Whither historical pragmatics? A cognitively-oriented perspective
Elizabeth Closs Traugott
Journal of Pragmatics 145
special issue *Quo Vadis pragmatics*, ed. by Marina Terkourafi

1. Introduction*

"Research on semantic change has gained considerable momentum from the idea that pragmatic factors are a driving force in the process" (Hansen and Visconti 2009,1). Hansen and Visconti point to the seminal role of Grice's much-quoted remark (1989[1975], 39) "it may not be impossible for what starts life, so to speak, as a conversational implicature to become conventionalized" in work on semantic change. They highlight four issues in semantic change: i) the role of pragmatic inferencing, ii) the role of speakers and hearers, iii) contexts for change, and iv) the nature of subjectification. While all these issues have remained central to studies of historical semantics/pragmatics in the last decade, how best to conceptualize pragmatic inferencing and context continues to be a topic of extensive further debate. I outline some aspects of this work that seem likely to engage future researchers, and also mention the burgeoning interest in quantifying contextual shifts associated with change.

I take historical pragmatics to be the study of the linguistic contextual features that may lead to change, both semantic and morphosyntactic. My focus is on current cognitively oriented strands of research and on language-internal evidence for pragmatic factors that by hypothesis enable change. I assume that language-internal pragmatic processes are universal and do not themselves change. What changes is the extent to which they are activated at different times and in different contexts and the extent to which they shape change.

I begin with discussion of work on the role of pragmatic inferencing in semantic change (section 2). Section 3 introduces recent quantitative work, and section 4 concludes with pointers toward possible future studies. Most examples are from English, but there has been extensive investigation of historical pragmatics in other Indo-European languages, and in Japanese (e.g. Onodera, Suzuki 2007).

2. Pragmatic inferencing

Current trends in work on the role of pragmatic inferencing have grown out of a long history of thinking about semantics that goes back to Greek and Roman times. In the mid-20th century the topic of the interface between semantics and pragmatics was taken up largely by ordinary language philosophers, of whom Grice (1989[1975]) was the most influential in historical research. In section 2.1 I mention a few of the works that have fueled debate over the last forty years or so. Section 2.2 homes in on topics raised in the last two decades that are likely to be actively pursued in the future.

2.1. Some early contributors to current work

Working in the cognitive framework being developed by Fillmore (e.g. 1997[1971]) and Langacker (e.g. 1987), among many others, Traugott (1982) attempted to identify "semantic-pragmatic" aspects of the proposed unidirectionality of grammaticalization. She hypothesized a tendency for meanings to shift from the propositional component of a grammar to the textual and expressive components,[1] rather than vice versa. Shortly after, in a highly influential paper Horn (1984) drew on Grice's (1989[1975]) Maxims, Prioritizing those Maxims that characterize Speaker's and Hearer's economy, especially Relation and Quantity, Horn distinguished (p. 13):

(1) A Hearer-based Q-principle: Make your contribution sufficient: Say as much as you can (based on Grice's Quantity1)
(2) A Speaker-based R principle: Make your contribution necessary: Say no more than you must (given Q) (based on Grice's Quantity2, Relation, and Manner)

---

* Many thanks to Marina Terkourafi and two anonymous reviewers for very helpful comments on an earlier version of this paper.
[1] This draws on Halliday and Hasan's (1976) functional-semantic model.

Post-Gricean concepts of pragmatic strengthening and informativeness, such as are proposed in Horn's R-Principle and Levinson's (2000: 37) I-Principle for the speaker: "Do not make your contribution *more* informative than is required" (italics original) informed a model of "Invited Inferencing" discussed in Traugott and Dasher (2002). Details of this model and challenges to it can be found in Traugott (2012).

In the first book devoted to historical pragmatics, Jucker (1995) laid the foundations of the field, distinguishing what came to be known as "diachronic macro-pragmatics", the study of factors such as the physical and social setting of text production and "diachronic micro-pragmatics", the study of largely language-internal factors in change.[2] In the investigation of language-internal factors in pragmatic-semantic change that are the focus of this paper, key notions are: i) the link between loss of contentful meaning ('bleaching') and concomitant pragmatic enrichment (Sweetser 1988), ii) the importance of speakers and hearers in change, and iii) the crucial role of linguistic context (also known as "co-text", see Brown and Yule 1983).

2.2 Contributions in the last two decades
The concepts mentioned above have inspired a large body of cognitively-oriented studies of the role of pragmatics in the development of expressions such as degree modifiers (e.g. *a heap of*) (Brems 2012), discourse structuring markers (e.g. *by the way*) (Traugott Forthcoming), progressive *BE Ving* (Petré 2016) and many other grammatical expressions in several languages. Much of this work seeks to understand the interaction of pragmatics and morphosyntax in change, especially grammaticalization. The R-principle and I-heuristic are hypothesized to encourage the hearer to select the best interpretation in the linguistic context. This may involve inferring an implicated meaning that is not part of the coded meaning but is nevertheless compatible with it. Over time, if inferences are replicated, they may become coded (a semantic change), and the inferential process may be short-circuited. For example, in some contexts such as plural or collective complements (e.g. *I bought a lot of clothes of the shopman*), there may be an inference from *a lot of* 'a set of' (for sale) to large quantity. Replication of such uses presumably led to association primarily with quantity, and then extension to complements such as *room*, which refer to entities that are neither collective/plural nor for sale (Brems 2012, 212).

Approaches to pragmatic inferencing in change have for the most part been informal (Eckardt 2006 is a notable exception), and the term "inference" is preferred over the logical "implicature". In early work the role of pragmatic inferencing was conceptualized as arising through metonymic associations in the syntactic flow of speech or writing, and as enabling both grammaticalization (e.g. Traugott and König 1991) and lexical change such as the development of both positive and negative interpretations of *sanction* (Traugott and Dasher 2002: 53-54).[3] The role of inferencing as a metonymic process that unfolds in language use continues to dominate research on pragmatic factors in language-internal change.[4] Because speakers are hypothesized to play a significant role in this process, inviting hearers to enrich interpretations, the hypothesis was named the Invited Inferencing Theory of Semantic Change (IITSC). Ambiguous contexts, which have come to be known as "bridging" contexts (Evans and Wilkins 2000), have been considered key to the transition from one meaning to another via pragmatic inferencing in grammaticalization (e.g. Diewald 2002, Heine 2002). However, the role of ambiguous contexts, which allow two or more distinct interpretations in linguistic change has been problematized. De Smet (2014) has challenged the enabling role of ambiguity in syntactic change because it presupposes that a second interpretation already exists. Denison (2017) makes a similar argument for pragmatic-semantic change. Noting that ambiguity presupposes a choice on the speaker/writer's part, and that ambiguity "is often the *result* of change" rather than its enabler (p. 318, italics original), Denison argues that initially many contexts are in some respects underdetermined and therefore vague rather than ambiguous. This allows for the addressee/reader to make interpretations compatible with but not identical with the older meaning.

---

[2] See also Jucker and Taavitsainen (2010).

[3] Briefly, the lexical item *sanction*, borrowed in the 15thC from French as a noun meaning 'decree', was used as a verb in the 18thC with extended meanings of 'approve' and in the 20th for 'impose penalty on', both derived by inference from the original legal meaning but in different contexts.

[4] Eckardt (2006, 238), however, regards the notion of metonymy to be overextended and thereby weakened.

The question of what roles ambiguity and vagueness may have in semantic change, and how to distinguish them in historical texts, is likely to continue to be a topic of future studies.

The linguistic contexts identified for pragmatic inferences are often relatively local, typically the clause, e.g. an expression such as *a lot of* was studied within the immediate context of the phrase or the clause within which it was used. Recently there has been a gradual push toward exploring relatively wider contexts including complex clauses (Petré 2016), conversational interaction (Waltereit 2002), discourse traditions (Pons 2006), and typological shifts that are ongoing in the language as a whole (Schmid 2016). Future research on historical pragmatics is likely to draw extensively on these larger contexts.

A recurrent theme in work on larger contexts is some aspect of discourse structuring. For example, Petré (2016, 50) suggests that a significant factor enabling the development of *BE Ving* as a progressive (e.g. *She was walking toward me*) was "changing textual structure in late Middle English". During this period profile shifts led to the use of adverbial clauses to mark background information in subordinate clauses. This provided the syntactic niche for the development of focalized, progressive semantics (Ibid.).

In a different vein, discussing the question why similar pragmatic-semantic evolution may recur across languages, Hansen (2018) investigates the renewal of proximal-deictic temporal adverbs from Latin to Romance. Latin *nunc*, French *or,* and *maintenant* all originally meant 'now' and, like English *now*, came to be used for metatextual discourse structuring purposes. Hansen adopts the concept of cyclicity from grammaticalization research, where the so-called 'Jespersen cycle' of negation renewal has been a topic of intense study in morphosyntax (van der Auwera 2011 provides a summary). She suggests there may be semantic-pragmatic cycles as well. Each individual change is tracked semasiologically (form is treated as relatively constant, while meaning change is highlighted), but together the set of outcomes form an onomasiological paradigm (meaning is treated as relatively constant, but form is derived from different sources and therefore differs).[5] Hansen argues that such cycles occur because "source items that are semantically similar will favor similar types of contextual inferences" (2018, 128). However, the outcomes of change may differ because differing processing instructions and interpretations may apply. Conceptualizing "linguistic meanings as processing instructions", Hansen (2008, 20-25) argues that such instructions can be viewed as "'traces of the speaker's cognitive activity", such as inviting the hearer to construct a mental representation of the truth value of what is said, or social relationships between the interlocutors. These instructions may conflict, even though they are constrained by general principles of utterance interpretation (Hansen 2008, 25).

Another thread of work concerned with recurring change in discursive contexts is the development of contrastive, adversative meanings. For example, Beeching (2009) accounts for why and how concessive meanings arise and tend to be extended to boosting degree modifiers and to hedges, as in the case of French *quand même,* German *aber,* and final *but* in English. Although these have different origins and are used in different positions in utterances, the underlying motivation for the recruitment of such usages is, Beeching suggests, universal, arising from both argumentation building and social interactional exigencies related to questions of politeness and face. This motivation is argued to be the rhetorical figure procatalepsis, which allows a speaker to concede certain arguments and thereby strengthen the main argument. For example, *quand même* originated in *quand* 'when' + *mesme* 'even'. By the 17th century it had been frozen and was used exclusively as a coordinating conjunction meaning 'although' introducing a clause in the conditional tense. By the 20th century it came to be used primarily as an adverb (cf. *all the same*) which retains the adversative meaning but is typically used in conversation to concede an argument in order to pre-empt the addressee's anticipated objection. It can therefore now function as a hedge.

Among possible discursive factors in pragmatic-semantic change that have recently received attention is turn-taking, where negotiation of meaning is of paramount importance. For example, Detges and Waltereit (2011) hypothesize that Italian *guarda* 'look' in its discourse marking, attention-getting sense arose in turn-taking, especially floor-seeking contexts. Traugott (2018) draws on proposals to address the role of pragmatics in the development of discourse-structuring markers and suggests that a single pragmatic

---

[5] For the semasiology-onomasiology distinction, see Grondelaers et al. (2007).

factor is unlikely to enable change. Rather, a multidimensional approach to pragmatic motivations for change is needed that pays attention to local inferences associated with particular expressions, discourse structuring and interaction. She shows that *look,* the equivalent in English of Italian *guarda*, did not originate in turn-taking. Drawing on Brinton (2008), Traugott argues that in Old English *locian* 'to direct one's sight' invites a local inference of active watchfulness that may derive from use with directional phrases. Use of attention-getter *look* expressions[6] originated in Old English when imperative *loc-* 'look' was extended to complementation contexts. Here *loc-* is a cognitive verb of understanding 'look to it that/consider how/pay attention to how' and the complement is an abstract idea, not something that can be seen. A second step was a profile shift in the 14th century resulting from the non-use of the complementizer *that*. Brinton hypothesizes that this minimized the distinction between main clause *look* and the following subordinate clause, enabling the inference that the point of the utterance was the content of the following clause. In this context, *look* could be interpreted as having a topic-introducing function that draws attention to redirection of the topic in the upcoming segment. Traugott notes that there is no textual evidence that turn-taking uses initially enabled the development. Rather, it was enabled by use as a verb of cognition (derived by local inferencing) and later by non-use of the complementizer (activating more global changes in information structuring). Use in turn-taking appears to have been a final stage.

Most of the work mentioned above assumes, with Grice, that interlocutors are cooperative. Speakers attempt to be clear, and hearers attempt to interpret cooperatively in the sense that they use the Gricean Maxims to interpret what is said. Hearers/readers do not always interpret correctly what the speaker/writer intended, but they approximate as best they can. This is one of the reasons for the minute steps usually found in change over time. However, it is obvious that cooperation does not always occur, even in Grice's narrow sense, and recently different types of non-cooperation have come to be of interest (Terkourafi 2008). In research drawing on presupposition accommodation theory (cf. von Fintel 2000), failure of interlocutors to cooperate and update common ground has been adduced as a reason for semantic-pragmatic change. Focusing on failure of presupposition accommodation because hearers are unable or unwilling to accommodate presuppositions, Schwenter and Waltereit (2010) hypothesize that the rise of contrastive refutational *too* from additive *too,* as in *He was too in the army* (1936), or likewise of refutational Spanish *tampoco* from an earlier additive 'either' meaning, can best be accounted for in terms of hearers overriding presuppositions conventionally associated with an expression in interactional, argumentative discourse. The role of non-cooperation as well as cooperation in discourse management is is a factor that needs to be considered in future work on the extent to which pragmatic inferencing enables change.

3. The quantitative turn in historical pragmatics
Much recent work in historical pragmatics has been made possible by the availability of increasingly large electronically searchable data bases. As in linguistics in general, there has been a quantitative turn and there has been a trend to investigate the role of frequency in promoting inferential changes. Petré, for example, supports his hypothesis about the role of backgrounding in the development of the *BE Ving* progressive with extensive evidence of "the complex and dynamic nature of the role played by frequency" (2016, 51) in the emergence of backgrounded subordination as the locus for the development of *BE Ving* progressive meaning.

The merging of work on pragmatics, understood as the study of language in use, and corpus linguistics recently led to the founding of the journal *Corpus Pragmatics*, which the editor describes as "the science that describes language use in real contexts through corpora" (Romero-Trillo 2017, 1). To date the journal has presented mainly synchronic analyses, but the historical dimension is provided by Jucker (2018) on apologies in represented speech in the fiction component of COHA. In this paper two methods were used: retrieval of apologies through their typical illocutionary use (e.g., *sorry, excuse, pardon*) and retrieval of explicit mention of apologies. The main finding is that use of apologies, especially in the form of *sorry*, has expanded exponentially, perhaps because "[w]hat used to be a heart-felt expression of regret … has in many cases turned into a conventionalized phrase with little meaning" (p. 24). Given the nature of corpus

---

[6] In earlier English these expressions are *look ye/you, look here*. Bare *look* was not conventionalized as an attention-getting discourse marker until the 20th century (Brinton 2008).

studies, attention has shifted from questions about cognitive production and processing to questions about what the data show regarding changes in frequency and context. This is a promising avenue for further work on historical pragmatics. It has the potential for elucidating the textual historical underpinnings of synchronic pragmatic variation such as is discussed in Aijmer's (2013) study of pragmatic markers like *well, in fact, actually* and extenders like *and things* in ICE-GB and other contemporary corpora of English conversation.

Multivariate cluster analysis has been used in historical studies to identify which factors are relevant in a particular change, and in what temporal stages change they took place (e.g. Gries and Hilpert 2010). Shao et al. (Forthcoming), bring multivariate analysis to the development of *a bunch of* as evidenced in COHA. In this corpus *a bunch of* was initially used with nouns referring to plants (with which it may still have meant 'bundle') and objects, and with neutral evaluative pragmatics. From the 1830s to the 1970s it is increasingly used as a quantifier ('a large quantity of') to convey negative evaluation when the noun complement is human especially in fiction (e.g. *The undergraduate males are a bunch of donkeys*, 1993). From the 1970s on about 50% of the examples can be interpreted as negative evaluations, based on the semantics of the Noun complement or "the semantic prosody of the construction as a whole".[7]

A recurrent question is whether frequency causes change. Since it is as yet unknown exactly what factors affect what speakers choose to replicate, it seems best to adopt Bybee's (2010, 50) position that increase in token frequency "does not mean that frequency CAUSES phonetic reduction, or meaning change, only that repetition is an important factor in the implementation of these changes".

4. Conclusion and further prospects
My emphasis in this paper has been on research on historical pragmatics that privileges cognitively oriented approaches to interpreting meaning in discursive contexts. As Bybee (2010, 171) says, "[p]ragmatic inference allows new meaning to become associated with a construction. Such new meanings derive from the context. …". I have highlighted linguistic textual context, which may be conceptualized as negotiation of meaning in developing an argument or in turn-taking. Investigation of linguistic context can also inform and be informed by work on social contexts for change. For example, Archer and Culpeper (2009, 287) advocate a "sociophilological approach" that explores how "the co-text, the genre, social situation and/or the culture, shape the functions and forms of language taking place within them", see also e.g. Mazzon (2016), Schmid (2016), Archer (2017). This trend is likely to continue.

Research on historical pragmatics has been multidisciplinary from the beginning. Initially influences were from philosophy (cf. Grice). In recent years there has been great interest in bringing historical linguistics and psycholinguistics together, e.g. Hundt et al. (2017). In a programmatic paper discussing experimental approaches to pragmatics, Grossman and Noveck (2015) mention tests that have been or could be done to test several of the hypotheses put forward about inferencing, including failure of presupposition accommodation. Their focus is on processing ease or difficulty. Experimental studies testing hypotheses about change are an area of work that is likely to expand. However, as is recognized by practitioners, most experimental settings are too artificial to directly test language change in use.

As pointed out in section 1, I have assumed that pragmatic processes are universal and do not change. This view has been supported by findings that suggest that "Inferential changes are cross-linguistically quite similar" (Bybee 2010, 171; see also Hansen 2018). The assumption that pragmatic (and other) cognitive processes are stable across time is based on the Uniformitarian Principle that "the linguistic processes taking place around us are the same as those that have operated to produce the historical record" (Labov 1972, 101). The Principle has served as a useful tool for constraining analysis. It is foundational for experimental tests of hypotheses about change. However, the question has been raised whether some types of changes, e.g. those associated with speech acts indexing politeness, may be more subject to cultural changes than to changes in linguistic contexts (Taavitsainen and Jucker 2008, 4). There is a debate about whether as researchers we can indeed legitimately project current processes of production and perception onto language users of the past (Bergs and Hoffmann 2017). Since the brain is

---

[7] In ft. 5, Shao et al. (Forthcoming) cite Louw's (1993,157) definition of semantic prosody as an attitudinal, primarily pragmatic "consistent aura of meaning with which a form is imbued by its collocates".

plastic, it seems not implausible that speakers several hundred years ago, who lived in small communities, often with little or no literacy, may have used processes of production and perception of meaning somewhat different from those of twenty-first century speakers who live in a digital world. To date, however, not enough is known about the genomics of brain evolution on such a small time-scale as the ~5000 years of textual record to validate or invalidate the Uniformitarian Principle when investigating language evolution.[8] The Principle is a useful heuristic that deserves to be maintained while recognizing that there is likely to be much to learn in the not too distant future from ongoing evolutionary studies such as are discussed in Reich (2018).

References
Aijmer, Karin, 2013. Understanding Pragmatic Markers: A Variational Pragmatic Approach. Edinburgh University Press, Edinburgh.
Archer, Dawn, 2017. Context and historical (socio)pragmatics twenty years on. Journal of Historical Pragmatics 18 (2), 315-336. DOI.10.1075/jhp.00008.arc.
Archer, Dawn, Culpeper, Jonathan, 2009. Identifying *key* socio-pragmatic usage in plays and trial proceedings (1640-1760): An empirical approach via corpus annotation. Journal of Historical Pragmatics 10 (2), 269-309. DOI.10.1075/jhp.10.2.07arc.
Beeching, Kate, 2009. Procatalepsis and the etymology of hedging and boosting particles, in: Hansen, Maj-Britt Mosegaard, Visconti, Jacqueline (Eds.), Current Trends in Diachronic Semantics and Pragmatics. Emerald Group, Bingley, pp. 82-110.
Bergs, Alexander, Hoffmann, Thomas (Eds.), 2017. Special issue on cognitive approaches to the history of English. English Language and Linguistics 21 (2), DOI.10.1017/S1360674317000077.
Brems, Lieselotte, 2012. The establishment of quantifier constructions for size nouns: A diachronic study of *heap(s)* and *lot(s).* Journal of Historical Pragmatics 13 (2), 202-231. DOI.10.1075/jhp.13.2.02bre.
Brinton, Laurel J., 2008. The Comment Clause in English: Syntactic Origins and Pragmatic Development. Cambridge University Press, Cambridge.
Brown, Gillian, Yule, George, 1983. *Discourse Analysis.* Cambridge University Press, Cambridge.
Bybee, Joan L., 2010. Language, Usage and Cognition. Cambridge University Press, Cambridge.
COHA Corpus of Historical American English (1810–2009). Compiled by Mark Davies. Brigham Young University. http://corpus.byu.edu/coha/ (last accessed July 6 2018).
Denison, David, 2017. Ambiguity and vagueness in historical change, in: Hundt, Marianne, Mollin, Sandra, Pfenninger, Simone E. (Eds.), The Changing English Language: Psycholinguistic Perspectives. Cambridge University Press, Cambridge, pp. 292-318.
De Smet, Hendrik, 2014. Does innovation need reanalysis? in: Coussé, Evie, Von Mengden, Ferdinand (Eds.), Usage-based Approaches to Language Change. John Benjamins, Amsterdam, pp. 23-48.
Detges, Ulrich, Waltereit, Richard, 2011. Turn-taking as a trigger for language change, in: Dessí, Sarah, Detges, Ulrich, Gévaudan, Paul, Mihatsch, Wiltrud, Waltereit, Richard (Eds.), Rahmen de Sprechens. Beiträge zu Valenztheorie, Varietätenlinguistik, Kreolistik, Kognitiver und Historischer Semantik. Narr, Tübingen, pp. 175-189.
Diewald, Gabriele, 2002. A model for relevant types of contexts in grammaticalization, in: Wischer, Ilse, Diewald, Gabriele (Eds.), New Reflections on Grammaticalization. John Benjamins, Amsterdam, pp. 103-120.
Eckardt, Regine, 2006. Meaning Change in Grammaticalization: An Enquiry into Semantic Reanalysis. Oxford University Press, Oxford.
Evans, Nicholas, Wilkins, David, 2000. In the mind's ear: The semantic extensions of perception verbs in Australian languages. Language 76 (3), 546-592. DOI.10.2307/417135.
Fillmore, Charles J. 1997[19971]. Lectures on Deixis. CSLI Publications, Stanford University.
Grice, H. Paul, 1989[1975]. Logic and conversation. Studies in the Way of Words. Harvard University Press, Cambridge, MA, pp. 22-40.
Gries, Stefan Th., Hilpert, Martin, 2010. Modeling diachronic change in the third person singular: A multifactorial, verb- and author-specific exploratory approach. English Language and Linguistics 14 (3), 239-320. DOI.10.1017/S1360674310000092.

---

[8] Many thanks to David Haussler (p.c.) for this comment and for the Reich reference below.

Grondelaers, Stefan, Speelman, Dirk, Geeraerts, Dirk, 2007. Lexical variation and change, in: Geeraerts, Dirk, Cuyckens, Hubert (Eds.), The Oxford Handbook of Cognitive Linguistics. Oxford University Press, New York, pp. 988-1011.

Grossman, Eitan, Noveck, Ira, 2015. What can historical linguistics and experimental pragmatics offer each other? Linguistics Vanguard 1 (1), 145-152. https://doi.org/10.1515/lingvan-2015-1005.

Halliday, M. A. K., Hasan, Ruqaia, 1976. Cohesion in English. Longman, London.

Hansen, Maj-Britt Mosegaard, 2008. Particles at the Semantics/Pragmatics Interface: Synchronic and Diachronic Issues: A Study with Special Reference to the French Phasal Adverbs. Elsevier, Amsterdam.

Hansen, Maj-Britt Mosegaard, 2018. The role of inferencing in semantic/pragmatic cyclicity: The case of Latin NUNC and French *or/maintenant*, in: Ehmer, Oliver, Rosemeyer, Malte (Eds.), Special issue on inferences in interaction and language change, Open Linguistics 4: 127-146. https://doi.org/10.1515/opli-2018-0007.

Hansen, Maj-Britt Mosegaard, Visconti, Jacqueline, 2009. Introduction, in: Hansen, Maj-Britt Mosegaard, Visconti, Jacqueline (Eds.), Current Trends in Diachronic Semantics and Pragmatics. Emerald Group, Bingley, pp. 1-19.

Heine, Bernd, 2002. On the role of context in grammaticalization, in: Wischer, Ilse, Diewald, Gabriele (Eds.), New Reflections on Grammaticalization. John Benjamins, Amsterdam, pp. 83-101.

Horn, Laurence R., 1984. Toward a new taxonomy for pragmatic inference: Q-based and R-based implicature, in: Schiffrin, Deborah (Ed.), Meaning, Form, and Use in Context: Linguistic Applications; Georgetown University Round Table '84. Georgetown University Press, Washington, DC, pp. 11-42.

Hundt, Marianne, Mollin, Sandra, Pfenninger, Simone (Eds.), 2017. The Changing English Language: Psycholinguistic Perspectives. Cambridge University Press, Cambridge.

ICE-GB   International Corpus of English-Great Britain. http://ice-corpora.net/ice/.

Jucker, Andreas H. (Ed.), 1995. Historical Pragmatics. Pragmatic Developments in the History of English. John Benjamins, Amsterdam.

Jucker, Andreas H., Taavitsainen, Irma [Eds.], 2010. Historical Pragmatics. De Gruyter Mouton, Berlin.

Jucker, Andreas H., 2018. Apologies in the history of English: Evidence from the Corpus of Historical American English (COHA). Corpus Pragmatics, https://doi.org/10.1007/s41701-018-0038-y.

Labov, William, 1972. Some principles of linguistic methodology. Language in Society 1 (1), 97-120. https:// 10.1017/S0047404500006576.

Langacker, Ronald W., 1987. Foundations of Cognitive Grammar, Vol. I: Theoretical Prerequisites. Stanford University Press, Stanford, CA.

Levinson, Stephen C., 2000. Presumptive Meanings: The Theory of Generalized Conversational Implicature. MIT Press, Bradford, Cambridge, MA.

Louw, Bill, 1993. Irony in the text or insincerity in the writer? The diagnostic potential of semantic prosodies, in: Baker, Mona, Francis, Gill, Tognini-Bonelli, Elena (Eds.), Text and Technology: In Honour of John Sinclair. John Benjamins, Amsterdam, pp. 157-75.

Mazzon, Gabriella, 2016. English historical pragmatics, in: Kytö, Merja, Pahta, Päivi (Eds.), The Cambridge History of English Linguistics. Cambridge University Press, Cambridge, pp. 54-64.

Onodera, Noriko O., Suzuki, Ryoko (Eds.), 2007. Historical Changes in Japanese: Subjectivity and Intersubjectivity. Special issue of Journal of Historical Pragmatics 8 (2). DOI.10.1075/jhp.8.2.

Petré, Peter, 2016. Grammaticalization by changing co-text frequencies, or why [BE Ving] became the 'progressive'. English Language and Linguistics 20 (1), 31-54. DOI.10.1017/S1360674315000210.

Pons Bordería, Salvador. 2006. From pragmatics to semantics: *esto es* in formulaic expressions. Acta Lingvistica Hafnienensia 38, 180-206.

Reich, David. 2018. Who We Are and How We Got Here: Ancient DNA and the New Science of the Human Past. Pantheon Books, New York.

Romero-Trillo, Jesús, 2017. Corpus Pragmatics. Editorial statement. Corpus Pragmatics 1 (1). https://doi.org/10.1007/s41701-017-0005-z.

Shao, Bin, Cai, Yingying, Trousdale, Graeme, Forthcoming. A multivariate analysis of diachronic variation in *a bunch of NOUN*: a construction grammar account. Journal of English Linguistics.

Schmid, Hans-Jörg (Ed.), 2016. Entrenchment and the Psychology of Language Learning: How we Reorganize and Adapt Linguistic Knowledge. Walter de Gruyter, Berlin.

Schwenter, Scott A., Waltereit, Richard, 2010. Presupposition accommodation and language change: From additivity to speech-act marking, in: Davidse, Kristin, Vandelanotte, Lieven, Cuyckens, Hubert (Eds.), Subjectification, Intersubjectification and Grammaticalization. De Gruyter Mouton, Berlin, pp. 75-102.

Sweetser, Eve E., 1988. Grammaticalization and semantic bleaching, in: Axmaker, Shelley, Jaisser, Annie, Singmaster, Helen (Eds.), Berkeley Linguistics Society 14: General Session and Parasession on Grammaticalization. Berkeley Linguistics Society, Berkeley, CA, pp. 389-405.

Taavitsainen, Irma, Jucker, Andreas H., 2008. Speech acts now and then: Towards a pragmatic history of English, in: Jucker, Andreas H. and Taavitsainen, Irma [Eds.], Speech Acts in the History of English. John Benjamins, Amsterdam, pp. 1-23.

Terkourafi, Marina, 2008. Toward a unified theory of politeness, impoliteness, and rudeness, in: Bousfield, Derek, Locher, Miriam (Eds.), Impoliteness in Language. Mouton de Gruyter, Berlin, pp. 54-89.

Traugott, Elizabeth Closs, 1982. From propositional to textual and expressive meanings: Some semantic-pragmatic aspects of grammaticalization, in: Lehmann, Winfred P., Malkiel, Yakov [Eds.], Perspectives on Historical Linguistics. John Benjamins, Amsterdam, pp. 245-271.

Traugott, Elizabeth Closs. 2012. Pragmatics and language change. In Allan, Keith, Jaszcolt, Kasia M. [Eds.], The Cambridge Handbook of Pragmatics. Cambridge University Press, Cambridge, pp. 549-565.

Traugott, Elizabeth Closs, 2018. Rethinking the role of invited inferencing from the perspective of interactional texts, in: Ehmer, Oliver, Rosemeyer, Malte (Eds.), Special issue on inferences in interaction and language change, Open Linguistics 4, 19-34. DOI: https://doi.org/10.1515/opli-2018-0002.

Traugott, Elizabeth Closs, Forthcoming. The development of "digressive" discourse-topic shift markers in English, in: Fagard, Benjamin, Charolles, Michel (Eds.), Special issue on topic shifters, Journal of Pragmatics.

Traugott, Elizabeth Closs, König, Ekkehard, 1991. The semantics-pragmatics of grammaticalization revisited, in: Traugott, Elizabeth Closs, Heine, Bernd (Eds.), Approaches to Grammaticalization, Vol. 1. John Benjamins, Amsterdam, pp. 189-218.

Traugott, Elizabeth Closs, Dasher, Richard B., 2002. Regularity in Semantic Change. Cambridge University Press, Cambridge.

van der Auwera, Johan, 2011. The Jespersen Cycles, in: Gelderen, Elly van (Ed.), Cyclical Change. John Benjamins, Amsterdam, pp. 35-71.

von Fintel, Kai, 2000. What is presupposition accommodation? http://mit.edu/fintel/fintel-2000-accomm.pdf (last accessed July 6 2018).

Waltereit, Richard, 2002. Imperatives, interruption conversation, and the rise of discourse markers: A study of Italian *guarda*. Linguistics 40 (5), 987-1010.
DOI: https://doi-org.stanford.idm.oclc.org/10.1515/ling.2002.041.