Lexical Pragmatics investigates the mechanisms by which linguistically-specified word meanings are modified in use. Following Wilson (2003) and Carston (2002), we can distinguish three basic phenomena:

(i) ‘Narrowing’ refers to using a lexical item to convey a more restricted interpretation than the semantically encoded one. Examples are the use of the word drink to mean ‘alcoholic drink’ or the use of smoke to mean ‘smoke your joint’ (at least in Amsterdam, where everybody knows the request ‘please smoke inside’). Further examples concern the interpretation of reciprocals (Dalrymple et al. 1998), adjectives (Lahav 1989), and polysemous nouns such as opera, concert, school, and government (Nunberg 1979).

(ii) ‘Approximation’ refers to a case of interpretive broadening where the interpretation of a word with a restricted core meaning is extended to a family of related interpretations. Cases in point are loose uses of numbers (e.g. 1000 students used to mean ‘about 1000 students’; cf. Krifka 2007a), geometric terms (e.g. square used to mean ‘squarish’; cf. Wilson 2003), colour adjectives, where the precise colour value can deviate from the lexically addressed focal colour (e.g. red in red nose, red bean, and red flag). Recanati (2004) introduced the term ‘modulation’ for describing the underlying mechanism of contextual modification. A precise model of this mechanism is one of the big challenges for lexical pragmatics.

(iii) ‘Metaphorical extension’ refers to a type of broadening that extends the space of possible interpretation much more radically than approximation. A good introductory example is the perception verbs in English (cf. Sweetser 1990). Following John Locke and Ferdinand de Saussure, Sweetser (1990) claims that the feature of arbitrariness could be taken at least as a sufficient condition for the presence of semantic information. It is
Certainly an arbitrary fact of English that *see* (rather than, say, *buy* or *smell*) refers to visual perception when it is part of the utterance (‘I *see* the tree’). Given this arbitrary association between a phonological word and its meaning, however, it is by no means arbitrary that *see* can also have an epistemic reading as in ‘I *see* what you’re getting at’. Moreover, it is not a coincidence that other sensory verbs such as *smell* or *taste* are not used to express an epistemic meaning. Sweetser (1990) sketches an explanation for such facts and insists that they have to do with conceptual organization. It is our knowledge about the inner world that accounts for vision and knowledge being highly related, in contrast to, say, smell and knowledge or taste and knowledge, which are only weakly related for normal human beings. If this claim is correct, then the information that *see* may have an epistemic meaning but *smell* and *taste* do not, no longer needs to be stipulated semantically. Instead, this information is pragmatic in nature, having to do with the utterance of words within a conceptual setting, and can be derived by means of some general mechanism of conceptual interpretation. Other cases of metaphoric extension are more radical extensions of the semantically specified interpretation, as illustrated by the following examples: ‘The president has been under fire for his veto’; ‘My memory is a little foggy’.

To give a categorization of different basic phenomena does not mean to assume different computational mechanisms for explaining these phenomena. Rather, it is theoretically much more satisfying to look for a unified theory of lexical pragmatics. Presently, we find two main attempts for realizing such a unified approach. The first one is based on relevance theory (RT; Sperber and Wilson 1986/1995); the second one is based on optimality-theoretic pragmatics (OTP; Blutner 1998; Blutner and Zeevat 2004; Blutner et al. 2005). Both approaches agree on a number of important assumptions. For instance, both approaches take a naturalistic stance with regard to pragmatics and pursue the same main goal: developing a cognitive psychological model of lexical interpretation. This contrasts with the normative character that is normally attributed to the Gricean approach. Further, both approaches claim that the linguistic semantics encoded by a natural language expression underdetermines what is communicated by an utterance of that expression. Taking a lead from Atlas (e.g. Atlas 2005), both theories reject the doctrine of literal meaning (that logical form conforms to literal meaning), and assume contextualism instead, i.e. the claim that the mechanism of pragmatic interpretation is crucial both for determining what the speaker says and what he means.

There are also important differences between the two approaches. OTP follows the neo-Gricean idea of assuming that two countervailing principles determine the interpretation mechanism (Atlas and Levinson 1981; Horn 1984; Blutner 1998; e.g. Atlas 2005; Horn 2005): the Q-principle and the R-principle. The first principle is oriented to the interests of the hearer and looks for optimal interpretations; the second principle is oriented to the interests of the speaker and looks for expressive optimization. In optimality theory (OT), these principles correspond to different directions of optimization where the content of the optimization procedure is expressed by particular OT constraints. In contrast, RT sees the communicative principle of relevance as the only effective principle. According to this principle, utterances convey a presumption of their own optimal relevance. That means that any given utterance can be presumed (i) to be at least relevant enough to
warrant the addressee’s processing effort and (ii) to be the most relevant one compatible with the speaker’s current state of knowledge and her personal preferences and goals.

Obviously, both RT and OTP account for the resolution of the conflict between communicative effect and (processing) effort. This observation, and the fact that both approaches have a number of ‘free parameters’ for fitting the empirical data, make a direct comparison relatively difficult. The notion of blocking, which is present in OTP but missing in RT, is presumably a substantial difference between the two approaches. Although it is not really clear if the mechanism of blocking is a real processing mechanism that takes place online in natural language interpretation, its role in directing language acquisition and language change is strongly supported. The general idea is that a specialized item can block a general/regular process that would lead to the formation of an otherwise expected interpretation equivalent to it. For example, in English the specialized mass terms pork, beef, and wood usually block the grinding mechanism in connection with the count nouns pig, cow, and tree. This explains the following contrasts: ‘I ate pork/?pig’; ‘I like beef/?cow’; ‘The table is made of wood/?tree’. It is important to note that blocking is not absolute, but may be cancelled under special contextual conditions (cf. Blutner 1998). This suggests that the blocking phenomenon is pragmatic in nature and may be explicable on the basis of Gricean principles.

McCawley (1978) makes the interesting claim that verbs such as cause and make are neutral with regard to the directness of causation but are given an interpretation of indirect causation through conversational implicature (as is famously exemplified by the periphrastic phrase cause to die where the direct causation interpretation is blocked by the existence of the semantically equivalent verb kill). Interestingly, McCawley cites examples demonstrating that periphrastic causatives can be used for direct causation in cases where there is no lexical causative. This provides direct evidence for the idea of blocking: the interpretation of periphrastic causatives depends not only on their own linguistic meaning but on what alternatives the lexicon provides for expressing the interpretation in question.

The RT approach to lexical pragmatics has been developed in Carston (2002), Wilson (2003), and Wilson and Sperber (2002), inter alia. The main idea is that the linguistically encoded meaning of a word is no more than an indication to the actual interpretation or utterance meaning. Hence, the interpretation is not decoded but has to be inferred by a pragmatic mechanism. Furthermore, understanding any utterance, literal, loose or metaphorical, is a matter of seeing its intended relevance, as specified in the relevance-theoretic comprehension procedure. In other words, RT ‘suggests the following answers to the basic questions of lexical pragmatics: lexical-pragmatic processes are triggered by the search for relevance, they follow a path of least effort, they operate via mutual adjustment of explicit content, context and cognitive effects, and they stop when the expectations of relevance raised by the utterance are satisfied (or abandoned).’ (Wilson 2003: 282).

The idea to use OTP for formalizing lexical pragmatics was proposed by Blutner (2000) (see also Blutner 2004; Blutner and Zeevat 2004; Blutner et al. 2005). There are several
case studies demonstrating the power of the formalism. Jäger and Blutner (2000, 2003) suggested an OTP analysis of the different reading of German ‘wieder’ (again). Henriëtte de Swart (2004) provided an OTP approach to the pragmatics of negation and negative indefinites. Referring to the stage level/individual level contrast, Maienborn (2004, 2005) argued against the popular view that the distinction between stage level predicates and individual level predicates rests on a fundamental cognitive division of the world that is reflected in the grammar. Instead, she proposed a pragmatic explanation of the distinction, and she gives, *inter alia*, a discourse-based account of Spanish *ser/estar*. Other applications include the pragmatics of dimensional adjectives (Blutner and Solstad 2000), the analysis of Dutch ‘om’/‘rond’ (Zwarts 2006), the pragmatics of negated antonyms (Blutner 2004; Krifka 2007b), the approximate interpretation of number words (Krifka 2007a), and several examples of semantic change (Eckardt 2002).

Recent developments concern the role of fossilization in lexical pragmatics as a mechanism for sanctioning certain interpretations (e.g. Blutner 2007; Blutner and Zeevat, forthcoming). The idea of fossilization was introduced in Geis and Zwicky’s (1971) paper about ‘invited inferences’ as a mechanism for conventionalization of implicatures. A closely related approach is Morgan’s (1978) theory of short-circuited implicatures where some fundamentally pragmatic mechanism has become partially grammaticalized. Using this idea, Horn and Bayer (1984) propose an elegant account of so-called neg-raising, i.e. the availability (with certain predicates) of lower clause understandings for higher clause negations. Here is an example:

(1) a. Surface form: Robert doesn’t think Stefan left.
   b. Interpretation: Robert thinks Stefan didn’t leave

There is a principal difficulty for pragmatic treatments of these neg-raising interpretations. The difficulty has to do with the existence of lexical exceptions to neg-raising, i.e. we find pairs of virtual synonyms of which one member allows the lower clause understanding and the other blocks it. One of Horn and Bayer’s (1984) examples concerns opinion verbs. For instance, Hebrew *xogev* ‘think’ permits neg-raising readings while *maamin* ‘believe’ does not. Interestingly, the opposite pattern obtains in Malagasy. In French, *souhaiter* ‘hope, wish’ exhibits neg-raising, but its near-synonym *espdrer* does not – although its Latin etymon *sperare* did. Horn and Bayer (1984) argue that conversational implicatures may become conventionalized (‘pragmatic conventions’) and this conventionalization sanctions neg-raising.

The short-circuiting of implicatures as a matter of convention has important empirical consequences for lexical pragmatics. *Inter alia*, these consequences were discussed in connection with the classical pattern of constructional iconicity (or Horn’s (1984) division of pragmatic labour) stating that unmarked forms preferentially correspond to unmarked meanings and marked forms preferentially correspond to marked meanings. McCawley (1978) listed numerous cases of constructional iconicity in the lexicon, the most famous one was mentioned already in connection with *kill* (denoting direct causation) and *cause to die* (denoting indirect causation). Krifka (2007a) observed that the phenomenon is the decisive factor in determining the precise/vague interpretation of
measure expressions. Interestingly, there are also examples of anti-iconicity. They are found in connection with semantic broadening. A good example can be found in Dutch, where besides the preposition om (= Engl. ‘round’; German ‘um’) the word rond is in use, which is a word borrowed from French. It refers to the ideal shape of a circle. Starting with its appearance the form rond comes in competition with the original (and unmarked) form om. The result is a division of labour as demonstrated in the following examples (cf. Zwarts 2003, 2006):

(2)  a.   Ze zaten rond (?om) de televisie
       (‘They sat round the television’)
   b.  Een man stak zijn hoofd om (?rond) de deur
       (‘A man put his head round the door’)
   c.  De auto reed om (?rond) het obstakel heen
       (‘The car drove round the obstacle’)

Interestingly, the marked form rond is semantically close to the ideal shape of a circle (unmarked meaning) whereas the unmarked form om is semantically close to the detour interpretation (marked interpretation).

A theoretical solution that accounts for iconicity and anti-iconicity is in terms of a mechanism of cultural evolution simulating the real process of conventionalization (e.g. Van Rooy 2004). Here, the actual frequencies of marked and unmarked interpretations play a significant role in determining the result of conventionalization. Hence, the actual parameters of use are often decisive for the result of conventionalization.

See also: Abduction; context; enrichment; experimental pragmatics; explicit/implicit distinction; formal pragmatics; generalized conversational implicature, theory of; Grice, H.P.; implicature; maxims of conversation; Neo-Gricean pragmatics; optimality-theory pragmatics; post-Gricean pragmatics; pragmatics; rationality; relevance theory; semantics-pragmatic interface; underdeterminacy, linguistic

Suggestions for further reading:


