On the Notion of Intended Meaning

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Abstract

The issue of intended meaning is an open problem in the study of linguistic processes. The paper presents a notion of intended meaning based on the idea of speaker's preference for a state of affairs to which a sentence refers. Its argument has two components. The first is the conception of meaning developed by analytic philosophy of language; that is, the meaning of a sentence depends on the truth conditions of the sentence, and the meaning of an expression depends on contribution of that expression to the truth value of the sentence in which it appears. The second is the notion of agent's interest, as a state of affairs which implies a goal of agent, as developed by cognitive social theory. The paper maintains that a speaker's intended meaning establishes when the truth conditions of a sentence and the possibility conditions of the state of affairs preferred by the agent match. The last part of the paper illustrates three linguistic disputes to support its theoretical intuitions. The first dispute concerns syntactic ambiguity, while the other two disputes concern semantic ambiguity. The paper deals with the general problem of the semantic underdeterminacy of the conventional meaning of natural language sentences. Its specific contribution relates to the problem of intended meaning in communicative processes and to meaning negotiation processes in conflicting interactions.

Keywords: state of affairs; truth conditions; semantic underdeterminacy; intended meaning; interest; negotiation.

Introduction

The issue of intended meaning is an open problem in the study of linguistic processes (see Grice 1957, 1989; Kripke, 1979; Sperber & Wilson, 1986; Clark, 1996; Recanati, 2001; Bach, 2004; Bianchi, 2006). In this paper I present a notion of intended meaning based on the notion of speaker's preference for a state of affairs to which a sentence refers. This notion derives from the analysis of negotiation processes and the determination of meaning in linguistic controversies provoked by ambiguous clauses in contracts. The paper's contribution to the notion of intended meaning is based on the following thesis: given a set of contextually plausible interpretations of a sentence, the agent's intended meaning is determined by his/her extra-semantic situational interests (Cruciani, 2009a). It uses the notion of interest viewed as a state of affairs preferred by an agent because it implies his/her goal (see Conte & Castelfranchi, 1995).

In my view, the notion of the intended meaning of declarative sentences is founded on the relation between the states of affairs in which a sentence is true and the speaker's preferences ordering in regard to the states of affairs in which the sentence is true. A sentence can be true with respect to different sets of truth conditions, which correspond to different states of affairs (more technically, they correspond to sets of states of affairs).

The state of affairs preferred by a speaker because it implies his/her goal provides the truth conditions which determine the intended meaning in the specific situation of use. From this perspective, the determination of intended meaning is viewed as a selection of a state of affairs which makes a sentence true (via truth conditions) and satisfies the agent's interest in situation.[1]

However, the aim of the paper is not to argue in favour of this conception, since the author has done so elsewhere (Cruciani, 2009b), but rather to explain its ontology. The schema in figure 1 illustrates the notion of intended meaning as it is conceived here. At the bottom of the schema is a sentence which, given a context of use, has some plausible interpretations. Each interpretation refers to a state of affairs which makes the sentence true: that is, it refers to specific truth conditions. The correspondence between the state of affairs preferred by the speaker and one of the states of affairs which make the sentence true determines the intended meaning. In other words, when the possibility conditions of the state of affairs preferred by speaker match the truth conditions of a sentence, we have intended meaning.
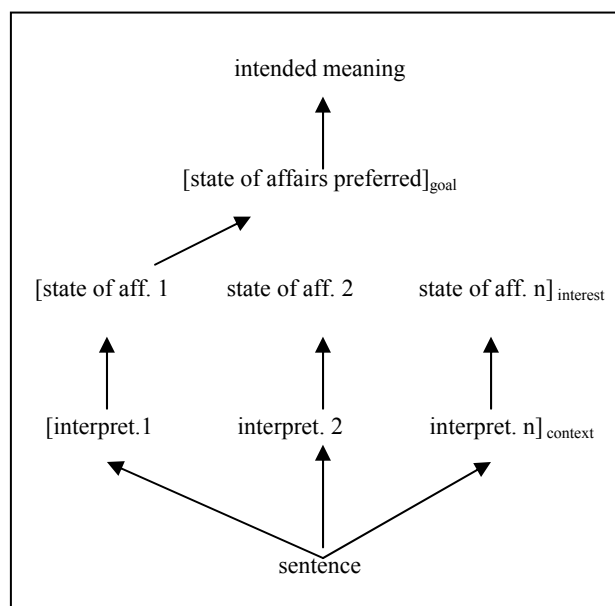

Figure 1

Meaning, Truth Conditions, States of Affairs and Context

In this section I illustrate the relation among meaning based on truth conditions, states of affairs, and context of use, and I outline some differences between semantics and pragmatics in regard to the phenomenon of semantic underdeterminacy. I base my view on the conception of

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[1] Hence, the process of determining intended meaning can be explained in terms of preferences ordering.

meaning as developed by analytic philosophy of language (specifically by structural semantics). This maintains that the meaning of a sentence depends on its truth conditions, and that the meaning of an expression depends on the contribution of that expression to the truth value of sentence in which it appears (see Tarski, 1944). This notion entails that knowing the truth conditions of a sentence corresponds to knowing how the world would be if the sentence were true; but it does not correspond to knowing whether or not the sentence is actually true (see Wittgenstein, 1921). Hence, in cognitive terms, a speaker who knows the truth conditions of a sentence knows the meaning of the sentence even if s/he does not know how the world actually is, but only how it would be if the sentence were true.

The conception of meaning as (a set of) truth conditions is accepted by most philosophers and pragmatists of language. Any disagreement essentially concerns whether conventional meaning (obtained by linguistic conventions and rules) is sufficient to provide truth conditions or whether other items are required as well. In other words, is it sufficient to know semantic conventions and linguistic rules or do we need to know elements of the specific situation of use?

On a semantics view, conventional meaning and a small number of contextual parameters are sufficient to determine the truth conditions of a sentence (proposition expressed by the sentence). On a pragmatics of language view, conventional meaning is not sufficient to determine a unique set of truth conditions (semantic underdeterminacy): we need information on the context of use to complete the conventional meaning and to determine the truth conditions. Semantic underdeterminacy occurs when the conventional meaning of a sentence used by a speaker in a specific situation, coded by semantic conventions, underdetermines the proposition explicitly expressed by the utterance (see Travis, 1975, 1981; Searle, 1979, 1980).

In semantics, context is composed of some objective elements of the situation of utterance, and it is used to decode only some problematic kinds of expressions: indexical and demonstrative expressions such as "I", "here", "now" and "this", "that" (see Kaplan, 1977)[2]; pronouns such as "she", "he" (e.g. anaphoric use); cases of structural and lexical ambiguity (see Perry, 1997); and verbal tense.[3] In semantics, truth conditions lie at the level of the objective context of utterance and conventional meaning (obtained by linguistic conventions and rules). Pragmatists do not agree, however, arguing that in order to fix truth conditions we need supplementary contextual information. This information consists of shared knowledge (encyclopaedic and local), the discourse or sentence in which an expression is used, and elements of the physical surroundings.[4] A technical distinction between information on the semantic context and information on the pragmatic context is that the former is made accessible by and constrained to linguistic form of expression, while the latter is made accessible by speaker's communicative intentions and is not constrained to linguistic form.

I do not deal, in the paper, with the problem of whether there is a need for non-linguistic information to fix a unique set of truth conditions; there is a need (pragmatics/semantics distinction debate). I instead deal with the problem of intended meaning when a number of interpretations are all plausible in the same context (any context or combination of contexts).

I report a simple example to shed light on this point. The issue is the following: the conventional meaning of a sentence, even without indexical expressions, and structural and lexical ambiguity, actually underdetermines the proposition expressed by the sentence. And even with the additional pragmatic contribution of relevant contextual information, it is not always possible to fix a unique proposition. The sentence is as follows: (1) "there is water on Pluto". I do not know whether there is water on Pluto, but I understand the sentence because I am able to imagine the ways in which there might be water on Pluto: for example, in the form of ice on the planet's surface or in the form of gas in its atmosphere. Consequently, sentence (1) can have at least two interpretations (two different sets of truth conditions); that is, it can be true both if there is water in the form of ice on the surface and if there is water in the form of gas in the atmosphere. The two truth conditions correspond to different states of affairs:

a. "there is ice on the surface of Pluto";
b. "there is water vapour in the atmosphere of Pluto".

Hence, (1) can refer to both states of affairs. This is the case if we consider linguistic conventions, but also, in our propaedeutical example, if we consider the text of the sentence in which the word "water" appears and we use encyclopaedic knowledge (e.g. physical states of water). In general, then, how is it possible to determine the speaker's intended meaning when a sentence admits to various meanings all plausible in a context of use (or any combination of contexts), that is, when the context seems not to be conclusive?

Intended Meaning and Speaker's Meaning

In this section I illustrate the notion of speaker's meaning proposed by Grice (1989) in regard to the notions of "what is said" (explicit level of communication) and "what is communicated" (implicit level of communication). Speaker's meaning corresponds to "what is communicated" by a speaker with a sentence. "What is communicated" is understood by an interlocutor by mean of an inference (i.e. conversational implicature) based on the conventional meaning of the sentence and contextual information concerning the situation in which the sentence is uttered. Relevant information is made accessible to the interlocutor by means of speaker's communicative intentions. Essentially, Grice argues that conventional meaning, completed with treatment of ambiguity and indexical expressions (*latu senso*), determines a unique proposition ("what is said"), and he examines the implicit communicative process based on it.

Most philosophers, linguists, and relevant theorists agree on the notion that the speaker's meaning is "what is

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[2] Note that Kaplan (1989), when introducing the "directing intention", admits a 'cognitive turn' for the reference of demonstrative pronouns (see Bianchi, 2006).
[3] On possessive expressions see Clark (1992).
[4] On background of meaning see Searle (1980).

communicated" by a speaker (implicit level of communication). But they do not agree on the role of conventional meaning in fixing "what is said" by a speaker (explicit level of communication) (see Sperber & Wilson, 1986; Carston, 1988, 2002; Recanati, 1989, 1993; Travis, 1997; Levinson, 2000; Bianchi, 2004). They consequently argue that we need some inferential (or associative) processes based on contextual information (e.g. free enrichment, transfer, saturation, bridging, narrowing, broadening, etc.). These processes fix a unique proposition (the one *explicitly* expressed by a sentence). In other words, these processes fix "what is said" by a speaker with a sentence in a specific situation. Consequently, conversational implicature determines, on the basis of "what is said" and further contextual information, "what is communicated" by a speaker. However, not all pragmatists agree on the temporal sequence of the above processes. Some of them maintain that implicature works in parallel with free enrichment, transfer, etc.[5] However, according to (a weak version of) contextualism in pragmatics, my proposal in regard to intended meaning concerns the level of "what is said" (explicit level of communication).[6]

I consider that if pragmatic processes, based on non-linguistic contextual information made accessible by communicative intentions, are not sufficient to determine a unique set of truth conditions (proposition), then, in order to determine the explicit level of communication, we can take into account the speaker's preferences for the states of affairs which make a sentence true.

State of Affairs and Preference

In this section I outline the notion of preference for a state of affairs based on the comparative notions: "better than" (>), "equal in value to" (≡) and "at least good as" (≥) taken from decision theory (see Hansson, 1994). Using this language, it is possible to express the preferences of agents for states of affairs. For instance, on writing: $[(sa_1)>(sa_2)]_{Ag}$, we assert that an agent prefers the state of affairs 1 rather than the state of affairs 2.

Decisions theorists assume that a rational agent *correctly* chooses an option if the ordering of options realizes certain properties: ordering, continuity, independence (see Myerson, 1991). For my purposes here, it is sufficient to consider the property of ordering, which concerns completeness and transitivity. Completeness for weak preference is defined as follows:

the relation ≥ is complete if and only if for any elements A and B of its domain, either A ≥ B or B ≥ A.

Transitivity for weak preference is defined as follows:

the relation ≥ is transitive if and only if it holds for all elements A, B and C of its domain, so that if A ≥ B and B ≥ C, then A ≥ C.

These properties ensure that an agent is able to compare some options coherently with his/her own interest. However, it is possible that an agent is not always able to compare all options clearly, but this does not prevent him/her from choosing coherently with his/her own interest. In our case, we can consider an agent as preferring one state of affairs coherently with his/her own interest if s/he chooses in accordance with the rule which states:

an alternative is uniquely the best if and only if it is better than all the other alternatives. If there is uniquely a best alternative, choose it (see Hansson, 1994).

Hence, in order to consider an agent's choice coherent with his/her interest, it is sufficient that s/he is able to determine the best state of affairs among others without necessarily ordering the other states of affairs. In this case, a partial ordering is sufficient to consider agents rational.

A Case of Syntactic Ambiguity

In this section I illustrate a case of structural ambiguity where support by the context is not sufficient to determine the state of affairs to which a sentence refers. I cite a case of linguistic controversy provoked by a labour agreement stipulated by a firm and a local trade union. The agreement stated the modes, schedules and procedures for the placement of redundant workers on a publicly-funded wages guarantee scheme and their job mobility.

The situation was as follows: the firm was attempting to turn around its economic-financial performance (economic reorganization) and had begun the procedures for the placement of redundant workers on the public wages guarantee scheme and for job mobility. To make the procedures lawful, the firm stipulated a collective company-level agreement with the local trade union to order to manage surplus workers. During the procedures, a controversy arose in regard to the one-off payment of a sum of money as an incentive for voluntary redundancy (as provided for the agreement). The controversy developed around two different interpretations of a specific clause in the agreement. The clause was the following:

"The firm shall pay a lump sum to workers accepting voluntary redundancy during the wage guarantee fund's validity (…)".[7]

The linguistic controversy concerned whether the expression: "during the wage guarantee fund's validity" referred to "the firm" or to "workers accepting voluntary redundancy", and therefore, whether only redundant workers who resigned would receive the sum of money or whether all workers (both redundant and still employed) who resigned in that period would receive the lump sum payment as an incentive.

Which state of affairs made the clause true?

[5] On the notion of explicature in Relevant Theory (see Carston, 1988); on impliciture in linguistics (see Bach, 1994).
[6] However, communication can succeed at the "what is said" level, for instance, in contracts and scientific texts. Note that when communication takes place at the implicit level a speaker can retract his/her statements; instead, when communication happens at the explicit level, s/he cannot freely retract.

[7] In Italian the clause is as follows: "L'azienda riconoscerà al personale dimissionario nel periodo di vigenza della Cassa Integrazione Guadagni straordinaria un importo forfetario *una tantum* (…)".

States of Affairs and Goals

The state of affairs preferred by the firm corresponded to its interest that only workers covered by the wage guarantee fund resigned, so that the firm could use the fund (it was limited by the agreement) for other employed workers (who took place of workers who accepted voluntary redundancy) and thus avoid paying their wages. The goal of the firm was to reduce the total amount of one-off incentives, to reduce payment of wages and to complete its restructuring. The state of affairs which comprised the possibility conditions for achievement of the firm's goal can be expressed as follows: 'the firm pays a lump sum for voluntary redundancy to *only* workers on the wages guarantee fund'.

The state of affairs preferred by the trade union corresponded to its interest in extending to all workers the possibility of receiving the lump sum for voluntary dismissal during the period of the redundancy payment scheme. The goal of the trade union was to improve the economic circumstances of workers as much as possible. The state of affairs which comprised the possibility conditions for achievement of the trade union's goal can be expressed as follows: 'the firm pays a lump sum for voluntary redundancy to *all* workers (those on the wages guarantee fund and those in employment) during the period of the wage guarantee fund's validity'.

Intended Meaning and Negotiation

In short, the goal of the firm was to reduce total wages, reduce total incentives and complete its restructuring. The interest of the firm was to move employed workers from regular employment to placement on the public wages guarantee scheme. The goal of the trade union was to improve the economic circumstances of workers. The interest of the trade union was to enable all workers to receive the sum of money.

The state of affairs was negotiated as follows: the firm gave eligibility to incentive to all workers. It thus obtained stability of the company-level agreement avoiding the risk of halting the reorganization and having to return the money already furnished by the state for wage guarantee fund. The trade union gave stability to the agreement by confirming its validity and obtaining the voluntary redundancy incentive for all workers. The state of affairs fixed in the negotiation was compatible with the truth conditions which made one interpretation of the clause true and excluded the other interpretations.

Two Cases of Semantic Ambiguity

In this section I illustrate two cases which concern two linguistic disputes provoked by the same clause in a nation-wide collective agreement stipulated by a trade union and Confindustria (corresponding to the British CBI). I show that the two different negotiations of interests gave rise to two different intended meanings in two very similar contexts. The clause was the following:

"The parties agree on working hours, which apply also to groups of workers, with respect to flexibility regarding the seasonality of products [...]. The parties further agree that, at company level, the modes and schedules of implementation will be agreed with the local trade union representatives".[8]

The dispute centered on the expression "seasonality of products". The two interpretations were:

(a) 'seasons of the year';
(b) 'peaks in the market',

respectively in both cases. The clause's meaning was important because of its impact on the criterion for implementing flexibility measures. In both cases the respective interpretations were the same: in the former case the company adopted interpretation (b), and the local trade union adopted interpretation (a). Analogously, in the latter case, another company adopted interpretation (b) and the same trade union adopted interpretation (a). In my view, it is very interesting that the same agent was involved in both situations and negotiated the same interpretations with different agents. In particular, I would stress that, in the two negotiations, different interests induced the same agent (the trade union) to select two different meanings in two very similar contexts.

Before I report the two cases I shall briefly present the notion of 'meaning negotiation'. According to Bouquet and Warglien, agents have a meaning negotiation problem whenever they have:

"the problem of reaching an agreement on the meaning of an expression when an agreement is valuable for all agents, but agents have conflicting preferences over which solution should be selected, so that every agreement implies that at least someone has to concede to some extent to other agent" (Bouquet & Warglien, 2002, p. 2).

In what follows, I shall show how agreement on situational extra-semantic interests selects which is the intended meaning in linguistic disputes.[9]

Case 1

In case 1, the term "flexibility" in the clause meant that the company, during some periods of the year, could require its employees to work a large amount of overtime. Overtime was required on Saturdays or in addition to the daily regular working hours. The company compensated overtime with paid rest days taken in other periods of the year. Essentially, the clause regulated the times and ways in which the company could require overtime and compensate it with paid rest days.

The company was interested in managing working hours with discretionary power in order to save money,

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[8] The clause in Italian is as follows: "Le parti convengono, a titolo di flessibilità sulla stagionalità dei prodotti e per le attività di installazione e montaggio, sull'orario plurisettimanale, da realizzarsi anche per gruppi di lavoratori". [...] "Le parti altresì concordano che, a livello aziendale, verranno convenute, tramite accordo, le modalità di attuazione oltre che i tempi di implementazione dell'orario settimanale di cui al presente punto con le rappresentanze sindacali unitarie e le organizzazioni sindacali territoriali".

[9] As Clark puts it, "we cannot hope to understand language use without viewing it as joint action built on individual actions. The challenge is to explain how all these actions work" (Clark 1996, p. 4).

possibly on the basis of information unavailable to the local trade union (e.g. orders). In particular, the interest of the company was to be able to use overtime without paying the wage supplements due and to distribute the cost of paid rest days among periods according to its needs (its discretion). Moreover, the company was interested in being able to resort to overtime at any time of the year on the basis of market demand, and it was not interested in hiring new personnel or in paying overtime regularly. On the other hand, the trade union was interested in reducing (or avoiding) the use of overtime and particularly if it was not regularly paid, in favouring the right to rest and to plan free time. It was also interested in inducing the company to hire new personnel and/or pay overtime regularly.

The company argued that overtime should be regulated with respect to peaks in the market: specifically, the company could resort to unpaid overtime at any time of the year on the basis of market demand. The company could not know peaks in the market in advance and thus could not fix a specific period *a priori*. The trade union argued that overtime should be regulated with respect to the seasons of the year in which the company's products were most in demand, spring in particular.

The two interpretations were both plausible in the situation, where the relevant combination of contexts consisted of the linguistic context, i.e. the text of the clause; the encyclopeadic knowledge, i.e. the contract's rules (e.g. civil code); and local knowledge, i.e. the specific shared activity which the clause regulated. At this point the parties attempted to reach an agreement by negotiating their interests. And, in the end the company and the trade union fixed the intended meaning whereby "seasonality of products" stood for "season of year when products are particularly in demand"; in particular a 'positive season' was spring and a 'negative season' was autumn. They agreed that, in a positive season, the company could utilize non-regularly-paid overtime, while in the negative season overtime was recompensed with paid rest days. How did the agents determine the intended meaning? How did the negotiation of interests work?

The company obtained high discretionary power to utilize unpaid overtime in the positive season (from March to June) *de facto* independently of peaks in the market, and to arrange paid rest days in a period of year when it did not need labour, that is, during the negative season (from September to December). The company relinquished overtime throughout the year (except in the positive season) and discretionary power to distribute paid rest days during the negative season. The trade union obtained a reduction in unpaid overtime (except in the positive season) and the right of employees to choose which days to use for paid rest during the negative season. Moreover, the trade union induced the company to hire new personnel or to pay overtime regularly (except in the positive season). The trade union relinquished to check overtime in the positive season. Finally, the trade union relinquished the possibility of distributing paid rest days throughout year, in that they could only be taken in the negative season.

The agents' interests were mediated with respect to the specific situation: each party gave up something in favour of the other party, and meaning (a) (compatible with the agreement reached) was finally fixed.

Case 2

In case 2, the term "flexibility" meant that the company could hire temporary workers and manage working hours and shifts according its needs.

The company was interested in hiring temporary workers on the basis of increased orders in any period of the year. The company was also interested in managing temporary workers because of information unavailable to the trade union. The trade union was interested in reducing temporary work; in particular, it was interested in restricting the use of temporary labour to only limited periods of the year. Moreover, the trade union was interested in reducing the use of temporary workers and in changing temporary jobs into salaried ones (on both permanent and fixed-term contracts).

The company claimed that the use of temporary labour must be regulated in accordance with peaks in the market: that is, at any time of the year on the basis of market demand. The company could not know peaks in the market in advance and thus could not fix a specific period *a priori*. The trade union claimed that the use of temporary labour must be regulated according to the seasons of the year in which the company's products are most in demand, summer in particular.

The two interpretations were both plausible in the situation, where the relevant combination of contexts consisted of the linguistic context, i.e. the text of the clause; encyclopaedic knowledge, i.e. the rules of contracts (e.g. civil code); and local knowledge, i.e. the specific shared activity which the clause regulated. At this point the parties attempted to reach an agreement by negotiating their interests. And, in the end, the company and the trade union fixed the intended meaning whereby "seasonality of products" stood for "peaks in the market". How did the agents determine the intended meaning? How did the negotiation of interests work in this case?

The company and the trade union reached an agreement in which the employer could use, in the case of peaks in the market throughout the year, an amount of temporary labour representing only ten percent of salaried labour (employees). Hence the company obtained high discretionary power throughout year, but only for a limited number of workers. The trade union obtained a reduction in the use of temporary labour (ten percent of the workforce), but relinquished control over it. Finally, it lost bargaining power on new hirings.

The agents' interests were mediated with respect to the specific situation: each party gave up something in favour of the other party, and meaning (b) (compatible with the agreement reached) was finally fixed.

In the two negotiations, two different meanings were determined for the same expression on the basis of two different negotiations of interests; even the same agent determined two different intended meanings with regard to the two different interests. It is in this sense that situational interest drives the determination of intended meaning.

Conclusion

The paper has presented a notion of intended meaning for declarative sentences. Its argument has been based, on the one hand, on meaning as truth conditions and, on the other, on interest as a state of affairs preferred by a speaker because it implies his/her goal. The compatibility

of the two notions is centered on the notion of state of affairs.

The notion of intended meaning presented in the article is compatible with that of "what is said" in pragmatics: that is, it represents the explicit level of communication. It is compatible with "what is said" because it is fixed by means of pragmatic processes based on information not constrained to the linguistic form of the sentence. But it differs from "what is said" because of the kind of information used: essentially, the pragmatic context refers to items in the current situation or past situations (linguistic context, shared knowledge, physical surroundings). Instead, my approach also takes into account future states of affairs related to agents' goals.

On this view, the truth conditions which make a sentence true can be fixed by means of the commitment of agents to realizing a certain state of affairs. However, agents do not fix meaning freely; rather, they are constrained by sets of truth conditions previously selected by a combination of relevant contexts in the specific situation.

We have seen three cases of structural and semantic ambiguity where semantics, which should be able to fix meaning in these kind of cases, failed. We have also seen that standard pragmatic information is not conclusive in fixing the intended meaning; as a consequence, the situational interests of agents have been taken into account. In conclusion, this notion seems to be adequate to express intended meaning, given a set of contextually plausible interpretations, both in cases of communicative processes to determine speaker's intended meaning and in cases of negotiation to resolve linguistic disputes.

Acknowledgements

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