productions of two-year-olds include nonliteral uses of words that resemble metaphors (e.g. *fire engine in my tummy* to suggest stomachache), whereas four-year-olds can distinguish between literal and metaphorical resemblance. Irony taps into more complex ToM abilities and, in particular, into children's understanding of the speaker's belief (in something different from what he says), his intention (to criticize), and his negative attitude. As a result, children start using verbal irony between the ages of five and six and develop it for several years.

Ch. 7 is on scalar implicatures. Processing scalar implicatures is faster than other contextual inferences when it relies on the derivation of pragmatic rather than logical interpretations, that is, interpretations that are generated by default and canceled if not warranted in context. On-line processing experiments with adults show that accessing scalar implicatures is very fast and generated by default only when warranted by context. Particularized and generalized implicatures are processed at similar rates, and also processed at similar rates with sentences that do not require pragmatic inferences. Contrary to adults, children prefer logical interpretations, but choice of scalar words (e.g. *quelques* vs. *certains*) can influence them to favor a pragmatic interpretation

instead. Z shows how experimental design (e.g. providing training, alternating lexical contrasts), linguistic complexity (\pm negative polarity), and cognitive factors (scales on number words are easier than quantifiers) affect children's performance.

Ch. 8 is on informative referring expressions as a testbed for children's pragmatic abilities. Twelve-month-olds point more often to objects adults ignore rather than to those adults know the location of. By two years of age children are able to understand that another person's visual perspective differs from their own, and by three years of age they combine pointing with verbal behavior to disambiguate referents. In using previous discourse, too, children exhibit pragmatic skills from a very early age. This is shown by two- and three-year-olds' preference to name referents by pronouns when there is common ground but by full nouns when there is no common ground. With reference to coherence and connectives, children from 1;7–3;0 are able to express additive, temporal, causal, and adversative relations but not use the corresponding connectives. Effects of cognitive complexity are confirmed by the fact that children produce additive connectives before causal, and positive connectives before negative ones. The difficulty of additive, causal, temporal, and adversative connectives, in that order, affects nine-year-olds' comprehension, leveling off at adult-like performance at ten years of age. Syntactic complexity (e.g. coordinating vs. subordinating conjunctions), parental input, and fine-grained differences in meaning (e.g. subjective vs. objective causal relations) affect order of acquisition, too. The chapter ties nicely with previous chapters by confirming that pragmatic abilities emerge considerably earlier than the appropriate linguistic forms to express them.

Ch. 9 argues that impairments due to autistic spectrum disorders (ASD) are less severe at the level of vocabulary, syntax, and semantics than pragmatic skills. A lack of interest in joint activities by children with ASD at preverbal stages becomes manifest in pointing to request objects rather than information or in sharing interest in an object. In the verbal period, pragmatic impairments tap into social norms (as in maintaining or changing topic during conversation) or into implicit and explicit pragmatic enrichment (as in reference assignment, metaphor comprehension, or indirect requests). The evidence suggests that children with ASD are able to use pragmatic skills in most cases, but are less able to assign coherence to a text and use context in making global inferences. Robust results indicate an impaired ability to process irony, humor, and jokes. But with training, ASD subjects can take social cues into account, such as face and voice, and as a result improve their performance in irony comprehension tasks. Z accounts for the data using two theoretical frameworks. The inability to acknowledge the hearer's perspective and to understand nonliteral language is attributed to ToM deficits and, in particular, to ASD children's inability to reason about other people's thoughts. Their inability to draw inferences that warrant global coherence is explained within the psychological theory of 'weak central coherence'. The chapter concludes with evidence against the weak central coherence hypothesis from eye-movement experiments that show that ASD children resort to context in disambiguating and understanding idioms.

The acquisition issues raised in the book are revisited in the last chapter from the perspective of second language acquisition. Although universal, cognitive pragmatic competencies are constrained by culturally specific assumptions and impoverished linguistic proficiency. Cultural facts may delay acquisition of implicatures that tap into universal ToM abilities, as confirmed by studies on irony, indirect criticism, and relevance implicatures. Shared cultural backgrounds facilitate interpretation of implicatures, as in the case of the scalar word *some* and indirect speech acts. The role of explicit instruction in fostering pragmatic competence is the final note in Ch. 10. Not mentioned in this connection is recent work by Kondo (2008), Takahashi (2010), Taguchi (2012), Li (2013a,b), Ifantidou (2013, 2014), and various other authors, showing the positive effects of explicit instruction on pragmatic competence and on retrieving new inferences or enhancing pragmatic vs. metapragmatic awareness, in particular.

To me, the primary value of the book lies in relating cognitive, social, and linguistic competencies across a wide range of data, from speech acts to figurative speech. In effect, the book provides a stimulating cross-section of a rich area of research aimed at the still remote but feasible goal of a coherent sociocognitive framework. Not surprisingly, we get so comfortable with mainstream acquisition pragmatics that we forget its usual dichotomy in social and cognitive lines of research.

In sum, this book is a timely introduction to acquisition pragmatics, defined broadly as tapping into cognitive and socially driven competencies alike and into a wide range of pragmatic phenomena.

REFERENCES

- BLOOM, PAUL. 2002. Mindreading, communication and the learning of names for things. *Mind and Language* 17.37–54. DOI: 10.1111/1468-0017.00188.
- CASILLAS, MARISA. 2014a. Taking the floor on time: Delay and deferral in children's turn taking. *Language in interaction: Studies in honor of Eve V. Clark*, ed. by Inbal Arnon, Marisa Casillas, Chigusa Kurumada, and Bruno Estigarribia, 101–14. Amsterdam: John Benjamins.
- CASILLAS, MARISA. 2014b. Turn-taking. *Pragmatic development in first language acquisition*, ed. by Danielle Matthews, 53–70. Amsterdam: John Benjamins.
- CASILLAS, MARISA, and MICHAEL C. FRANK. 2012. Cues to turn boundary prediction in adults and preschoolers. *Proceedings of SemDial 2012 (SeineDial): The 16th Workshop on the Semantics and Pragmatics of Dialogue*, ed. by Sarah Brown-Schmidt, Jonathan Ginzburg, and Staffan Larsson, 61–69. Paris: Université Paris-Diderot.
- HILBRINK, ELMA; ELENA SAKKALOU; KATE ELLIS-DAVIES; NIA FOWLER; and MERIDETH GATTIS. 2013. Selective and faithful imitation at 12 and 15 months. *Developmental Science* 16.6.828–40. DOI: 10.1111/desc.12070.
- IFANTIDOU, ELLY. 2013. Pragmatic competence and explicit instruction. *Journal of Pragmatics* (Special issue: *Pragmatic development in L1, L2, L3: Its biological and cultural foundations*, ed. by Elly Ifantidou and Tomoko Matsui) 59(Part A).93–116. DOI: 10.1016/j.pragma.2012.12.008.
- IFANTIDOU, ELLY. 2014. *Pragmatic competence and relevance*. Amsterdam: John Benjamins.
- JOHANSON, MEGAN, and ANNA PAPAFRAGOU. 2014. What does children's spatial language reveal about spatial concepts? Evidence from the use of containment expressions. *Cognitive Science* 38.1–30. DOI: 10.1111/cogs.12106.
- KONDO, SACHIKO. 2008. Effects on pragmatic development through awareness-raising instruction: Refusals by Japanese EFL learners. *Investigating pragmatics in foreign language learning*, ed. by Eva Alcón Soler and Alicia Martínez Flor, 153–77. Bristol: Multilingual Matters.
- KYRATZIS, AMY. 2007. Using the social organizational affordances of pretend play in American preschool girls' interactions. *Research on Language and Social Interaction* 40.321–52. DOI: 10.1080/08351810701471310.
- LI, SHUAI. 2013a. Amount of practice and pragmatic development of request-making in L2 Chinese. *Technology in interlanguage pragmatics research and teaching*, ed. by Naoko Taguchi and Julie Sykes, 43–69. Amsterdam: John Benjamins.
- LI, SHUAI. 2013b. The role of instruction in developing pragmatic competence in L2 Chinese: A review of empirical evidences. *Increased empiricism: Recent advances in Chinese linguistics*, ed. by Zhuo Jing-Schmidt, 293–308. Amsterdam: John Benjamins.
- MATSUI, TOMOKO, and STANKA A. FITNEVA. 2009. Knowing how we know: Evidentiality and cognitive development. *New Directions for Child and Adolescent Development* (Special issue: *Evidentiality: A window into language and cognitive development*) 125.1–11. DOI: 10.1002/cd.246.
- MATTHEWS, DANIELLE E. (ed.) 2014. *Pragmatic development in first language acquisition*. Amsterdam: John Benjamins.
- PAPAFRAGOU, ANNA. 1998. The acquisition of modality: Implications for theories of semantic representation. *Mind and Language* 13.370–99. DOI: 10.1111/1468-0017.00082.
- POUSCOULOUS, NAUSICAA. 2011. Metaphor: For adults only? *Cognitive and empirical pragmatics: Issues and perspectives*, ed. by Gregory Bohner, Philippe De Brabanter, Mikhail Kissine, and Daniela Rossi, 51–79. Amsterdam: John Benjamins.
- POUSCOULOUS, NAUSICAA. 2014. 'The elevator's buttocks': Metaphorical abilities in children. *Pragmatic development in first language acquisition*, ed. by Danielle Matthews, 239–60. Amsterdam: John Benjamins.
- QUINN, PAUL; MATTHEW DORAN; and ANNA PAPAFRAGOU. 2011. Does changing the reference frame affect infant categorization of the spatial relation BETWEEN? *Journal of Experimental Child Psychology* 109.109–22. DOI: 10.1016/j.jecp.2010.10.001.
- SLOBIN, DAN ISAAC; JULIE GERHARDT; AMY KYRATZIS; and JIANGSHENG GUO (eds.) 1996. *Social interaction, social context, and language: Essays in honor of Susan Ervin-Tripp*. Hillsdale, NJ: Lawrence Erlbaum.
- SPERBER, DAN, and DEIRDRE WILSON. 2002. Pragmatics, modularity and mind-reading. *Mind and Language* 17.1.3–33. DOI: 10.1111/1468-0017.00186.

- TAGUCHI, NAOKO. 2012. *Context, individual differences and pragmatic competence*. Bristol: Multilingual Matters.
- TAKAHASHI, SATOMI. 2010. The effect of pragmatic instruction on speech act performance. *Speech act performance: Theoretical, empirical and methodological issues*, ed. by Alicia Martínez-Flor and Esther Usó-Juan, 127–42. Amsterdam: John Benjamins.
- VOSNIADOU, STELLA. 1989. Context and the development of metaphor comprehension. *Metaphor and Symbolic Activity* 4.159–72. DOI: 10.1207/s15327868ms0403_4.

Department of English Language and Literature
National and Kapodistrian University of Athens
Panepistimioupoli Zographou, GR-157 84
Athens, Greece
[ifelly@enl.uoa.gr]