

The paradox of communication

Socio-cognitive approach to pragmatics

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Communication is not as smooth a process as current pragmatic theories depict it. In Rapaport's words "We almost always fail [...]. Yet we almost always nearly succeed: This is the paradox of communication" (Rapaport 2003: 402). This paper claims that there is a need for an approach that is able to explain this "bumpy road" by analyzing both the positive and negative features of the communicative process.

The paper presents a socio-cognitive approach (SCA) to pragmatics that takes into account both the societal and individual factors including cooperation and egocentrism that, as claimed here, are not antagonistic phenomena in interaction. This approach is considered an alternative to current theories of pragmatics that do not give an adequate account of what really happens in the communicative process. They consider communication an idealistic, cooperation-based, context-dependent process in which speakers are supposed to carefully construct their utterances for the hearer taking into account all contextual factors and hearers do their best to figure out the intentions of the speakers. This approach relies mainly on the positive features of communication including cooperation, rapport and politeness while almost completely ignores the untidy, trial-and-error nature of communication and the importance of prior contexts captured in the individual use of linguistic units. The overemphasis on cooperative, societal, contextual factors has led to disregard individual factors such as egocentrism and salience that are as important contributors to the communicative process as cooperation, context and rapport. The socio-cognitive approach is presented as a theoretical framework to incorporate and reconcile two seemingly antagonistic sides of the communicative process and explain the dynamic interplay of prior and actual situational contexts.

1. Introduction

Recent research in pragmatics and related fields shows two dominant tendencies: an idealistic approach to communication and context-centeredness. According to

views dominated by these tendencies, communication is supposed to be a smooth process that is constituted by recipient design and intention recognition. The speaker's knowledge involves constructing a model of the hearer's knowledge relevant to the given situational context; conversely, the hearer's knowledge includes constructing a model of the speaker's knowledge relevant to the given situational context. Focus in this research is on the positive features of communication: *cooperation*, *rappport*, *politeness*. The emphasis on the decisive role of *context*, *socio-cultural factors* and *cooperation* is overwhelming, while the role of the individual's prior experience, existing knowledge and egocentrism is almost completely ignored although these two sides are not mutually exclusive as we will see later.

In current theories it is widely accepted that meaning is socially constructed, context-dependent and is the result of cooperation in the course of communication. Communication is unproblematic if the speaker's intentions are recognized by the hearer through pragmatic inferences. Consequently, the main task of pragmatics is to explain how exactly the hearer makes these inferences, and determine what is considered the speaker's meaning. In a recent study, Levinson (2006) confirmed that (Gricean) intention lies at the heart of communication, and proposes an "interaction engine" that drives human interaction.

Although several attempts have been made by both neo-Griceans (e.g. Levinson 2000; Horn 2007) and relevance theoreticians (e.g. Carston 2002; Moeschler 2004) to "revise and correct" the Gricean *speaker meaning* concept based on truth condition semantics, most theories are still hearer-centered because they place too much emphasis on the common aspects of communication and disregard individual aspects. In SCA, speaker and hearer are equal participants of the communicative process but they are different individuals. They both produce and comprehend language while relying on their most accessible and salient knowledge expressed in their private contexts. Consequently, only a holistic interpretation of utterances, from both the perspective of the speaker and hearer, can give us an adequate account of language communication. Interlocutors should be considered as "complete" individuals with different possible cognitive statuses, with possible different interpretations of the same core common ground information, all of which has a profound effect on what the same linguistic structure may mean for any of them.

The other strong tendency in current pragmatic theories is emphasis on context-dependency. According to the dominant view, context-sensitivity (in various forms) is a pervasive feature of natural language. Nowadays, everybody seems to be a contextualist. Literalism according to which (many or most) sentences express propositions independent of context has been extinct for some time; compare Carston's claim that ".linguistically encoded meaning never fully determines the intended proposition expressed" (Carston 2002: 49). Consequently, linguistic data must be completed by non-linguistic, contextual interpretation processes.

The present paper argues that the idealistic view on communication and the over-emphasis placed on context-dependency give a lopsided perspective on communication by focusing only on the positive features of the process. In fact, communication is more like a trial-and-error, try-and-try-again, process that is co-constructed by the participants. It appears to be a non-summative and emergent interactional achievement (Arundale 1999, 2008; Mey 2001; Kecskes & Mey 2008). Consequently, due attention should be paid to the less positive aspects of communication including breakdowns, misunderstandings, struggles and language-based aggression — features which are not unique, but seem to be as common of communication as are cooperation and politeness. Similarly, dependency on actual situational context is only one side of the matter, while individuals' prior experience of recurring contexts expressed as content in the interlocutors' utterances likewise play important roles in meaning construction and comprehension.

2. Three problems with current theories

The dominance of the societal and contextual factors over the individual cognitive factors can be demonstrated through the way current theories handle three major issues: speaker-hearer relations, context-dependency, and cooperation versus egocentrism.

2.1 Hearer-centered pragmatics

Kecskes (2008:404) argued that in order to give an adequate explanation of the communicative processes, we need a dialectical model of pragmatics that combines the perspective of both the speaker and hearer. This change is needed because current pragmatic theories, both those that have grown out of Grice's theory, such as the various neo-Gricean approaches and the approach proposed by Relevance Theory are all hearer-centered; they base themselves on the Gricean modular view that divides the interpretation process to two stages: *what is said* and *what is implicated*. Although Gricean theory, with its cooperative principle and maxims, was supposed to embrace conversation as a whole, basically its further development has remained hearer-centered, with less emphasis on and interest in the speaker's position — a rather paradoxical turn, as Grice himself always emphasized speaker's meaning. Even so, the Gricean divide of truth-conditional semantics and pragmatics has led to an impoverished speaker's meaning, without regard for the *pragmatic* features of speaker's meaning.

The division between *what is said* and *what is implicated* was made for the sake of utterance interpretation. However, a theory that is concerned about speaker's

meaning should focus not only on the truth values of the speaker's utterance, but also on its pragmatic elements and on speakers' egocentrism. Most attempts to revise/correct the problems of the modular view and recognize pragmatic features of the speaker's meaning (e.g. Sperber and Wilson, 1986; Carson 2002; Moeschler 2004: *explicature/implicature*; Capone 2008: *what-is-A-said/what-is-B-said*; Bach 2001: *what is said/implicature/implicature*) have not gone far enough because they still were interested primarily in utterance interpretation, without paying due attention to private knowledge, prior experience, and the emergent, rather than the a priori intentions of the speaker.

Although the neo-Griceans' main concern is speaker's meaning, they still view communication as designed with a view towards the recipient and his/her recognition of speaker's intention. In this view, the speaker designs his/her utterance for the hearer and the hearer's task is to recognize the speaker's intention. But what is recovered is not always what was intended because of the interlocutors' differences in private cognitive contexts and prior experience. So an adequate account of interaction should consider interlocutors not only as common-ground seekers, but as individuals with their own agendas, with their specific mechanisms of saliency (based on prior experiences), and their individual language production systems.

Unlike the neo-Griceans, who attempt to give an account of the speaker's meaning, relevance theorists focus on developing a cognitive psychological model of utterance interpretation, which does not address the question of how and why the speaker, given what he wants to communicate, utters what he utters. Saul (2002) said that the main difference between the neo-Gricean theory and Relevance Theory lies in 'whose meaning' they model. While the neo-Griceans follow the original perspective and consider utterance meaning, including implicature, to be the speaker's intended meaning, relevance theorists discuss intentional communication from the perspective of the addressee's reconstruction of the speaker's assumptions.

For the socio-cognitive approach which will be presented here, the main problem with the hearer-centered views is that they want to recover *speaker* meaning from a *hearer* perspective. The proposition the speaker produces will not be exactly the same as that which will be recovered by the hearer: interlocutors are individuals with different cognitive predispositions, prior experiences, and different histories of use of the same words and expressions. In SCA, by contrast, equal attention is paid to the processes of utterance production and utterance interpretation.

2.2 Context-dependency

In linguistics, context usually refers to any factor — linguistic, epistemic, physical, social — that affects the actual interpretation of signs and expressions. The notion

that meanings are context-dependent has informed some of the most powerful views in current linguistic and philosophical theory, all the way from Frege to Wittgenstein and beyond. Frege's Context Principle (1884) asserts that a word has meaning only in the context of a sentence. Wittgenstein (1921) basically formulated the same idea, saying that an expression has meaning only in a proposition; every variable can be conceived as a propositional variable. Such *external* perspectives on context hold that context modifies and/or specifies word meanings in one way or another. Context is seen as a selector of lexical features because it activates some of those features while leaving others in the background. Some versions of this 'externalist' contextualism take this line of thinking to the extreme and claim that meanings are specified entirely by their contexts, and that there is no semantic systematicity underlying them at all (e.g. Barsalou, 1993, 1999; Evans, 2006). According to this view, the mind works primarily by storing experiences and finding patterns in those experiences. These patterns shape how people engage with their subsequent experiences, and store these in their minds.

According to Sperber & Wilson's original formulation of Relevance Theory, relevance is something that is not determined by context, but constrained by context. A context-driven pragmatic process is generally top-down. It is usually not triggered by an expression in the sentence but emerges for purely pragmatic reasons: in order to make sense of what the speaker says. Such processes are also referred to as "free" pragmatic processes. They are considered 'free', because they are not mandated by the linguistic expressions but respond to pragmatic considerations only. For example, the pragmatic process through which an expression is given a non-literal (e.g. a metaphorical or figurative) interpretation is context-driven: we interpret the expression non-literally in order to make sense of the given speech act, not because this is required by linguistic expressions.

Opposite to the externalist view on context is the *internalist* perspective. It considers lexical units as creators of context (e.g. Gee, 1999; Violi, 2000). Violi (2000) claimed that our experience is developed through a regularity of recurrent and similar situations that we tend to identify with given contexts. Standard (prior recurring) context can be defined as a regular situation that we have repeatedly experienced, about which we have expectations as to what will or will not happen, and on which we rely to understand and predict how the world around us works. It is exactly these standard contexts that linguistic meanings tied to lexical units refer to. For instance:

- (1) License and registration, please.
Let me tell you something.
What can I do for you?
How is it going?

These and similar expressions create their own context. Kecskes called them ‘situation-bound utterances’ (2000; 2002) since they are tied to standard recurring contexts which they are able to (re) create. Thus, Gumperz (1982) said that utterances somehow carry with them their own context or project that context. Similarly, Levinson (2003), referring to Gumperz’s work, claimed that the message-versus-context opposition is misleading, because the message can carry with it, or forecast its context. In the socio-cognitive approach this refers to what is called the ‘double-sidedness’ of context.

In the semantics–pragmatics interface debate, contextualists are committed to deriving rich pragmatic effects from what is said by a sentence, or from the proposition expressed, or from the semantic content. Contextualism has its origin in speech act theories of meaning, as I have argued above. Moderate contextualists will claim that only some expressions outside the basic set are context-sensitive and/or semantically incomplete, while radical contextualists claim that every expression or construction outside the basic set is context sensitive. Radical contextualists include Searle and Recanati as well as the relevance theorists such as Carston, Sperber, and Wilson; among the moderate contextualists, we find those who argue for the context sensitivity of quantified phrases (e.g., Stanley and Szabo), of belief statements (e.g., Richard and Perry), and of epistemic claims (e.g., DeRose).

From the perspective of SCA, the main problem with both the externalist and internalist views of context is that they are one-sided inasmuch as they emphasize either the selective or the constitutive role of context. However, the dynamic nature of human speech communication requires a model that recognizes both regularity and variability in meaning construction and comprehension, and takes into account both the selective and constitutive roles of context at the same time. Millikan (1998) claimed that the conventional sign (the lexical unit) is reproduced (or ‘copied’ as he said), not discovered or invented anew by each producer–processor pair. This can only happen if the linguistic unit has some kind of regular reference to certain contexts in which it has been used. Already Leibniz (1976 [1679]) said: “... si nihil per se concipitur, nihil omnino concipietur” (‘... if nothing is understood by itself, nothing at all will ever be understood’). Consequently, we need an approach to communication that recognizes both the selective and constitutive role of context. This is exactly what the SCA does.

2.3 Cooperation versus egocentrism

Current pragmatic theories attach great importance to cooperation in the process of communication. Communication is considered an intention-directed practice, during which the interlocutors mutually recognize their intentions and goals, and make joint efforts to achieve them (Clark 1996). Grice’s (1975) four maxims

formulate the overall rules regulating the speaker's production of an utterance, and it is on the basis of a mutual agreement on these maxims that cooperation is recognized and comprehension is warranted.

Grice's is an ideal abstraction of verbal communication, in which cooperation and effect of intention are greatly valued. In this communication-as-transfer-between-minds, construal of common ground takes a central place. However, common ground is also idealized in this approach as an *a priori* mental state of interlocutors that facilitates cooperation and successful communication (e.g. Stalnaker 1978; Clark and Brennan 1991; Clark 1996). The mental representations of (assumed) shared knowledge exist in the speaker prior to conversation; they relate to, and facilitate comprehension of, the intentions and goals, and thereby direct the conversation in the desired way.

Such theories favoring an ideal abstraction of verbal communication have met with several challenges. Cooperation was questioned by Relevance Theory (RT) when it referred to counter-cases of cooperation, with interlocutors being unwilling to build relevance because of their preferences for certain interests, as opposed to cases when they are unable to be relevant because of lack of the needed information or mental resources. In RT, the interlocutors are free to be cooperative or uncooperative, and their preferences for cooperation or the reverse are driven by their own interests.

The most robust evidence against cooperation and common ground as an *a priori* mental state derives from empirical cognitive research, which reported the egocentrism of speaker-hearers in mental processing of communication and postulated the *emergent property* of common ground. Barr and Keysar (2005) claimed that speakers and hearers commonly ignore their mutual knowledge when they produce and understand language. Their behavior is called 'egocentric' because it is rooted in the speakers' or hearers' own knowledge instead of in their mutual knowledge. Other studies in cognitive psychology (e.g., Keysar and Bly 1995; Giora 2003; Keysar 2007), have shown that speakers and hearers are egocentric to a surprising degree, and that individual, egocentric endeavors of interlocutors play a much more decisive role, especially in the initial stages of production and comprehension, than is envisioned by current pragmatic theories. This egocentric behavior is rooted in speakers' and hearers' relying more on their own knowledge than on mutual knowledge. People turn out to be poor estimators of what others know. Speakers usually underestimate the ambiguity and overestimate the effectiveness of their utterances (Keysar and Henly 2002).

These findings about the egocentric approach of interlocutors to communication are also confirmed by Giora's (1997, 2003) graded salience hypothesis and Kecskes' (2002, 2008) dynamic model of meaning. Interlocutors seem to consider their conversational experience more important than prevailing norms of

informativeness. Giora's (2003) main argument is that knowledge of salient meanings plays a primary role in the process of using and comprehending language. She claims that "...privileged meanings, meanings foremost on our mind, affect comprehension and production primarily, regardless of context or literality" (Giora 2003: 103). Kecskes' dynamic model of meaning (2008) also emphasizes that *what* the speaker says, relies on prior conversational experience, as reflected in lexical choices in production. Conversely, *how* the hearer understands what is said in the actual situational context depends partly on his/her prior conversational experience with the lexical items used in the speaker's utterances. Smooth communication depends primarily on the extent of the match between the two. Cooperation, relevance, and reliance on possible mutual knowledge come into play only after the speaker's ego is satisfied and the hearer's egocentric, most salient interpretation is processed. Barr and Keysar (2005) argued that mutual knowledge is most likely implemented as a mechanism for detecting and correcting errors, rather than as an intrinsic, routine process of the language processor. Kecskes and Zhang (2009) proposed an integrated concept of common ground, in which both core common ground (as assumed shared knowledge, or *a priori* mental representations) and emergent common ground (as emergent participant resources, in *post factum* emergence through use) converge to construct a dialectical socio-cultural background for communication.

3. A socio-cognitive view: The construal of communication

3.1 Need for a socio-cognitive view

The studies mentioned above, as well as many others (Giora 2003; Arnseth and Solheim 2002; Koschmann and Le Baron 2003; Heritage 1984; Arundale 1997, 2004; Scheppers 2004; Kecskes 2004a, 2008; Kecskes & Zhang 2009), warrant some revision of traditional pragmatic theories of cooperation and common ground. However, as they also point out, the cooperative principle does not suffice for such a revision, as it has been proven vulnerable to fluctuations in the mental resources that prefer egocentric interpretations (Strayer and Johnson 2001).

However, a call for revision of the idealized view of communication does not imply its absolute denial. If we compare the pragmatic ideal version and the cognitive coordination approach, we can see that the two approaches are not contradictory, but rather complement each other. The ideal abstraction adopts a top-down approach. It works well for a theoretical construct of pragmatics that warrants successful communication in all cases. In contrast, the cognitive coordination view adopts a bottom-up approach. It provides empirical evidence supporting a

systematic interpretation of miscommunication; it can be applied in general as well. From a dialectical perspective, cooperation and egocentrism are not conflicting, such that the *a priori* mental state supporting intention and common ground versus the *post factum* emergence of intention and common ground may converge to a body of integrated background knowledge for the interlocutors to rely on in pursuit of a relatively smooth communication. However, so far no attempt has been made to combine the two. Therefore, the aim of the socio-cognitive approach is to eliminate the ostensible conflicts between the two views, and propose an approach that integrates their considerations into a *holistic concept of communication*.

3.2 The socio-cognitive view

The socio-cognitive approach that I am proposing is based on two important claims. First, speaker and hearer are equal participants in the communicative process. They both produce and comprehend, while relying on their most accessible and salient knowledge as expressed in their private contexts in production and comprehension. Consequently, only a holistic interpretation of the utterance, from both the perspective of the speaker and the perspective of the hearer, can give us an adequate account of language communication. Interlocutors should be considered as “complete” individuals with different possible cognitive statuses, and with possible different interpretations of the same core common ground information and actual communicative situation — all of which has a profound effect on what the same linguistic structure may mean for any of them. Second, communication is a dynamic process, in which individuals are not only constrained by societal conditions but they also shape them at the same time. As a consequence, communication is characterized by the interplay of two traits that are inseparable, mutually supportive, and interactive:

<i>Individual trait:</i>	<i>Social trait:</i>
attention	intention
private experience	actual situational experience
egocentrism	cooperation
salience	relevance

Communication is the result of the interplay of intention and attention, as this interplay is motivated by the individuals' private socio-cultural backgrounds. This approach integrates the pragmatic view of cooperation and the cognitive view of egocentrism and emphasizes that both cooperation and egocentrism are manifested in all phases of communication, albeit to varying extents. While cooperation is an intention-directed practice which may be measured by relevance, egocentrism is an attention-oriented trait which is measured by salience. Intention and

attention are identified as two measurable forces that affect communication in a systematic way.

4. Intention and attention

The proposal to measure intention and attention by means of relevance and salience is distinct from earlier explanations (e.g., Sperber and Wilson 1986; Wilson and Sperber 2004; Giora 1997; 2003; Kecskes 2001, 2004b). Unlike Wilson and Sperber's (2004) account of relevance as a unified constraint with both cognitive and pragmatic concerns, relevance in SCA is considered exclusively a pragmatic effect, caused by relations to intention. Only information that relates to intention is considered relevant in communication, according to SCA.

The notion of salience also carries different interests. While salience by Giora (2003) mainly concerns the storage of knowledge as a function of degree of familiarity, frequency, and conventionality, salience in SCA refers to the contingent effect of salient knowledge as a result of the attentional processing of communication in a particular situation which facilitates or hampers the expression of intention and the subsequent achievement of communicative effects. SCA claims that salience plays as important a role in language production as it does in comprehension; in contrast, most of the research on salience investigates only comprehension (see, e.g., Giora 1997; 2003). SCA demonstrates how salience of an entity can be interpreted as a measure of how well an entity stands out from other entities, and how it influences the preference of the individual in selecting words, expressions and complex constructs in the process of communication.

SCA also differs from current research by positing a dialectical relationship between intention and attention. As previously argued, the pragmatic view and the cognitive view are concerned about intention and attention in an isolated way. There is no explicit explanation of the relations between the two. Relevance Theory defines relevance by effects of both attention and intention, but does not distinguish the two effects and never clarifies their relations explicitly, as revealed by their claim that "an input (a sight, a sound, an utterance, a memory) is relevant to an individual when it connects with background information he has available to yield conclusions that matter to him" (Wilson and Sperber 2004: 3). In SCA, intention and attention are identified as two measurable forces that affect communication in a systematic way, and whose interplay is clarified by appealing to the interlocutors' socio-cultural background.

4.1 Intentions

With regard to intention, the socio-cognitive view on the one hand incorporates the Searlean understanding of the term (Searle 1983); on the other, it extends the notion to emphasize the dynamism of intention and its non-summative, emergent nature. SCA not only considers the centrality of intention in conversation, just as the cognitive-philosophical approach has done, but also takes into account the dynamic process in which the intention can be an emergent effect of the conversation. In SCA, intention is considered a dynamically changing phenomenon that is the main organizing force in the communicative process. Intention is not only private, individual, pre-planned and a precursor to action; it is also emerging and social. Here, it should be underlined that we are not talking about a dichotomy: rather, *a priori intention* and *emergent intention* are two sides of the same phenomenon that may receive different emphasis at different points in the communicative process. When a conversation is started, the private and pre-planned nature of intention may be dominant. However, in the course of conversation the emergent and social nature of the phenomenon may come to the fore. These two sides of intention are always present; the question is only *to what extent* they are present at any given moment of the communicative process. This view does not contradict Searle's claim that intentionality is directedness; intending to do something is just one kind of intentionality among others (Searle 1983: 3); it is also in line with Joas' claim that intentionality consists in a self-reflective control which we exercise over our current behavior (Joas 1996: 158).

The basic property that renders intention a central element of communication is its functionality. There is always a reason and/or a goal behind a conversation; without intention, there would be no need to initiate communication, and we could hardly make any sense of this social action. Searle (1983; 2007) considered intention, along with other mental acts such as perception, desire, and belief, as prerequisites to communication. However, this is just one side of intention. The emergent side is co-constructed by the participants in the dynamic flow of conversation. Consider the following (source: internet) conversation:

- (2) John: — Want to talk about your trip?
Peter: — I don't know. If you have questions...
John: — OK, but you should tell me ...
Peter: — Wait, you want to hear about Irene?
John: — Well, what about her?
Peter: — She is fine. She has...well... put on some weight, though.

John's utterance gives the impression that his intention is to give a chance to his friend to talk about his trip. However, Peter does not seem to have much of an

intention to do so. John's second utterance appears to be very determined, but it is not completed, so we will never know what his real intention was. But that utterance triggers an interesting turn by Peter, who thinks John wants to know about his former girlfriend, Irene. Maybe this is the case, but it was not John's original intention. It was the conversational flow that led to this point, at which there appears a kind of *emergent, co-constructed intention*.

Communication is a process in which intention is formed, expressed, and interpreted. From the speaker's perspective, intention is something that s/he bears in mind prior to the utterance; alternatively, it is generated in the course of conversation and expressed in the form of utterances. From the hearer's or analyst's perspective, intention is something that is processed by the hearer simultaneously with the utterance, or after it has been completed. The primary intention expressed in a particular situation serves the function of guiding the conversation. Knowledge or information explicated in linguistic forms, implied connotation, along with inferable background, all get united to achieve comprehension and communication under the driving force of intention. Notice there that in SCA there is significant room for such a dynamism, which means that intention is not necessarily an *a priori* phenomenon; it can also be generated and changed during the communicative process. This dynamism is reflected in emerging utterances: they may be interrupted and started again. It is not only the context, but also the dynamism of the conversational flow and the process of formulating an utterance that likewise affect and change the intention.

4.2 Attention

Attention refers to those cognitive resources available to interlocutors that make communication a conscious action. When intention is formed, expressed, and interpreted in the process of communication, attention contributes to the various stages of the process with different strength. Three factors will affect salience of knowledge and ease of attentional processing in all stages: (a) interlocutors' knowledge based on prior experience; (b) frequency, familiarity, or conventionality of knowledge tied to the situation; and (c) the interlocutors' mental state and/or the availability of attentional resources. Based on these three factors, the knowledge most salient to the interlocutors in a particular situation is the information that both are included in their knowledge base, is pertinent to the current situation, and is processed by the necessary attentional resources. No matter what mental state the interlocutors are in, and at which stage of the communication they are operating, the most salient knowledge will be available as a result of the interplay of these three factors.

All stages in the communicative process require the commitment of attention in order for successful communication to occur. As stated above, cognitive research has documented the interlocutors' egocentric behavior in the process of communication. *Egocentrism means that interlocutors activate and bring up the most salient information to the needed attentional level in the construction (by the speaker) and comprehension (by the hearer) of the communication.* Consequently, the speaker will use the linguistic resources (e.g., the lexical units) which s/he thinks are most salient for expressing his/her communicative intentions and/or goals; similarly, the hearer will cooperate by capturing those salient units and assigning them a proper place in the communicational process. Because of their different knowledge bases, the frequency/rituality of their knowledge in the situation, and the attendant attentional resources available to them for processing the salient items, the interlocutors' knowledge has different levels of salience; as a result, they conduct the attentional processing of communication in an egocentric manner.

There are specific ways in which attention contributes to different stages of communication as characterized by the processes of intention. When intention is formed, attention plays a crucial role. Consider the following (construed) example:

(3) Sally is speaking to Bill.

Sally: — Don't move! There is a snake over there!

Without Sally noticing the existence of a snake nearby, her intention of warning Bill wouldn't come into being. When expressing intention in an utterance, the speaker also needs the necessary attention, so as to formulate the utterance in a comprehensible way. The frequency or familiarity of the intention and especially of the linguistic expression in question determines the extent of attentional processing. Greetings require less attentional resources and appear more automatic than do snake warnings, the latter being less frequent and also easier to process. When intention is interpreted by the hearer, the amount of attentional resources needed is similarly proportional to the resources required in the formulation of intention. The person being greeted can easily comprehend the speaker's intention and respond to it in an effortless way. However, in example 3, Bill, when warned of the snake, may need to undertake some effort in order to read the intention and deploy the relevant reaction. Intention directs attention to relevant information resources so that the intention can be realized, and communication be conducted in a coherent and comprehensible way. By selecting those resources, intention becomes central to the processing of communication.

The socio-cultural background has an overall influence on the interplay of intention and attention. The interlocutors' prior knowledge directs their attention to becoming aware of different features, or different parts, of the same phenomenon. For example, an architect, an engineer, and a dustman may form different

views when looking at the same building. Also as a consequence of this, different intentions may be formed, and the effect of interplay is also affected by the accessibility of the knowledge. As a result, *communication is achieved with intentional action guaranteed by attentional processing; both are motivated by the common socio-cultural background*. In this process, interlocutors are both cooperative (in terms of intention) and egocentric (in terms of attention). The part of knowledge that is relevant to intention, salient to attention, and available in the socio-cultural background will contribute to successful communication.

5. SCA as speaker–hearer pragmatics

The speaker-hearer perspective of the socio-cognitive approach requires a revision of the recipient design and intention recognition views espoused by current pragmatics theories. In SCA, the *speaker's utterance* is the result of an interpreting commitment that is a private reaction to a communicative situation, as it is expressed in lexical items that are affected by the mechanism of salience. This interpretation is different from *explicature*, the latter being a proposition explicitly expressed by the speaker; it differs in several aspects (cf. Sperber and Wilson 1986; Carston 2002; 2004). *Explicature* is distinguished from 'what is said', in that it involves a considerable component of pragmatically derived meaning, which is added to linguistically encoded meaning. In SCA, the *speaker's utterance* is more than that. According to Carston (2004), the derivation of an *explicature* may require 'free' enrichment, that is, the incorporation of conceptual material that is wholly pragmatically inferred, on the basis of considerations of rational communicative behavior. In SCA, this enrichment of the uttered sentence is the result of the speaker's private and subjective treatment of the utterance in an actual situational context. How the hearer will infer this speaker-subjectivized commitment is another issue.

While admitting that an *explicature* is defined as committed and endorsed by the speaker, SCA stresses that the enriched proposition is actually owned by the *speaker*; it is not something recovered by the *hearer* as result of the latter's inference, as it is the case in RT. The *speaker's utterance* is the speaker's product, his private reaction to an actual communicative situation, it is based on the speaker's prior and emergent knowledge and intention. In current pragmatic theories, the main issue is to figure how the hearer recognizes and recovers what the speaker said. Less attention is paid to the question of *why exactly the speaker said what s/he said in the way s/he said it*. SCA differs from the Gricean and relevance theoretical approaches in its attempt to give equal attention to speaker production and hearer interpretation. In SCA, *speaker's utterance is a full proposition constructed by the speaker; in contrast, explicature is a full proposition of the hearer's reconstruction*.

In the Gricean paradigm, speakers are committed to offer linguistic forms, while the rest is left to the hearers: what is said is an inference trigger. The neo-Griceans have gone further, by saying that speaker's commitment includes not only the truth-value in the Gricean sense but also some automatic pragmatic enrichment. Thus, *what is said* is revised from being limited to sentence meaning to comprise utterance meaning. Since the neo-Griceans' main concern is *speaker's meaning*, the familiar divide between speaker's meaning and utterance interpretation is still in existence, and intention is restricted to the hearer's recovering process. In SCA, *speaker's utterance* is a full proposition in its own right, operating with speaker-centered pragmatic enhancement and speaker's intention in order to satisfy primarily the speaker's agenda. The full proposition the speaker puts out in this scenario will not necessarily mean the same as that which is recovered by the hearer: interlocutors have different privatized background knowledge and experience, they may perceive the actual situational contexts differently, use lexical items in different sense and in general, differ greatly as to what is salient for them and to what extent. So the *speaker's production is not a recipient design*. What is recovered by the hearer cannot replace what the speaker produces on his/her own.

As to the RT concept of '*explicature*', as we have seen, this includes not only the truth-conditional semantic meaning, but also some contextual pragmatic enrichment. There have been attempts to enlarge the pragmatic scope of explicature towards "full propositions" (e.g. Carston 2002a; Burton-Roberts 2005; Jaszczolt 2005), but the RT approach remains hearer-oriented. Explicature is something that is recovered by the hearer, and as such it is not necessary equal to what the speaker has explicated. In fact, in the hearer's perspective of RT, what the hearer can recover by automatic and default pragmatic inference is what the speaker was supposed to have explicitly offered; any additional inference goes to implicatures. In SCA, on the other hand, *speaker's utterance* is a '*pragmatized*' full proposition that involves speaker intention, personal attitude, and privatized actual contextual elements. This approach shares some features with what Jaszczolt has called "*merger representation*" (Jaszczolt 2005); her notion of representation is comprehensive and integrative. But unlike Jaszczolt's proposal, the scope of speaker's utterance in SCA is wider because it contains not only the automatic pragmatic inference part recovered by the hearer, but also the part new to the hearer, which comes from the speaker's private knowledge and privatized actual situational context. The main concern of SCA is how the speaker's public knowledge and private knowledge are integrated a speaker's utterance.

Kecskes (2008) makes a distinction between private context and actual situational context. Private contexts develop through individuals' situational experience. Some of these experiences get tied to lexical items in the minds of speakers of a particular speech community. These private contexts incorporate core

knowledge (tied to prior experience), which is the public part of the private context, and individual-specific knowledge that may not be shared by other members of the speech community, because it is the individualized reflection of prior socio-cultural contexts. The public context, that is to say, the public part of the private context, however, is available to each speaker of that speech community because it refers to relatively similar, conventionalized conceptual content. In utterance production, speaker's intention gets privatized in accordance with the actual situational context; it is formulated in words uttered 'out there' in the world by the speaker in a situation (actual situational context), and is matched ('internalized') to the private cognitive contexts (prior and actualized knowledge) 'inside' the head of the hearer. Meaning is the result of interplay between the speaker's private context and the hearer's private context in the actual situational context as understood by the interlocutors.

6. Salience as guiding mechanism

In SCA, both speaker production and hearer interpretation are governed by the mechanism of salience. As a semiotic notion, salience refers to the relative importance or prominence of signs. The relative salience of a particular sign when considered in the context of others helps an individual to quickly rank large amounts of information by importance and thus give attention to that which is the most important. Linguistic salience describes the accessibility of entities in a speaker's or hearer's memory and how this accessibility affects the production and interpretation of language. Several theories of linguistic salience have been developed, to explain how the salience of entities affects the form of referring expressions, as in the Givenness Hierarchy (Gundel et al., 1993), or how it affects the local coherence of discourse, as in Centering Theory (Grosz et al., 1995), or in Giora's Graded Salience Hypothesis (1997; 2003). I would also include Jaszczolt's (2005) concepts of 'primary meaning' and 'pragmatic default' in this list, because the latter also deals with salience, albeit from a somewhat different perspective.

6.1 Differences between SCA and the graded salience hypothesis

SCA relies mainly on the Graded Salience Hypothesis (GSH), but it does not accept all of its tenets. GSH is hearer-centered, while SCA focuses on production and comprehension equally. GSH deals with lexical processing, whereas SCA's concern is both lexical unit meaning and utterance meaning; in contrast, SCA distinguishes individual salience, collective salience, and situational salience. While GSH uses 'context' in the sense of actual situational context, SCA emphasizes the

interplay between prior contexts, encapsulated in the utterance formulation, and actual situational context.

The main claim of the GSH is that stored information is superior to unstored information, such as novel information or information inferable from context (Giora, 2003: 15). As a consequence, salient meanings of lexical units (e.g., conventional, frequent, familiar, or prototypical meanings) are processed automatically, irrespective of contextual information and strength of bias. Although context effects may be fast, they run in parallel with lexical processes and initially do not interact with them (Giora, 2003: 24).

According to the GSH hypothesis, in language processing both salient information and contextual knowledge run in parallel, and salient information may not be filtered out even when it is contextually inappropriate. This claim basically questions context-dependency as we have described it earlier.

While salience, according to the GSH, mainly concerns the storage of knowledge as a function of degree of familiarity, frequency, and conventionality, salience in SCA refers to the contingent effect of salient knowledge as a result of the attentional processing of communication in a particular situation, which facilitates or hampers the expression of intention and the subsequent achievement of communicative effects.

A significant difference between GSH and SCA is that the GSH emphasizes the importance of stored information, while SCA considers salience to be both a stored and an emergent entity. According to the GSH (Giora 2003: 15), for information to be salient — to be foremost on a person's mind — it needs to undergo consolidation, that is, to be stored or coded in the mental lexicon. Stored information is superior to unstored information, such as novel information or information inferable from the context: while salient information is highly accessible, non-salient information requires strongly supportive contextual information to become as accessible as is salient information. Giora seems to equate salient information with consolidated/stored information and nonsalient information with unstored information. This, to me, is somewhat questionable because it considers salience as a relatively static entity. In contrast, SCA emphasizes that salience is in a continual state of change both diachronically and synchronically. What is ranked 'most salient meaning' at the present moment may die off after only a few decades. An example of such diachronical change is the word 'gay', whose most salient meaning in the 50s of the past century was 'joyful'; nowadays, this meaning would rank below that of 'homosexual'. Salient information can be 'disconsolidated' when its salience dies off and the information in question ends up as less salient or non-salient.

For analytic purposes three theoretically significant categories are distinguished in SCA: individual salience, collective salience, and situational salience.

Individual salience is characterized as a natural preference built into the general conceptual- and linguistic knowledge of the speaker; it has developed as a result of prior experience with lexical items, and changes both diachronically and synchronically. Individual salience is affected by the two other types. *Collective salience* is shared with the other members of the speech community, and changes diachronically. *Situational salience* changes synchronically, and refers to the salience of specific objects in the context of language production; it may accrue through such determinants as vividness, speaker motivation, and recency of mention.

In an actual situational context, individual salience is affected and shaped both by collective and situational salience. The following (source: British sitcom) example serves to show the role of salience both in production and comprehension:

- (4) Jill: — I met someone today.
 Jane: — Good for you.
 Jill: — He is a police officer.
 Jane: — Are you in trouble?
 Jill: — Oh, no....

Jill met someone who was a policeman. Conform with our society's collective salience, the concept of 'policeman' is identified with some kind of trouble. However, this understanding of the concept is privatized in Jill's case and acquires a positive overtone, as the result of her positive (maybe even romantic) encounter with the policeman. Jane did not have this experience, so she processed the word in accordance with its collective salience, as privatized by her in the given situation. What the speaker meant differed from what the hearer inferred from the same utterance. The difference is the result of the concept's different privatization, based on prior experience.

Situational salience refers to the salience of situational constraints that can derive from factors such as obviousness, recency of mention, and others. The cashier's "how are you doing today?" question in a supermarket requires only a short "fine, thank you". The salience of the situation makes the function of the expression obvious. However, situational salience can be overridden by both collective salience and individual salience. In the following example, situational salience is overridden by a collective salience, individualized similarly by hearer-readers.

- (5) (Sign on the door of a department store)
 "Girls wanted for different positions."

Not even the actual situational context and environment can subdue the sexual connotation of the sentence. As Giora (2003) claimed, both salient information and contextual knowledge run in parallel, and salient, but contextually inappropriate information may not be discarded. A similar example comes from one of

Robin Williams' films, where the hero says: "I had to sleep with the dogs. Platonically, of course..." The speaker thinks that the sexual connotation of "sleep with" is so strong that a clarification is necessary.

6.2 Salience in language production

The role of salience in language production involves a ranking relation of prominence of entities, as well as a preferred choice among alternatives. When the speaker is faced with having to choose a word or an expression, a ranking of the available choices is obtained on the basis of the degree of salience of entities in the context of generation. The word or phrase then is selected for utterance on the basis of maximum salience. Once a speaker has either an *a priori* or an emergent, co-constructed intention to communicate, s/he should find an appropriate linguistic representation to transfer this message to the hearer. The message of the preverbal thought is made up by combining the concepts that the speaker intends to *explicate*. Concepts are attached to several possible frames. When a preverbal thought is formulated, the related schemas will be activated. Jackendoff (2002) claimed that concepts have no direct, one-to-one connection with lexical items. A concept may be associated with several lexical expressions, and conversely. The process of transforming preverbal thought into linguistic expressions varies among different speakers because they have several options to explicate their intentions.

Kecskes (2008: 401) argued that *there is a difference between speaker processing and hearer processing*. When a lexical unit (labeled for private context) is used by a speaker, private contexts attached to this lexical expression are activated top-down in a hierarchical order based on salience. This hierarchical order works differently for the speaker and the hearer. For the speaker, there is primarily an inter-label hierarchy, while for the hearer the intra-label hierarchy comes first. The *inter-label hierarchy* operates in the first phase of production, when a speaker looks for words to express her/his intention. First, s/he has to select words or expressions from a group of possibilities in order to express his/her communicative intention. These words or expressions constitute a hierarchy from the best fit to those less suited to the idea s/he is trying to express. The hearer, however, has to cope with a different type of hierarchy from her/his perspective. Thus, an *intra-label hierarchy* is in force, when the hearer processes (a) lexical unit(s) in an utterance (or even an entire utterance). The label (word) uttered by the speaker hierarchically triggers the history of that particular label as used by the hearer (but not by the speaker). This may also be a reason for misunderstanding in the communicative process. Compare the following (source: American sitcom) interchange:

- (6) Bob: — Are you OK?
 Mary: — I am fine.
 Bob: — I know you are fine, but are you OK?

Bob had several options to ask about Mary's well-being: "Are you OK?", "Are you fine?", "Is everything all right?", etc. His selection of "Are you OK?" caused a slight misunderstanding between the two.

The mechanism of putting preverbal thought into linguistic expressions is a process of privatization of the actual situational context. In fact, this process contradicts Grice's notion of "what is said". For how can a truth-conditional semantic meaning be transferred from speaker to hearer without any change? Both processes, the speaker's utterance production and the hearer's interpretation, are highly personalized and based on an *individual* salience that is the result of privatizing collective and actual situational salience. Both speaker's production and hearer's inference comprise lexical processes and contextual processes that run parallel and are governed by salience. Speaker's utterances often undergo corrections showing speaker's attempts to adjust to the context en-route. Similar processes occur in comprehension. Utterance interpretation hardly consists of just those two modules, as the Griceans maintain. Inferencing is a trial-and-error process on the part of the hearer who tries to make sense of speaker intention.

7. Conclusion

This paper has presented a socio-cognitive approach to pragmatics as an alternative to current pragmatic theories. SCA is based on two assumptions. First, the process of communication is shaped by the interplay of societal and individual factors. In this process interlocutors act as individuals on their own right. Their different prior experiences, their different evaluations of the actual situational context, their dynamically changing intentions and individual degrees of salience result in a personalized process of production and comprehension; as a result, there may be no single point in the recovery process at which speaker's utterances exactly matches hearer's implicatures. This is because both speaker's production and hearer's interpretation are 'contaminated' by individualized pragmatic elements. For this reason, a pragmatic theory should be both speaker- and hearer-centered to be able to explain both production and comprehension.

Second, as a consequence of the differences in speaker and hearer processing, the communicative process is rough, rather than smooth. Communication is a trial-and-error process that is co-constructed by the participants. It is an emergent interactional achievement that requires researchers to pay equal attention to both the positive and negative aspects of communication. An idealized description of

the communicative process that focuses only on cooperation, politeness, and rapport building can be misleading if it does not also focus on break-downs, misunderstandings, struggles, and linguistic aggression as properties which are in no way unique, but rather represent common features of communication.

SCA proposes four traits that function like continuums, connecting individual features with societal features, namely: attention — intention; private experience — actual situational experience; egocentrism — cooperation; salience — relevance. All these traits are present in every phase of the communicative process, albeit to different extent. A systematic analysis of their relationships may help us better understand the nature of human communication. The present article is an attempt in that direction.

References

- Arnseth, Hans Christian and Ivar Solheim. 2002. Making sense of shared knowledge. In: Proceedings of CSCL 2002, Computer Support for Collaborative Learning: Foundations for a CSCL Community, G. Stahl (ed), 102–110
- Arundale, Robert B. 1999. An alternative model and ideology of communication for an alternative to politeness theory. *Pragmatics* 9, 119–154.
- Arundale, Robert B. 2008. Against (Gricean) intentions at the heart of human interaction. *Intercultural Pragmatics* 5, 2, 231–256.
- Bach, Kent. 1994. Conversational implicature. *Mind and Language* 9, 124–162.
- Bach, Kent. 2001. You don't say? *Synthese* 128, 15–44.
- Barr, Dale J. and Boaz Keysar. 2005. Making sense of how we make sense: the Paradox of egocentrism in language use. In: *Figurative Language Comprehension*, Herbert L. Colston and Albert N. Katz (eds), 21–43. Mahwah, N.J.: Lawrence Erlbaum.
- Barsalou, Lawrence W. 1993. Challenging assumption about concepts [commentary]. *Cognitive Development* 8, 169–180.
- Barsalou, Lawrence. 1999. Perceptual symbol systems. *Behavioral and Brain Sciences* 22, 577–609.
- Burton-Roberts, Noel. 2005. Robyn Carston on semantics, pragmatics and 'encoding'. *Journal of Linguistics* 41, 389–407.
- Capone, Alessandro. 2008. Are explicatures cancellable? Towards a theory of the speaker's intentionality. *Intercultural Pragmatics*, 6, 1, 55–83
- Carston, Robyn. 2002. *Thoughts and Utterances*. Oxford: Blackwell.
- Carston, Robyn. 2004a. Truth-conditional content and conversational implicature. In: *The Semantics/Pragmatics Distinction*, C. Bianchi (ed), 65–100. Stanford: CSLI.
- Carston, Robyn. 2004b. Explicature and semantics. In: *Semantics: A reader*, Steven Davis and Brendan S. Gillon (eds), 817–845. Oxford: Oxford University Press
- Clark, Herbert H. 1996. *Using Language*. Cambridge: Cambridge University Press.
- Clark, Herbert and Susan E. Brennan. 1991. Grounding in Communication. In: *Perspectives on Socially Shared Cognition*, L. Resnick, J. Levine and S. Teasley (eds), 127–149. Washington, DC: American Psychological Association.

- Evans, Vyv. 2006. Lexical Concepts, Cognitive Models and Meaning-construction. *Cognitive Linguistics* 17, 4, 491–534.
- Fauconnier, Gilles and Mark Turner. 2002. *Conceptual Blending and the Mind's Hidden Complexities*. New York: Basic Books.
- Frege, Gottlob. 1980 [1884]. *The Foundations of Arithmetic*, transl. J. L. Austin. Second, revised edition. Evanston, Illinois: Northwestern University Press.
- Gee, James Paul. 1999. *An Introduction to Discourse Analysis*. London: Routledge.
- Gibbs, Raymond W. 1996. What's cognitive about cognitive linguistics. In: *Cognitive Linguistics in the Redwoods*, Eugene H. Casad (ed), 27–55. Berlin and New York: Mouton de Gruyter.
- Giora, Rachel. 1997. Understanding figurative and literal language. The graded salience hypothesis. *Cognitive Linguistics* 7, 183–206.
- Giora, Rachel. 2003. *On Our Mind: Salience, Context and Figurative Language*. Oxford: Oxford University Press.
- Grice, H. Paul. 1957. Meaning. *The Philosophical Review* 66, 377–388.
- Grice, H. Paul. 1969. Utterer's meaning and intention. *The Philosophical Review* 78, 147–177.
- Grice, H. Paul. 1975. Logic and Conversation. In: *Speech Acts*, P. Cole and J. Morgan, eds. 41–58. New York: Academic Press.
- Grosz, Barbara J., Aravind K. Joshi and Scott Weinstein. 1995. Centering: A framework for modeling the local coherence of discourse. *Computational Linguistics* 21, 2, 203–225.
- Gumperz, John. 1982. *Discourse Strategies*. Cambridge: Cambridge University Press.
- Gundel, Jeannette K., Nancy Hedberg and Ron Zacharski. 1993. Cognitive Status and the Form of Referring Expressions in Discourse. *Language* 69, 2, 274–307.
- Heritage, John. 1990/91. Intention, Meaning and Strategy: observations on constraints from conversation analysis. *Research on Language and Social Interaction* 24, 311–332.
- Horn, Lawrence R. 2006. The Border Wars: a neo-Gricean perspective. In: *Where Semantics Meets Pragmatics: The Michigan papers*, K. von Stechow and K. Turner (eds), 21–48. Oxford: Elsevier.
- Horn, Lawrence R. 2007. Neo-Gricean Pragmatics: a Manichaean manifesto. In: *Pragmatics*, Noel Burton-Roberts (ed.), 158–183. Basingstoke: Palgrave.
- Jackendoff, Ray. 2002. *Foundations of language*. Oxford: Oxford University Press.
- Jaszczolt, Katarzyna M. 2005. *Default Semantics. Foundations of a Compositional Theory of Acts of Communication*. Oxford: Oxford University Press.
- Joas, Hans. 1996. *The Creativity of Action*. Chicago: The University of Chicago Press.
- Kecskés, István. 2000. A Cognitive-pragmatic Approach to Situation-bound Utterances. *Journal of Pragmatics* 32, 6, 605–625.
- Kecskés, István. 2001. The “Graded Salience Hypothesis” in Second Language Acquisition. In: *Applied Cognitive Linguistics I: theory and language acquisition*, Martin Pütz, Susanne Niemeier and René Dirven (eds), 249–270. Berlin: Mouton de Gruyter.
- Kecskés, István. 2002. *Situation-Bound Utterances in L1 and L2*. Berlin and New York: Mouton de Gruyter.
- Kecskés, István. 2004a. Lexical Merging, Conceptual Blending and Cultural Crossing. *Intercultural Pragmatics* 1, 1, 1–21.
- Kecskés, István. 2004b. The Role of Salience in Processing Pragmatic Units. *Acta Linguistica Hungarica* 51, 3–4, 309–324.
- Kecskés, István. 2006. On My Mind: thoughts about salience, context, and figurative language from a second language perspective. *Second Language Research* 22, 2, 219–237.

- Kecskés, István. 2008. Dueling Context: A dynamic model of meaning. *Journal of Pragmatics* 40, 3, 385–406.
- Kecskés, István and Jacob L. Mey (eds). 2008. *Intention, Common Ground and the Egocentric Speaker-Hearer*. Berlin and New York: Mouton de Gruyter.
- Kecskés, István and Fenghui Zhang. 2009. Activating, Seeking and Creating Common Ground: A socio-cognitive approach. *Pragmatics & Cognition*. 17, 2, 331–355.
- Keysar, Boaz. 2007. Communication and Miscommunication: the role of egocentric processes. *Intercultural Pragmatics* 4, 1, 71–84.
- Keysar, Boaz and Anne Henly. 2002. Speakers' Overestimation of their Effectiveness. *Psychological Science* 13, 207–212.
- Koschmann, Timothy and Curtis D. LeBaron. 2003. Reconsidering Common Ground: Examining Clark's contribution theory in the OR. In: *Proceedings of the Eight European Conference on Computer-Supported Cooperative Work*, Kari Kuutti, Eija Helena Karsten, Geraldine Fitzpatrick, Paul Dourish and Kjeld Schmidt (eds), 81–98. Dordrecht: Kluwer.
- Leibniz, G.W. 1976 [1679]. *Philosophical papers and letters*. Selection, translated and edited with an introduction by Leroy E. Loemker, 2nd ed. Dordrecht: Reidel.
- Levinson, Stephen C. 2000. *Presumptive Meanings: The theory of generalized conversational implicature*. Cambridge, Mass: MIT Press.
- Levinson, Stephen C. 2003. Language and Mind: let's get the issues straight! In: *Language in Mind: Advances in the study of language and cognition*, Dedre Gentner and Susan Goldin-Meadow (eds), 25–46. Cambridge, Mass.: MIT Press.
- Levinson, Stephen C. 2006. On the Human 'Interaction Engine'. In: *Roots of Human Sociality. Culture, cognition and interaction*, Nick Enfield and Stephen Levinson (eds), 39–69. Oxford: Berg
- Mey, Jacob L. 2001. *Pragmatics: An Introduction*, 2nd ed. Oxford: Blackwell.
- Millikan, Ruth G. 1998. A Common Structure for Concepts of Individuals, Stuffs, and Real Kinds: More mama, more milk, and more mouse. *Behavioral and Brain Sciences* 9, 1, 55–100.
- Moeschler, Jacques. 2004. Intercultural Pragmatics: a cognitive approach. *Intercultural Pragmatics*, 1, 1, 49–70.
- Rampton, Ben. 1995. *Crossing: Language and ethnicity among adolescents*. London: Longman.
- Rapaport, William J. 2003. What Did You Mean by that? Misunderstanding, negotiation, and syntactic semantics. *Minds and Machines* 13, 3, 397–427.
- Recanati, Francois. 2001. What is Said. *Synthese* 128, 75–91.
- Saul, Jennifer. 2002. What is Said and Psychological Reality: Grice's project and relevance theorists' criticisms. *Linguistics and Philosophy* 25, 347–72.
- Searle, John. 1983. *Intentionality: An essay in the philosophy of mind*. Cambridge: Cambridge University Press.
- Searle, John. 2007. What is Language? Some preliminary remarks. In: *Explorations in Pragmatics: Linguistic, cognitive and intercultural aspects*, István Kecskés and Laurence Horn (eds.), 7–37. Berlin and New York: Mouton de Gruyter.
- Sperber, Dan and Deirdre Wilson. 1995. *Relevance: communication and cognition*, 2nd ed. Oxford: Blackwell.
- Stalnaker, Robert C. 1978. Assertion. *Syntax and Semantics* 9, 315–332.
- Stalnaker, Robert C. 2002. Common Ground. *Linguistics and Philosophy* 25, 701–721.
- Strayer, David L. and William A. Johnston. 2001. Driven to Distraction: Dual-task studies of simulated driving and conversing on a cellular phone. *Psychological Science* 12, 462–466.

- Violi, Patrizia. 2000. Prototypicality, Typicality and Context. In: *Meaning and Cognition*, L. Albertazzi (ed), 103–123, Amsterdam: Benjamins.
- Wittgenstein, Ludwig. 1921/1922. *Tractatus Logico-Philosophicus*, transl. C. K. Ogden. London: Routledge and Kegan Paul.

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