ther examples are del-Teso-Craviotto's (2006) analysis of the construction of gender ideologies through the deployment of different patterns of language use in magazines targeted at men and women, and Velasco-Sacristan and Fuertes-Olivera's (2006) relevance-theoretical analysis of **metaphors** in advertising. What makes such analyses relevant to the study of gender and pragmatics is summed up by Eckert and McConnell-Ginet's (2003: 6) definition of gender: 'Gender is, after all, a system of meaning – a way of construing notions of male and female – and language is the primary means through which we maintain or contest old meanings, and construct or resist new ones'.

C.CH.

See also: Communication; context; cooperative principle; culture; discourse; humour; implicature; meaning; metaphor; misunderstanding; performativity; politeness; power; presupposition; relevance theory; societal pragmatics; sociolinguistics

Suggestions for further reading

Cameron, D. (1998) '"Is there any ketchup, Vera?" Gender, power and pragmatics', *Discourse and Society*, 9: 437–55.

Christie, C. (2000) *Gender and Language: Towards a Feminist Pragmatics*, Edinburgh: Edinburgh University Press.

Eckert, P. and McConnell-Ginet, S. (2003) *Language and Gender*, Cambridge: Cambridge University Press.

Generalized Conversational Implicature, Theory of

The philosopher H.P. **Grice** (1975, 1989) introduced the notion of conversational implicature for a philosophical purpose: he hoped to show that divergences between ordinary language understanding and the logical interpretation of connectives like *and*, *or* and *if* are due to certain pragmatic overlays on the underlying logical meanings that arise in conversational use. For example, if I say *Paul is a linguist or a philosopher*, I seem to imply that Paul is not both, and I don't know which. But that is not the interpretation of *p or q* from a logical point of view – *p or q* is true if either p, or q or both are true. Grice put forward the idea that the difference is due to a rule of usage, which follows from the **cooperative principle**, namely that one shouldn't produce a weaker statement than one's **knowledge** of the situation allows. Thus, not having said *Paul is both a linguist and a philosopher*, I will have implicated (the term of art for this kind of **inference**) that Paul is one or the other but, as far as I know, not both. (It is implicated, or pragmatically suggested, rather than encoded because there is no contradiction in saying *Paul is a linguist or a philosopher, or possibly both.*) In this case, as in many others, we want to say that this inference will tend to go with the word *or* because speakers will always have had the opportunity to have used the stronger *and* if they knew it applied. Hence, Grice called this kind of inference a generalized conversational implicature (GCI for short), distinguishing this special kind of **implicature** from others that are tied to the details of the **context** and have no such generality, which he called particularized conversational implicatures (henceforth, PCI). For example, consider B's answer in two different contexts, represented by the alternative **questions** from A:

A: (i) "Is Paul a writer?"
(ii) "We need someone with practical skills – would Paul be the man?"
B: "He's a linguist or a philosopher"
GCI: He's either a linguist or a philosopher, and I don't know which.
PCIs in context
(i) Paul writes, but he is not perhaps what one normally means by a writer.
(ii) Paul is not a practical man.

Here the two different questions set up alternative relevant answers, special to the contexts, and any inferences derived from the contextual specificities will be, by definition, PCIs. In contrast, regardless of the different contexts, B's utterance is likely to suggest that B is not in a position to say which is Paul's profession (the GCI).

From the point of view of linguistic theory, GCIs promise a wealth of generalizable insights

into how inferential **meaning** is constructed around the basis of coded or lexical meaning. For example, the theory of GCIs suggests that any language that has a disjunction is likely to find it used in opposition to a conjunction, and thus its use will implicate that the conjunction does not hold. Alternatively, PCIs seem more interesting to **conversation** and **discourse analysis** and **rhetoric**.

Not all theorists think the contrast between GCIs and PCIs is theoretically useful (see, for example, Sperber and Wilson 1995), mostly on the grounds that all implicatures are context-bound, and that therefore there are no generalizations of the kind that GCIs are meant to capture. This is an empirical issue, and the onus is on GCI theorists to show that there are indeed useful generalizations to be collected, which have explanatory force within linguistic theory. A good case for GCIs can be made by considering the quantifiers, and more generally the sort of logical and sub-logical relations that were captured in the medieval 'square of oppositions' as in Figure 2 below (Horn 1989; Levinson 2000). Internal to the square are given the traditional names of the corners and the logical or sub-logical relations between them.

According to the theory of GCIs, the relation of the I and O corners, traditionally described as subcontraries, is in fact implicatural – there is a systematic GCI from 'Not all' to 'Some' and from 'Some' to 'Not all', as indicated in the example below:

(i) "Not all the boys came to class". GCI: Some of the boys came to class.
(ii) "Some of the boys came to class". GCI: Not all of the boys came to class.

The importance of this observation is that it generalizes to a wide range of logical operators. For example, the (alethic) modal *necessary* can fill the A corner, *impossible* the E corner, *possible* the I corner, *possible not* the O corner. The prediction then is that saying 'It's possible he'll come' implicates *It's possible he won't come.* One can even think of the A corner filled by *and*, the I corner by *or*, the E by *neither* and the O corner by *not both*. Then saying 'Paul is a linguist or a philosopher' implicates 'not both', as expected. So here are a wide range of predictions about GCIs based on the structure of the square. And a further prediction is of real interest to linguistic theory, namely that the O corner of the square resists lexicalization – we have 'not all', 'not both', etc., rather than a single word **nall* or **noth* (cf. *none* or *neither* at the E corner). The prediction is based on the observation that *some* implicates 'not all' by a general conversational principle, so having a lexicalized 'not all' would be unnecessary (for the full argument see Levinson 2000: 64–71). The challenge to those who do not want to subscribe to a theory of GCIs is,

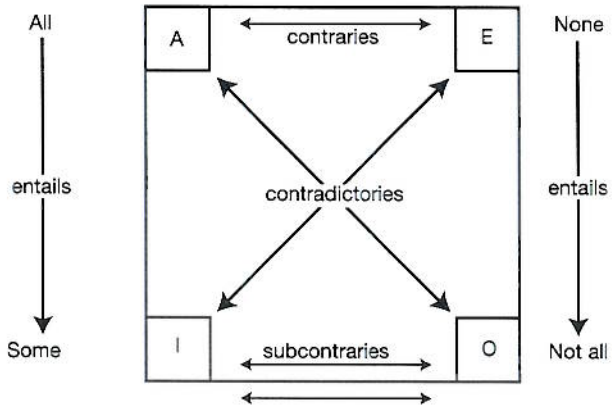

Figure 2 Square of oppositions with the quantifiers.

amongst other things, to account for these regular, cross-language patterns of implicature and lexicalization in terms of an entirely context-specific theory of PCIs.

To understand why GCIs play this systematic role in the square, consider Grice's **maxims of conversation**, which describe working presumptions about the use of language. Grice posited a first maxim of quantity, 'make your contribution as informative as is required'. One way to fulfill the maxim is to choose carefully between the options your lexicon gives you. So in constructing the utterance 'Paul is a linguist or a philosopher', you ought to have considered the more informative 'Paul is a linguist and a philosopher' and rejected it, on the grounds you don't know it is true. The connectives *and*, *or* are in salient opposition, and in that way the structure of the lexicon forces a choice. The same goes for *all* and *some*, *necessary* and *possible*, and so on. Terms like these form scales, ordered pairs in these cases, such that the more informative member of the pair entails the less informative member in a neutral sentence frame (e.g. *p and q* entails *p or q*), and the **assertion** of the less informative member then carries a GCI to the effect that the more informative member could not have been substituted. GCIs thus ultimately depend on the structure of the lexicon for their general effect – it is because the lexicon is stable across contexts that GCIs are context independent.

There is now a large body of observations about GCIs and the kinds of words and constructions that give rise to them (see Levinson 2000). Together these give some account of the quite regular ways in which what we understand when we comprehend language always exceeds what is actually coded in the words and the grammar.

Another way to motivate the concept of a GCI is an argument from design. At up to four times slower than comprehension, language production is a bottleneck in the **communication** process. A design solution would be an information compression system, which uses simple **heuristics** to unpack a message. Heuristics have the advantage over some more mechanical 'zipping' solution that the information never has to be coded at all – the invoked information can be mutually presumed by speaker and addressee wherever it fits the news so far.

There do in fact seem to be such amplifying heuristics in language usage, of the following kind, more or less transparently related to Grice's two maxims of quantity and manner: (i) relevant things not mentioned can be assumed not to obtain (giving rise, for example, to **scalar implicatures**, so that *some* suggests 'not all'); (ii) simple descriptions suggest stereotypical exemplifications (giving rise to substantive enrichments of what was coded, so that, for example, *in the cup* suggests 'in the volume, not the wall' of the cup); (iii) marked messages suggest marked situations (giving rise, for example, to special inferences from periphrasis, as in *x caused the death of y* which suggests 'x didn't directly murder y'). GCI theory proposes that these sorts of heuristics are presumptively in force, so that GCIs are default inferences, which can nevertheless be cancelled by context and content where they do not fit.

S.L.

See also: Cooperative principle; Grice, H.P.; impliciture; maxims of conversation; post-Gricean pragmatics; radical pragmatics; scalar implicature; what is said

Suggestions for further reading

Horn, L. (2004) 'Implicature', in L.R. Horn and G. Ward (eds) *The Handbook of Pragmatics*, Oxford: Blackwell.

Huang, Y. (2007) *Pragmatics*, Oxford: Oxford University Press.

Levinson, S.C. (2000) *Presumptive Meanings: The Theory of Generalized Conversational Implicature*, Cambridge, MA: MIT Press.

Gestural Communication

Speech and gestures are almost always copresent during communicative actions (McNeill 1985) across all **cultures** (Cassell 1998). Gestures that accompany speech, called co-speech or speech-related gestures, are hand, head and arm movements produced by the speaker in a manner that is closely time-locked to the semantic and prag-