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### Introduction: Context and Cognition – A Concern Shared by the Cognitive Sciences

Context is both a time-honoured and a fashionable research topic in linguistics as well as in other areas of the so-called cognitive sciences. What is particularly interesting about context at present is a growing consensus in various disciplines that context should be viewed as a state of mind, i.e. a cognitive notion. The aim of this brief introduction is to substantiate this claim and to give a rough outline of some of the major traditions of context research. More detailed surveys of the field from various perspectives can be found in Quasthoff (1994), Schiffrin (1994, ch. 10) and Auer (1995).

One of the hallmarks of autonomous linguistics, both of the structuralist and the generativist type, is the reduction of *context* to *cotext*, i.e. linguistic context. A typical example of this position is Cruse's "contextual approach" (1986, 1), which explicitly excludes extralinguistic context from semantic considerations.

An early counterpole to such approaches is Firth's (1957) expansion of Malinowski's (1923) ideas about context. In the wake of Firth, British contextualism and systemic-functional grammar exploit Malinowski's distinction between *linguistic context*, *context of situation* and *context of culture* for the study of the relation between language, situation and society. According to Halliday/McIntosh/Strevens (1964, 10–12), for example, *context* is "the relation of language form to other features of the situations in which language operates" and "the patterned relation between linguistic events and non-linguistic phenomena" (cf. Monaghan 1979, 199). Halliday/Hasan break down context into *contextual configurations of field, tenor and mode* (1989, 55ff.).

Also going back to Malinowski's work, there is a strong context tradition in linguistic anthropology (see e.g. Duranti/Goodwin 1992) and the ethnography of communication. Probably the most famous version of what Bublitz (this volume) calls "the listables" of context, i.e. the parameters of speech situations, is Hymes' SPEAKING model (1967) of speech events. In the interactional sociolinguistic school influenced by Gumperz' work (cf. e.g. Auer 1992, Auer/di Luzio 1992, Gumperz 1992), the emphasis is on the dynamic aspects of *contextualizing* utterances by means of so-called *contextualization cues* such as gesture, facial expression, intonation etc.

Dialectology and variationist sociolinguistics focus on the co-variation of linguistic features, typically phonological ones, on the one hand, and speaker features and/or situation features, on the other. The classic research in this tradition includes Labov's studies (1972) on the American east coast and Trudgill's (1974) work in Norwich.

Many linguists regard pragmatics as the discipline that brought context (back) into the linguistic limelight after the structuralist era. Leech (1983, X), for example, says that pragmatics is concerned with *situational or contextual meaning* and defines context as

"any background knowledge assumed to be shared by s and h and which contributes to s's interpretation of what h means by a given utterance" (1983, 13). Context is explicitly depicted here as a psychological state rather than a set of extralinguistic parameters. A stronger version of the shared-knowledge approach is the *mutual-knowledge* theory (Clark/Marshall 1981), which assumes shared reflexivity of knowledge: context is not just seen as shared knowledge but as knowledge mutually known to be shared. This idea is criticized by proponents of relevance theory (e.g. Sperber/Wilson 1995), who argue that mutual knowledge is not required for successful communication, but can actually result from interaction (cf. Blakemore 1992, 16ff.). The most recent contribution to the pragmatic debate is Mey (2003).

A cognitivist view of context is also held by some philosophers of language, especially ordinary-language philosophers. Searle's (1979, 125) view of context as "background assumptions", for example, may have inspired Leech's definition mentioned above. The list-like proposals by more formalist-minded philosophers tend to be reminiscent of Hymes' parameters of the speech situation. Yet it must be emphasized that the "coordinates" for determining the truth of sentences put forward by Lewis (1972), for example (cf. e.g. Brown/Yule's 1983, 40ff.), have an entirely different theoretical status, since the concept of truth is of little significance to ethnographers.

Not surprisingly, cognitive linguists also tend to subscribe to a cognitivist notion of context. Ungerer/Schmid (1996), for example, define *context* as a "cognitive representation of the interaction between [...] concepts" (1996, 47) and argue that networks of related contexts form *cognitive* and *cultural models*. A model for the systematic investigation of context effects on categorization is proposed by Geeraerts et al. (1994, esp. 149ff., 177ff.). Langacker, in his recent work on discourse, regards *context* as a part of *current discourse space*, i.e. "the mental space comprising those elements and relations construed as being shared by the speaker and hearer as a basis for communication at a given moment in the flow of discourse" (2001, 144).

In cognitive psychology and the psychology of text-processing notions like *schema*, *scenario*, *frame* and *mental model* have been used for a long time to refer to knowledge structures stored in long-term memory and activated for language processing (cf. the survey in Brown/Yule 1983, 236ff.). On the other hand, as van Dijk argues, probably with experimental studies in mind, "if context is taken into account in the psychology of text processing at all, it is usually reduced to one or more independent variables that are assumed to affect text understanding, such as goals, task demands, previous knowledge, gender, age, or different types of readers" (1999, 123). Van Dijk himself proposes a cognitivist and subjectivist notion of situational context: "Context models are the mental representations of the subjective interpretations language users construct of the relevant features of the communicative situation" (1999, 142).

The social meaning of context is in the focus of various approaches already mentioned, among them systemic-functional grammar, interactional sociolinguistics and the ethnography of speaking. Descriptions of the social meanings and implications of communicative events are also of concern to social psychologists and sociologists. Typical examples of early work in these fields are Goffman's (1974) work on *frames* and *footing* or Gumperz' (1982) notion of *activity type*. Recently, more dynamic models have

been proposed by ethnomethodologists and conversation analysts, in which context is seen as being constantly re-constructed and re-negotiated by the participants during on-going discourse (cf. e.g. Quasthoff 1994).

Central aims of context research in Artificial Intelligence include formalizing world knowledge and common sense, modelling the context-dependence of truths, and developing logics of context (McCarthy 1993, Bouquet/Serafini 2001). A well-known early attempt to capture world knowledge for natural language processing is Schank/Abelson's (1977) restaurant script. These procedures are required for processes like parsing, lexical disambiguation and reference resolution in automatic text processing and translation. It is in tasks like these that corpus linguistics can be of assistance: for example, by providing the masses of authentic linguistic data necessary for probabilistic decisions and model generation.

That context is currently a hot research topic, especially from a cognitivist perspective, is evidenced by a series of four large interdisciplinary conferences held in Rio de Janeiro, Brazil, in 1997; in Trento, Italy, in 1999; in Dundee, UK, in 2001; and in Stanford, California, this year (see Bouquet et al. 1999, Akman et al. 2001). Other recent conferences on the topic are mentioned in Bublitz (this volume).

The papers brought together in this section reflect a range of approaches to the study of context. In his historiographical contribution, Dirk Geeraerts looks at tendencies of contextualizing and decontextualizing different aspects of language such as grammar, cognition or social context in the development of 20<sup>th</sup> Century linguistics. The contributions by Matthias Meyer and Rainer Schulze share the aim of showing how taking context into account helps refine linguistic analysis. Meyer looks at difficult words and passages from *Alice in Wonderland* and *Through the Looking-glass* exploiting both the "narrow" linguistic context and the "wider" context of additional material published by Lewis Carroll. Schulze puts forward a corpus-based, context-sensitive semantic and syntactic analysis of the two near-synonyms *stay* and *remain*. A dynamic view of context as (inter-)active contextualization is prominent in the contributions by Richard Janney, Gerda Lauerbach, Wolfram Bublitz, Hans-Jörg Schmid, and Andreas Jucker and Sara Smith. Janney depicts the World Wide Web as a global contextualization machine which is exploited for information warfare by the parties involved in the Middle East conflict. Lauerbach illustrates with the analysis of two extracts from TV news programmes the minimal requirements for an analysis of context, contextualization and re-contextualization. Using a dynamic, experiential and mental understanding of context, Bublitz looks at the subtle expression of emotive stance and the creation of "emotive prosodies" in texts. A similar view of context is also advocated by Schmid, who tries to characterize the role of context during on-going discourse comprehension. Jucker/Smith investigate differences in reference assignment by native speakers and learners of English in their descriptions of a silent movie. Regarding the choice of referring expressions as an interactive, communicative task, they find differences mainly in the forms used to introduce supporting characters.

## References

- Akman, Varol; Bouquet, Paolo; Thomason, Richmond; Young, Roger A. (eds.) (2001): *Modeling and using context. Third international and interdisciplinary conference, CONTEXT 2001, Dundee, UK, July 2001, Proceedings*. Berlin etc.: Springer
- Auer, Peter (1992), "Introduction: John Gumperz' approach to contextualization," in: Auer/di Luzio (1992), 1-37
- Auer, Peter (1995): "Context and contextualization," in: Verschueren, Jef, Ostman, Jan O.; Blommaert, Jan (eds.): *Handbook of pragmatics*. Amsterdam: John Benjamins
- Auer, Peter; di Luzio, Aldo (eds.) (1992): *The contextualization of language*. Amsterdam/Philadelphia: John Benjamins
- Blakemore, Diane (1992): *Understanding utterances. An introduction to pragmatics*. Oxford: Blackwell
- Bouquet, Paolo; Serafini, Luciano (2001): "Two formalizations of context: a comparison," in: Akman et al. (2001), 87-101
- Bouquet, Paolo; Serafini, Luciano; Brézillon, Patrick; Benerecetti, Massimo; Castellani, Francesca (eds.) (1999): *Modeling and using context. Second international and interdisciplinary conference, CONTEXT'99, Trento, Italy, September 1999, Proceedings*. Berlin etc.: Springer
- Brown, Gillian; Yule, George (1983): *Discourse analysis*. Cambridge etc.: Cambridge UP
- Clark, Herbert; Marshall, Catherine (1981): "Definite reference and mutual knowledge," in: Joschi, Aravind K.; Webber, Bonnie; Sag, Ivan (eds.): *Elements of discourse understanding*. Cambridge etc.: Cambridge UP, 10-63
- Cruse, D. Allan (1986): *Lexical semantics*. Cambridge etc.: Cambridge UP
- Duranti, Alessandro; Goodwin, Charles (eds.) (1992): *Rethinking context: Language as an interactive phenomenon*. Cambridge: Cambridge UP
- Firth, John R. (1957): *Papers in linguistics 1934-1951*. London: Oxford UP
- Geeraerts, Dirk; Grondelaers, Stefan; Bakema, Peter (1994): *The structure of lexical variation. Meaning, naming, and context*. Berlin: Mouton de Gruyter
- Goffman, Erving (1974): *Frame analysis*. Cambridge, MA.: Harvard UP
- Gumperz, John (1982): *Discourse strategies*. Cambridge: Cambridge UP
- Halliday, Michael A.K.; Hasan, Ruqaiya (1989): *Language, context, and text: Aspects of language in a social-semiotic perspective, 2<sup>nd</sup> ed.* Oxford: Oxford UP
- Hymes, Dell H. (1967): "Models of the interaction of language and social setting," *Journal of Social Issues* 23, 8-28
- Labov, William (1972): *Sociolinguistic Patterns*. Oxford: Blackwell
- Langacker, Ronald W. (2001): "Discourse in Cognitive Grammar," *Cognitive Linguistics* 12(2), 143-188
- Leech, Geoffrey N. (1983): *Principles of pragmatics*. London - New York: Longman
- Lewis, David (1972): "General semantics," in: Davidson, Donald; Harman, Gilbert (eds.): *Semantics of natural language*. Dordrecht: Reidel, 169-218
- Malinowski, Bronislaw (1923): "The problem of meaning in primitive languages," Supplement 1 to: Ogden, Charles K.; Richards, Ivor A. (eds.): *The meaning of meaning*. London: Kegan Paul, 296-336
- McCarthy, John (1993): "Notes on formalizing context," <<http://www-formal.stanford.edu/jmc/context3.pdf>>
- Mey, Jacob L. (2003): "Context and (dis)ambiguity: A pragmatic view," *Journal of Pragmatics* 35, 331-347
- Monaghan, James (1979): *The Neo-Firthian tradition and its contribution to general linguistics*. Tübingen: Niemeyer
- Quasthoff, Uta M. (1994): "Context," in: Asher, R.E. (ed.): *The encyclopedia of language and linguistics*. Oxford: Pergamon Press, 730-737
- Schank, Roger C.; Abelson, Robert P. (1977): *Scripts, plans, goals and understanding*. Hillsdale, NJ: Lawrence Erlbaum

- Schiffrin, Deborah (1994): *Approaches to discourse*. Oxford: Blackwell
- Searle, John R. (1979): *Expression and meaning*. Cambridge: Cambridge UP
- Sperber, Dan; Wilson, Deirdre (1995): *Relevance. Communication and cognition, 2<sup>nd</sup> ed.* Oxford: Blackwell
- Trudgill, Peter (1974): *The social differentiation of English in Norwich*. Cambridge: Cambridge UP
- Ungerer, Friedrich; Schmid, Hans-Jörg (1996): *An introduction to cognitive linguistics*. London etc.: Longman
- Van Dijk, Teun (1999): "Context models in discourse processing," in: van Oostendorp, Herre; Goldman, Susan R. (eds.): *The construction of mental representations during reading*. Mahwah, NJ: Lawrence Erlbaum Associates, 123-148