Researchers in semantics and pragmatics now widely agree that knowledge of syntactic rules and semantic relations does not suffice for communication — in other words, linguistic meaning does not exhaust the meaning of sentence tokens. Much recent work has therefore been devoted to integrating the interaction between world-knowledge and linguistic knowledge within models of utterance interpretation.

Naturally, such models cannot be built without making claims about the cognitive underpinnings of our interpretative competence. The ubiquity of extra-linguistic context during the derivation of meaning from utterances thus calls for psychological accounts of pragmatics. So much is accepted by virtually everyone in the field. What has been fiercely debated, however, is the theoretical stage at which the context needs to be brought into play. There is a consensus that semantic content is derived from syntactic form (even if that is a theoretical shortcut for what is a non-sequential process). Disagreements arise, first, as to how semantic content has to be described, and second, as to the relationship between semantic content and utterance content.

The present contributions approach the various particular phenomena or general issues that are the focus of their articles against the background of a few key questions: Are there empirical phenomena whose analysis requires a notion of semantic content? If yes, which phenomena and which notion of semantic content? What kind of contextual parameters are needed? At which stages of the interpretation process? And what is the relationship between contextual and linguistic information? In sum, how do we integrate our accounts of the meanings of utterance — or their components — within a psychologically plausible perspective?

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Utterance Interpretation and Cognitive Models

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The aim of this series is to focus upon the relationship between semantic and pragmatic theories for a variety of natural language constructions. The boundary between semantics and pragmatics can be drawn in many various ways; the relative benefits of each gave rise to a vivid theoretical dispute in the literature in the last two decades. As a side effect, this variety has given rise to a certain amount of confusion and lack of purpose in the extant publications on the topic. This series provides a forum where the confusion within existing literature can be removed and the issues raised by different positions can be discussed with a renewed sense of purpose. The editors intend the contributions to this series to take further strides towards clarity and cautious consensus.
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Introduction

Utterance Interpretation in the Light of Cognitive Models

In the last two decades, there has been an increasing consensus about the need for a transdisciplinary perspective among researchers working on the mechanisms underlying interpretation of natural language utterances. As far as the semantics/pragmatics interface is concerned, the chief reason is probably the now universally accepted fact that knowledge of syntactic rules and of semantic relations does not suffice for communication – in other words, linguistic meaning does not exhaust the meaning of sentence tokens (e.g., Recanati, 1989, 2004; Bach, 1994a; Sperber and Wilson, 1995; Levinson, 2000; Carston, 2002). Since it is indisputable that in order to make sense of utterances heurists have to take extralinguistic facts into account, much research has been devoted to integrating the interaction between world-knowledge and linguistic knowledge within models of utterance interpretation. And such models cannot be built without making further claims about the cognitive underpinnings of our interpretative competence.

The ubiquity of extralinguistic context during the derivation of meaning from utterances thus calls for psychological accounts of pragmatics. So much is accepted by virtually everyone working in the field. What has been the matter of a fierce debate, however, is the theoretical stage at which the context needs to be brought into play. There is a consensus that semantic content is derived from syntactic form (even if this is a theoretical shortcut for what is, in reality, a non-sequential process). Disagreements arise, first, as to how semantic content has to be described, and second, as to the relationship between semantic content and utterance content.

Let us begin with the first dispute. Some scholars (most notably Bach, 1994a, b; Soames, 2002) contend that the output of the semantic
interpretation of a sentence sometimes falls short of being propositional. Others – the so-called ‘semantic minimalists’ – maintain that semantic interpretation always results in a full-fledged proposition (Borg, 2004; Cappelen and Lepore, 2005). Both camps, however, admit that a certain amount of contextual information is needed in order to go beyond sentence meaning; for the linguistic meaning of indexicals – I, here, now and possibly others – is an instruction to look for a contextual value – the speaker, the location, the time of the utterance, etc. Context, so understood, is not an intuitive notion: it is an abstract set of values required by the semantic apparatus to derive the content of sentences which contain indexical expressions (Kaplan, 1989).

The difference between such an abstract conception of context and a more intuitive – pragmatic – notion lies at the heart of the second debate alluded to above. On the pragmatic conception, the context consists of those assumptions about the extra-linguistic communicative setting that are necessary for the interpretation process (e.g. Stalnaker, 1978; Sperber and Wilson, 1995). Now, although the two positions described in the previous paragraph can be characterised as ‘semantically conservative’, even their proponents grant that broad contextual assumptions come into play when we try to figure out what the speaker meant by her utterance. The question is whether the semantic content constructed without any recourse to the broad context is a psychologically motivated notion. According to people who share the ‘conservative’ views of either Bach or Cappelen and Lepore, it is. According to what can be called ‘contextualism’, it is not: sentence meaning plus broad context is all there is to utterance interpretation. Semantic content, be it sub-propositional or propositional, is not something that a cognitive model of utterance interpretation should bother about.

While the theoretical wars are still raging (Turner, 1999; Freyer and Peter, 2005, 2007; Szabó, 2005), we believe that some concrete research questions should be asked. Are there empirical phenomena that are better analysed with the help of the notion of semantic content? If yes, which phenomena and which notion of semantic content? What kind of contextual parameters are needed? At which stages of the interpretation process? And what is the relationship between contextual and linguistic information? In sum, how do we integrate our accounts of the meanings of utterance – or their components – within a psychologically plausible perspective?

These questions constitute the background against which the contributors to this volume have approached the various particular phenomena or more general questions that are the focus of their articles. As we already said, it is hardly news that there is no way to avoid adopting this perspective. Our ambition in gathering the papers of this volume is merely to systematically impose this constraint on our authors.

As indicated above, one of the main debates around utterance interpretation is the question whether semantic processing outputs propositions or something less than propositions. Fernando Martínez-Manrique and Agustín Vicente take this issue seriously and subject the minimalist notion of ‘minimal proposition’ to close scrutiny. They start from the hypothesis that the minimal proposition can be associated with three different theoretical commitments: ‘minimal-first’, ‘minimal-too’ and ‘minimal-if’. They conclude that only the last position, which grants the most peripheral role to minimal propositions, is tenable. Along the way, they make a case that there is not, as yet, enough evidence substantiating the existence of a ‘semantic module’ for processing utterances, suggesting that one can do with a syntactic and a pragmatic module instead. They also argue that there may be no principled way for determining what ‘the minimal proposition’ consists in, thereby further undermining the minimalists’ claims.

Marina Terkourafi’s contribution sheds a different light on this debate. The author contends, contra contextualists but in agreement with Bach, that the output of semantic interpretation – even though it may be less than propositional – can be psychologically relevant. Drawing on experimental work on how hearers respond to and recall indirect speech acts, she argues that, although hearers often bypass the literal meaning of such acts, they sometimes process it. Taking pains to differentiate this literal meaning from mere sentence meaning, Terkourafi equates it with the notion of ‘what is said’ advocated by Bach (1994a, b, 2005). She also suggests that the role played by what is said itself context-dependent: it appears to be sensitive notably to the degree of conventionalisation of the indirect speech act and the extent to which the hearer is attending to the wording of the utterance.

Both the papers just outlined accept a premise that has triggered numerous recent research programmes on the psychology of utterance interpretation: that the truth-value, hence the meaning, of many – if not all – natural language expressions depend on the context in which they occur. It is claimed that the need for a psychologically motivated account of how context affects meaning arises from the fact that traditional semantic machinery, qua mapping from expressions to extensions (in a circumstance of evaluation), fails to provide a correct picture of our conversational practices. Yet, this basic contention is disputed by Stefano Predelli in the only paper in this collection that
denies that traditional semantic models suffer from neglecting broad contextual assumptions. In his paper, Predelli distinguishes between three ‘unsurprising’ ways for the context to affect utterance content: structural ambiguity, indexicality and semantic contingency. According to Predelli, only the latter is crucial for the present debate, and it boils down to the fact that the same expression can be true at some circumstances of evaluation and false at others. That kind of ‘unsurprising’ context dependency suffices for dealing with contextualist challenges. In other words, the author takes it that the traditional semantic apparatus is suitable for describing our semantic competence. In his view, the general mistake consists in assuming a one-to-one relationship between possible worlds and circumstances of evaluation.

With the next paper, we move from the relationship between sentences and propositions to the nature of the elements entering into truth-conditional composition. A recent influential proposal has it that word meanings are concepts that undergo ad hoc modulations ‘on the fly’. That is, the content conveyed by a word – as it occurs within an utterance – is often not a literal concept which is fixed out of context (e.g. Wilson and Carston, 2007). Thus, in utterances of sentences like All politicians drink or I’m not drinking tonight, the claim is that the meaning of the verb drink will often be modulated in such a way as to express a narrowed concept nexus: “who’s meaning is ‘drink (large amounts of) alcohol’.

In opposition to this, Elisabetta Lalumera’s contribution argues for a separation between word meanings and concepts. She maintains that certain instances of apparent ad hoc concept construction can be accounted for without appeal to ad hoc concepts (nor, for those who reject the assimilation of meanings with concepts, to ad hoc word meanings). The idea is that, in particular contexts, an unmarked but stable concept can form a nonce association with a particular lexical item. If correct, Lalumera’s account has the advantage that – at least in certain types of cases – it can do the same job as theories à la Wilson and Carston while preserving the sort of (conceptual) stability assumed to be necessary for keeping track of representational categories across time.

Like Elisabetta Lalumera, Peter Bosch does not equate word meanings with concepts. The question he addresses, focusing on the meaning of predicates, is how much world-knowledge is included in word meanings. Against the rich conventional meaning assumed by compositional theories of lexical meaning such as the ‘Generative Lexicon’ (Pustejovsky, 1995), he argues that the lexical entries associated with natural language predicates are underspecified. Lexical items may exhibit either ‘index dependence’ or ‘context dependence’. When index-dependent, their conventional meaning specifies a parameter of the index (for instance for a comparison group). When context-dependent, they denote different concepts in different contexts of use, a property that is not part of their conventional meaning. Some predicates, notably gradable adjectives, display both types of dependence. Interestingly, these two kinds of dependence are handled by different modules of the language comprehension device – context dependence by the conceptual or pragmatic module, index dependence by linguistic competence – the latter is contingent upon the former.

There is another aspect of the relationship between lexical semantics and concepts that calls for a cognitively informed linguistic investigation: clusters of properties. On the one hand, the long-standing tradition according to which our concepts consist of an array of features – clusters of non-necessary properties – has received considerable empirical confirmation. On the other hand, a no less respectable strand in philosophy of language and semantics emphasizes the inadequacy of cluster approaches when it comes to issues such as compositionality or ‘aboutness’. In her paper, Golit Sassoon offers a model that encompasses both the psychological viability of cluster theories and the theoretical advantages of formal, intensional semantic accounts. She claims that predicate interpretation consists in determining not only an intension, but also a contextually dependent cluster of membership properties, as well as a contextually dependent typicality ordering on them. In doing so, Sassoon aims at a theoretical model that accounts for linguistic facts such as the semantic workings of different universal quantifiers, and, at the same time, for the psychology of concepts.

Not every word is associated, within the mind of the hearer, with a widely defined concept. First, as has been well acknowledged since Putnam (1975), we sometimes use words whose precise content is beyond our epistemic grasp – thus trusting some knowledgeable experts. Second, not all utterances are meant to be interpreted by ascription of a semantic content. Sperber (1975, 1996) argued forcefully that some linguistic stimuli trigger a process of evocation, with no principled end. In order to get a clear and unified view of these issues, Marc Domicity starts by building a novel hierarchy of mental representations, in which each level – percepts, quasi-concepts, occurrence-gathering concepts and individual-gathering concepts – is articulated with either episodic or semantic-encyclopaedic memory. The role of evocation is then assumed to ensure the transition from one level to the next, and/or the corresponding transformation of one kind of mental representation into another.

The paper by Ira Noveck and collaborators is the epitome of the sort of work that can be done at the interface of linguistics and
cognitive psychology, and is a valuable contribution to the recent research programme known as ‘Experimental Pragmatics’ (for a representative sample, see Noveck and Sperber, 2004). Building on and refining earlier experimental studies into the meaning of conjunctions, they confirm a developmental trend previously observed for scalar expressions. Children’s tendency to pragmatically enrich the logical meaning of both types of expressions increases in the course of linguistic and cognitive development. These results provide further evidence that, pace Horn (1989) and Levinson (2000), pragmatic effects – such as the sequential interpretation of and or the reading of some as some, and not all – are not defaults built into conventional meaning.

Although much of the work done on the literal interpretation of utterances deals exclusively with sentences in the indicative mood, other grammatical moods constitute an extremely important research area. Mark Jary’s paper deals with a particularly well-documented phenomenon – the alternation between the indicative and the subjunctive moods in Spanish. Jary surveys previous accounts, which divide neatly into two categories: those centred on the pragmatic notion of assertion, and those situated within the formal model-theoretical semantic framework. The ambition of this contribution is to show that in order to integrate the merits of both approaches, a cognitive theory of utterance interpretation is needed. To this end, Jary uses the tools supplied by Relevance Theory, and argues that the subjunctive mood signals that the propositional content is not ‘relevant in its own right’.

References