

# Presumptive Reasoning in Interpretation. Implicatures and Conflicts of Presumptions

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**Abstract** This paper shows how reasoning from best explanation combines with linguistic and factual presumptions during the process of retrieving a speaker's intention. It is shown how differences between presumptions need to be used to pick the best explanation of a pragmatic manifestation of a dialogical intention. It is shown why we cannot simply jump to an interpretative conclusion based on what we presume to be the most common purpose of a speech act, and why, in cases of indirect speech acts, we need to depend on an abductive process of interpretation.

**Keywords** Implicatures · Interpretation · Presumption · Argumentation · Abductive reasoning · Inferences · Argumentation schemes · Implicit meaning

The Gricean theory of conventional and conversational implicature is rightly considered to be the foundation of modern theories of meaning and implicitness (Levinson 1983, 2000). Grice observed that the meaning of some utterances cannot be retrieved by only considering the semantic meaning of the sentence that they express, and showed that the context and purpose of the communication is part of the linguistic evidence. For instance, consider the following example (Grice 1975, p. 43):

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### **Implicature 1: Bank Employee**

Suppose that A and B are talking about a mutual friend, C, who is now working in a bank. A asks B how C is getting on in his job, and B replies, *Oh, quite well, I think: he likes his colleagues, and he hasn't been to prison yet.*

A retrieves the meaning of the sentence “*he hasn't been to prison yet*” not only using his lexical and syntactic knowledge of English, but combining such information with contextual factors. Grice pointed out that what is said does not correspond in this case to what is meant, and distinguished between explicitly saying and indirectly implicating. In his view (Grice 1975, 1989), what a man says needs to be considered in the context of the expectations and presumptions of the community of speakers he belongs to (Grice 1975, p. 47). Grice collected such presumptions and expectations under general categories conceived as communicative norms (Sperber and Wilson 1986, p. 162) (the maxims of quality, quantity, relevance and manner), and a more general rule, the so-called cooperative principle. Such an ideal model relies on the knowledge of shared norms of conversation, which the speaker can abide by, flout or opt out of. However, a crucial problem arises when we need to describe what “quantity” and “quality” of information means, and what “be relevant” or “be clear” refer to. Why is a maxim violated or exploited? What is the principle setting out what needs to be considered as a “good” quantity of information?

The problem of the relationship between context and meaning is one of the most controversial topics in linguistics. The purpose of this article is to analyze interpretation and implicatures considering a specific dimension of context, common knowledge, and a particular type of meaning reconstruction, implicatures. Describing meaning as a property of a dialogue move, inextricably connected with the interlocutors, their communicative setting and their knowledge of the world (see Asher and Lascarides 2003, chap. 6; Asher and Lascarides 1995), implicatures can be conceived as instruments to retrieve the dialogical effect of a communicative act. From a linguistic point of view, reconstruction of communicative meaning depends on two elements: contextual factors that have been analyzed in previous work on linguistic implicitness, and principles applied to bridge the gap between code meaning and context-determined meaning (Levinson 1983; Yule 1996; Horn and Ward 2004).

The purpose of this paper is to investigate the reasoning underlying the implicit reconstruction of meaning, sometimes considered as intuitive (Mercier and Sperber 2009) or heuristic processes (Allott 2005, pp. 234–235; Levinson 2000, pp. 30–36), from an argumentative perspective. In this paper, the concept of “argumentative perspective” is conceived in a broader sense to include a reasoning process implicitly suggested by the speaker and implicitly performed by the hearer and aimed at retrieving the goal of a move.

## **1 Implicatures and Presumptions: Indirect Speech Acts**

Since our purpose is to inquire into implicatures, we need to start from what we can observe, that is, linguistic facts, or discursive moves. We cannot observe

implicatures, but only linguistic moves that an interlocutor performs to achieve some conversational effect on the hearer. The speaker utters some sentence to modify the hearer's conversational situation. For example, a question, in order to be successful, needs to place the hearer in a situation in which he may choose whether to answer or not. An assertion, in order to be conversationally successful, needs to alter the other party's shared knowledge and place him in the condition in which he has to choose whether to reply or abandon the fragment of dialogue. In argumentation, the abstract notion of "conversational situation" is represented by so-called commitment sets (Walton and Krabbe 1995). A successful dialogical move binds the other party to obligations of a kind. An assertion, for instance, binds the speaker to the statement asserted, and the other party can keep a record of what has been said in a dialogue and choose whether to continue the dialogue. Asking a question, similarly, commits the other party to choosing between carrying on the dialogue by answering, or interrupting the conversation by challenging the question. In both cases, the interlocutor is faced with a choice that he did not have before. He may accept the direction of the dialogue, and continue the conversation according to the new commitments, or interrupt it, either by pointing out his willingness not to proceed on such grounds, or by simply not replying. In all events, the utterance changes the interlocutor's condition in the dialogue. Now he needs to make a choice he needs to choose between some specific alternatives.

This dialogical representation only accounts for the conversational effects of a speech act on the conversational status of the interlocutors. While Searle (see Searle 1980) classifies speech acts according to mental states, such as belief, desire, and sincerity (for a discussion about the relative importance of the sincerity condition, see Searle 1965, p. 119; Kibble 2006), in the dialogue model dialogical moves are only analyzed according to their dialogical effects, which can be described defined from a pragmatic perspective as the speaker's communicative intention, or his/her intended effect on the audience (Grice 1975; Grice 1989, p. 220; Levinson 1983, p. 97; Austin 1962, pp. 50–51). Such effects can be dialogically represented as the possible moves that they allow (see Walton 1989, pp. 65–71). For instance, it would be somehow dialogically incoherent to reply to the assertion "Bob has got a new cat" with the utterance "My grandmother is old", or to answer, "I haven't met your sister recently" to the question, "Have you seen Bob?" These dialogue moves fail to comply with the conditions of the previous ones and to provide the hearer with an indication of their purpose in the dialogue. The speaker is left with the option of refusing to reply at all or challenging the acceptability of the speaker's move. In this latter case, he can perform a meta-dialogical move aimed at discussing the conditions and meaning of the speaker's communicative act (Krabbe 2003; Walton 2007a).

This dialogical perspective subordinates the meaning of single speech acts to dialogical intentions. Grice (1975, p. 45) described this dialogical dimension of meaning using the notion of the "direction" of the dialogue, a purpose shared by the interlocutors that imposes specific conditions on the possible conversational moves:

Our talk exchanges do not normally consist of a succession of disconnected remarks, and would not be rational if they did. They are characteristically, to some degree at least, cooperative efforts; and each participant recognizes in them, to some extent, a common purpose or set of purposes, or at least a mutually accepted direction. This purpose or direction may be fixed from the start (e.g. by an initial proposal of a question for discussion), or it may evolve during the exchange; it may be fairly definite, or it may be so indefinite as to leave very considerable latitude to the participants (as in a casual conversation). But at each stage, SOME possible conversational moves would be excluded as conversationally unsuitable.

This rational connection between dialogical intentions (or cooperative efforts) and dialogue, or communicative, moves (Lumsden 2008, pp. 1897–1898) can be represented as high-order predicates commonly referred to as “rhetorical predicates” (Grimes 1975, p. 209), “logical-semantic connectives” (Crothers 1979, Rigotti 2005) or “coherence relations” (Hobbs 1979, p. 68; 1985). These abstract predicates connect discourse sequences explicitly or implicitly. The clearest case is when the purpose of the predicate is made explicit. The set of coherence conditions that its argument need to comply with (Grimes 1975, p. 162) represents a dimension of the semantic structure of the predicate (for the distinction between the semantic and the pragmatic dimension of presuppositions, see Kempson 1973). Grice analyzed these conditions and implicit information (or pragmatic presuppositions, see Vanderveken 2002, p. 47; Bach 2003, p. 163), partially codified in the connector structure, as conventional implicatures (Grice 1975, p. 45). For instance, in the sentence

1. I am very thirsty, but I cannot drink anything

the connector ‘but’ presupposes (in the aforementioned sense) two sequences,  $p$  (I am very thirsty) and  $q$  (I cannot drink anything), such that  $p$  must be interpreted as an argument supporting a conclusion  $r$  (I need to quench my thirst) ( $p \rightarrow r$ ), and  $q$  as supporting the contrary or contradictory conclusion  $non-r$  (I cannot quench my thirst) (Ducrot 1978). This representation of dialogical meaning becomes more complicate when the discourse relation is left implicit. In this case, the coherence requirements (presuppositions) are not part of the connector semantic structure, but need to be reconstructed (Ballard et al. 1971) so that the role of the discourse segments or sequences can be retrieved. For instance, coordination can express temporal, causal, explanation relations. From a pragmatic perspective, such relations can be considered as high-level speech acts (Grice 1989, p. 362; Carston 2002, pp. 107–108), indicating the role of the first level speech acts, or rather, their felicity conditions (Vanderveken 2002, p. 28).

These conditions can be conceived as pragmatic presuppositions (see Vanderveken and Searle 1985, pp. 66–67; Bach 2003, p. 163) as they express the conditions for a possible effect of a dialogical move. Speech acts can be felicitous and carry out a dialogical effect only if they are reasonable. They need to be connected to the shared knowledge (the knowledge the participants in a dialogue share), such as encyclopedic information (knowledge of the world, of the news, of common

acquaintances ...) or linguistic information (lexical meaning). For instance the *utterance*.

## 2. Have you seen Bob?

will be “void” if the interlocutor does not know who Bob is, or if he has never seen Bob before (see Austin 1962, pp. 50–51). The listener cannot continue the dialogue, as the conditions for its continuance are not fulfilled. Such conditions can be different in nature. For instance, in case 1 the interlocutor needs to know that “thirsty people need to drink”, and that “drinking quenches thirst” in order to accept the relationship between the two propositions. However, if we consider this compound sentence at a dialogical level, it becomes a dialogical move that needs to comply with dialogical requirements that include also interests and expectations. For instance, a condition can be that the hearer needs to know and be interested in the subject matter (otherwise there would not be any need to continue the dialogue itself). The dialogue sequences in a text are therefore connected not only to the communicative intention, but also to the common ground, or context, including mutual knowledge (for this concept see Clark 1996).

We maintain that the common goal is represented as a high-level predicate (the discourse purpose) (Asher and Lascarides 2003; Rigotti and Rocci 2001; Rigotti 2005; Rigotti and Rocci 2006), which assigns a role to each dialectical move, or discourse segment (Grosz and Sidnert 1986, p. 178; Walton 1989, p. 68). The text is therefore thought of as a hierarchy of predicates connecting sequences. For instance, a dialogue between friends on Bob’s difficult situation may be conceived as a hierarchy of dialogical goals. The highest and most general one could be “to impress the hearer”, or “to arouse pity”, etc., while each dialogical move is aimed at achieving a subordinate dialogical effect (Asher and Lascarides 2003). The speaker may interest the hearer in the topic by asking him a question on his knowledge of Bob’s condition, and proceed with a sequence of moves whose purpose is to gradually lead the other party to the main goal. What is essential is that each move is reasonable only if specific conditions are respected.

This theoretical framework can be applied to our analysis of speech acts as dialogical moves aimed at achieving specific dialogical effects. In particular, speech acts are analyzed in a dialectical framework in which each move alters the interlocutor’s commitment store (Walton and Krabbe 1995). Searle and Vanderveken (Vanderveken and Searle 1985, pp. 17, 80) maintain that both semantic and pragmatic presuppositions alter the dialogical situation. In their view, the speaker is committed to the presuppositions and preparatory conditions of the speech act that he performs. We can represent the conversational effects of the speech acts of assertion and request in Table 1.

In Table 1, each move has a set of presuppositions, or rather conditions necessary for its reasonableness (see the notion of dark-side commitments in Walton and Krabbe 1995, later analyzed by Corblin 2003), and opens up a range of possible effects or choices that the interlocutor needs to accept if he wants to continue the dialogue. In Searle’s classification of speech acts (Searle 1980) commitments can fall within the illocutionary effects while dialogical effects can be considered as perlocutionary. However, as seen above, if we shift our focus from utterances to

**Table 1** Conversational effect

Dialogue move	Speaker's Commitments (S)	Interlocutors' dark side commitments	Interlocutor's Commitments (H)	Dialogical effects
<b>ASSERTION</b>				
Assert ( <i>p</i> ).	Defend ( <i>p</i> ) if challenged.	Presuppositions and preparatory conditions.	Commit to ( <i>p</i> ) if not challenged or questioned.	<i>H</i> : - Assume <i>p</i> ; - Challenge <i>p</i> ; - Accept <i>p</i> .
Bob's cat has eaten a mouse.	Provide reasons if requested.	<i>S</i> : ( <i>H</i> knows that Bob has a cat). <i>S</i> : ( <i>H</i> is interested in Bob). <i>S</i> : ( <i>H</i> knows who Bob is).		<i>H</i> : So does mine usually. <i>H</i> : Really? Bob usually complains about his cat. <i>H</i> : Bob must be happy.
<b>REQUEST (INFORMATION)</b>				
( <i>p</i> ?)	S wants his question to be answered.	Presuppositions and preparatory conditions.		<i>H</i> has to reply considering the subject matter.
Have you seen Bob?		<i>S</i> : ( <i>H</i> knows who Bob is). <i>S</i> : ( <i>H</i> can provide the answer).		<i>H</i> : Yes. <i>H</i> : No. <i>H</i> : I do not know.

dialogues, from semantic predicates to dialogical predicates, the type and nature of perlocutionary effects can be found in the coherence relation governing the dialogical move. The possible dialogical effects of a move can therefore be conceived as contextual specifications of a generic coherence requirement (see also Grice's notion of meaning as a response, Grice 1989, p. 92). Such possible effects can therefore be considered as deontic dialogical commitments, or obligations (Dutilh Novaes 2005, 2010), which vary according to the purpose of the move.

## 2 Reasoning for Interpreting: Indirect Speech Acts and Implicatures

Grice's difference between sentence meaning and utterer's meaning (see Grice 1989, pp. 116–122) is crucial to understand the difference between what is said and what is meant. However, if we distinguish between the meaning of an utterance and its dialogical purpose, we need to introduce a distinction between what is said and why it is said, between utterer's meaning and *utterance* meaning. As Searle puts it (Searle 1980, p. 30), "the simplest cases of meaning are those in which the speaker utters a sentence and means exactly and literally what he says." In such cases, utterer's meaning and utterance meaning correspond. However, as indirect speech acts show, such a correspondence is often breached. Questions may be asked or assertions uttered to command the hearer to act. Such indirect speech acts are explained as acts that have a second illocutionary point, which is hinted at in a dialogue by expressing one of its preparatory conditions (see Searle 1980, pp. 46–47; Searle 1975). Consider this question:

3. Can you pass the salt?

Asking this question (taken literally, as an inquiry on the interlocutor's salt-passing capability) performs no effect in a normal dialogue, as the ability to pass the salt is

commonly known and shared. Interpreting Searle's position, the hearer needs to find an explanation for such a lack of dialogical relevance. From the fact that the sentence expresses a preparatory condition of a command he infers that the speaker intended to request him to pass the salt. In this analysis the inference is triggered by a perlocutionary effect, the lack of a dialogical effect. The answer is already known, and the act of stating an apparent and obviously shared proposition cannot achieve any real effect on the interlocutor. He could not perform a real move as he cannot choose between a paradigm of possibilities, but only repeat the answer that the speaker already takes for granted.

Indirect speech acts can be conceived as discrepancies between the prototypical manifestation of a discourse move, or speaker's intention, and his actual dialogical purpose. Interrogative phrases are usually uttered to ask questions, and not to command. Assertions are usually made to inform, and not to request, criticize, etc. Linguistic instruments are prototypically used to perform some action, and some speech act types (assertions, requests, etc.) prototypically manifest specific dialogical intentions and commit the interlocutor to specific dialogical responses. However, manifestations, which can be semantic, syntactic or pragmatic, need to be distinguished from what they manifest. The association between an assertion and the intention to inform is grounded on what happens on most occasions, but the relation between the instrument and the goal is not necessary. Indirect speech acts are therefore the most evident cases in which we cannot simply jump to an interpretative conclusion based on what we presume to be the most common purpose of the act, but we need to avail ourselves of a complex process of interpretation. When we are faced with an indirect speech act, we cannot resort to the presumptive patterns of interpretation based on the prototypical connections between type and purpose. If we adopt such a conventionalized association, we cannot retrieve the dialogical paradigm of possible replies, as we simply cannot understand which commitments the move has set on us. We need to use a more complex form of interpretative reasoning (for the notion of interpretation as meaning, see Allott 2005, p. 238), which and has been partly described as implicature.

In our view, implicatures represent forms of inference aimed at retrieving the speaker's intended meaning and reconstructing his or her dialogical plan (Carberry 1990; Litman and Allen 1987). Implicatures, in such a perspective, can be conceived as indirect speech acts (Bach 1994, p. 13) in which the ordinary dialogical effect associated with the utterance does not correspond to the utterer's intention. Such speech acts are characterized by their apparent lack of discursive purpose, and their intended effect is to trigger a process of interpretative reasoning. In order to explain this relationship, we turn to considering the case below—an exchange between a sea-captain and his first mate (Fischer 1970, p. 272).

### **Implicature 2: The Log Book and the Captain**

The captain wrote in the ship's log: "The first-mate was drunk all day". When the first-mate read the log, he confronted the captain. The captain replied: "Well, it was true, wasn't it?". The following day the first-mate, whose

normal duties include writing up the ship's log, got his revenge. He wrote in the ship's log: "The captain was sober all day".

This implicature is triggered by an irrelevant statement. On the ship's log usually the crew record what is important for the journey, or exceptional events. Therefore, there is no purpose in stating a normally expected state of affairs in a diary intended to record only what is important and unexpected. For this reason, such a statement would produce no direct effects on the dialogue or the interlocutor. The effect needs to be found resorting to a different type of interpretation, consisting in considering the utterance as a clue instead of a fact. The move of the first mate should be read not as an attempt to report a fact, but as an effort aimed at attacking the captain. Just like questions being used as commands, or requests disguised as statements, an assertion may be used to attack, or to achieve a goal completely different from the ones the utterance is commonly intended to pursue. For instance, let us consider the following assertion (Grice 1975, p. 52):

### **Implicature 3: Recommendation Letter**

A is writing a testimonial about a pupil who is a candidate for a philosophy job, and his letter reads as follows: 'dear Sir, Mr. X's command of English is excellent, and his attendance at tutorial has been regular. Yours, etc.'

In this case, A's dialogical move is intended to convey a completely different meaning from the one apparently stated. The absence of positive information relative to the research or academic skills of the pupil is dialogically irrelevant. It does not convey any information that a letter of recommendation is supposed to communicate. Therefore, the reader needs to accommodate for such a lack of informativeness by taking the assertion as a sign of a different dialogical move, in which the writer does not want to become committed to the negative evaluation of the pupil, but at the same time he wishes to share his negative judgment with the reader. Such a speech act is characterized by dialogical elements essentially different from an ordinary assertion, as shown in Table 2.

The act of implicating something modifies the dialogical situation in a fashion that is different from the effect of an assertion. The speaker does not explicitly commit himself to the implied proposition (Vanderveken and Searle 1985, p. 25), but only implicitly, as he is indirectly bound to the most plausible interpretation of the purpose of the move. This type of commitment is weaker than the explicit type, but its strength may vary according to the typicality of the implicature, or rather the conventionality of the indirect speech act. The committing force of an implicature depends on its interpretational ambiguity, that is, on the conventionality of the link between premise and dialogical conclusion (Morency et al. 2008, pp. 204–206). By implicating the conclusion, or rather the purpose and meaning of the move, the speaker can avoid defending it and simply refuse to acknowledge it as the intended purpose of the speech act. Implicatures allow such an ambiguity defense (the way out, see Capone 2009, p. 79) without incurring the risk of inconsistency (Morency et al. 2008, p. 210) even though it may strongly conflict with interpretative reasonableness to a greater or lesser degree (see also Capone 2009, p. 59). The



**Table 2** Commitment table for assertion and implicature

Dialogue move	Speaker's commitments (S)	Interlocutors' dark side commitments	Interlocutor's commitments (H)	Dialogical effects
<i>Assertion</i>				
Recommend ( <i>p; q</i> )	Defend ( <i>p</i> ) if challenged	Presuppositions and preparatory conditions		<i>H</i> : Assume <i>p</i> ; <i>H</i> : Challenge <i>p</i> ; <i>H</i> : Accept <i>p</i> . <i>H</i> : Really? <i>H</i> : Why? <i>H</i> : Ok. I won't hire him.
<i>p</i> : The pupil only attended classes. Therefore ( <i>q</i> ) he is not good.	<i>S</i> uttered <i>p</i> and <i>q</i> <i>S</i> needs to provide reasons to defend <i>p</i> and <i>q</i> if requested.	( <i>S</i> knows the pupil); ( <i>S</i> is in position to judge the pupil); ( <i>q</i> is a value judgment); ( <i>p</i> is a reason to believe <i>q</i> ); ( <i>H</i> is interested in <i>q</i> ); ( <i>H</i> knows that if someone only attended classes, he is not exceptional)		
<i>Implicature</i>				
Recommend ( <i>p</i> )	Defend ( <i>p</i> ) if challenged	Presuppositions and preparatory conditions		<i>H</i> : Infer <i>q</i> ; <i>H</i> : Accept <i>q</i> ; <i>H</i> : Ignore <i>q</i> ; <i>H</i> : Ask for commitment to <i>q</i> <i>H</i> : Ah, I understand. <i>H</i> : Ok. I won't hire him <i>H</i> : Are you saying that he is not good?
<i>p</i> : The pupil attended classes regularly. <i>Implicit—deriving from the context of letter of recommendation:</i> ( <i>q</i> . He is good)	<ul style="list-style-type: none"> <li>• <i>S</i> uttered <i>p</i>;</li> <li>• <i>S</i> needs to provide reasons to defend <i>p</i> if requested.</li> </ul>	( <i>S</i> knows the pupil), ( <i>S</i> is in position to judge the pupil), ( <i>H</i> knows the pupil), ( <i>p</i> is uttered to support <i>q</i> on the grounds of <i>k</i> ), ( <i>k</i> : <u>If someone only attended classes, then he is exceptional</u> ), ( <i>k</i> is generally not acceptable); ( <i>non-k</i> : <u>It is generally acceptable that if someone only attended classes, then he is NOT exceptional</u> ) ( <i>H</i> will draw a conclusion based on <i>non-k</i> ); ( <i>p</i> can be interpreted as leading to <i>non-q</i> )	<i>pp</i> : <i>non-k</i> (If someone only attended classes, he is not exceptional)	

hearer in such cases cannot directly challenge the implicature, but needs to commit the speaker to the conclusion first.

From this perspective, indirect speech acts are conceived as acts that have perlocutionary, or rather dialogical, effects different from the effects produced by the original act. Since they modify the interlocutors' commitments, the paradigm of the possible future dialogical moves that they can perform is provided and affected in a different fashion. The problem the following sections seek to address is to explain how such implicatures are produced, and how the mechanism underlying the apparent lack of dialogical relevance can be analyzed. If we consider (implicature 2) above, we can notice that the same sentence would produce rather different "perlocutionary" effects if written in a diary in the context of a description of a party (see Bell 1997). The captain's behavior would perhaps be tolerated, or at least justified, instead of being blamed. How do we explain such a difference in reactions? How do we analyze the relation between linguistic "facts", speech acts, and what they are actually aimed at achieving, the effect on the interlocutor (Verschueren 1977)?

### 3 The Conditions of Meaningfulness: Dialogical Predicates

What leads us to infer from the first mate's writing in the log that "The captain was sober all day" that this captain is an alcoholic? In Grice's theory, the mechanism that triggers such an inference is explained in terms of the breach of the principle of quantity. As the expression "not drinking" cannot bring the quantity of information needed to meet the standard of information in order for the communicative move to achieve an effect on the interlocutor, the sought-after informativeness needs to be found by reasoning. However, the reasons for this lack of informativeness are unclear. This problem has been tackled from a different perspective in Schutz's theory of thematic relevance (Greenall 2009; Schutz and Luckmann 1973). In this view, inferences are triggered by unexpected events. Just as an object flashing at intervals of a few seconds in the sky (which we expect to be disrupted only by the fixed lights of the stars) attracts our attention and triggers a pattern of reasoning, so unfamiliar linguistic moves are thematized and elicit processes of explanation. The need of an inference can be conceived as a relation between familiar expectations and an unexpected event. In non-linguistic situations our need to bring actions, facts and states of affairs to normality and stability (see Perelman and Olbrechts-Tyteca 1951, p. 253) leads us to find reasons or explanations to account for the unexpected. The problem is to define what an unexpected linguistic event is, and why it is abnormal. One possible explanation of such a phenomenon lies in the notions of presumption and presupposition.

#### 3.1 Dialogical Predicates and Dialogical Presuppositions

As mentioned above, dialogue relations can be conceived as the highest level of predicates. They connect dialogue moves and represent the cohesion of discourse.

However, the effect of a dialogue move depends on the syntactic and pragmatic coherence of its sequences. In their turn, sequences can produce an effect because the semantic and syntactic conditions of their components have been respected. Discourse can be thought of as a hierarchy of predicates: predicates within a sequence, predicates connecting sequences, and predicates connecting dialogue moves. If we maintain a dialogical perspective of meaning, we can include all the different conditions that such predicates impose on their arguments in the category of “pragmatic presuppositions” (Stalnaker 1974), which are requirements for the felicity of a dialogical move (Austin 1962, pp. 34; 51).<sup>1</sup> These propositions, which are taken for granted, may derive from different types of conditions imposed by semantic, syntactic or pragmatic predicates, all of which represent at different levels requirements for the felicity of the dialogue move.

Predicates of the lower level impose selectional constraints on their arguments (see Corblin 2003). For instance, the predicate ‘to drink’ presupposes a liquid (I cannot *drink* a sandwich), while ‘to eat’ requires a solid element (I cannot *eat* water) (McCawley 1971, p. 290; Antley 1974; Seuren 2010, p. 328). Inter-sequence predicates presuppose connections between states of affairs. For instance, consider the following statement:

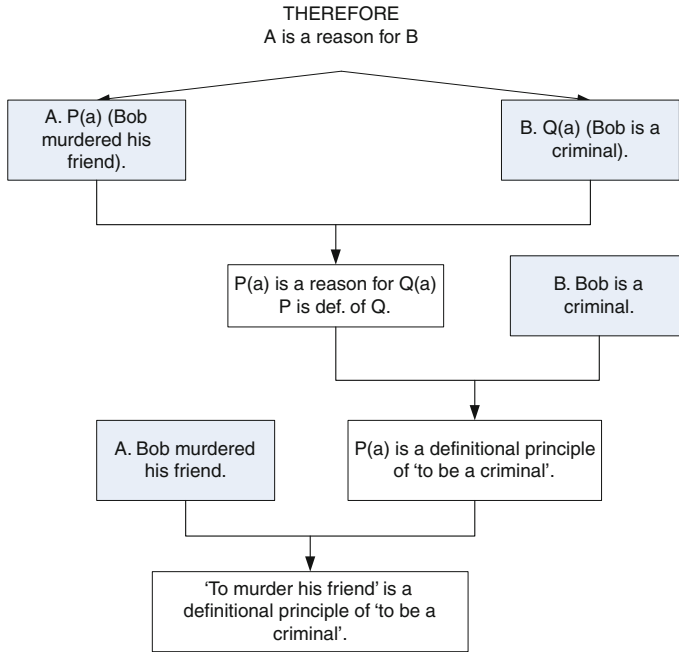
4. Bob murdered his friend. Therefore he is a criminal.

The predicate ‘therefore’ presupposes that there is a reason leading from the fact mentioned in the first sequence to the judgment expressed in the second sequence. We can represent the structure of this predicate in Fig. 1.

In this case, we can notice that the relation between the sequences is represented by the meaning of the connector, which establishes that the state of affairs of the first sequence is a reason to believe the state of affairs of the second sequence. Since the second sequence represents a principle of classification, the first sequence needs to be a principle of classification.

Finally, the conditions that a communicative intention imposes on its argument (Austin 1962, p. 30) can be described as presuppositions. For instance, I can ‘inform’ someone only if he can understand the fact or event I am talking of (placing it in a certain place and at a certain time) and is interested in it. Similarly, I cannot perform the speech act of ‘appointing’ someone if I am not entitled to do so, or if the person that I want to appoint has already been appointed, or is not a person (Austin 1962, pp. 34, 51). Moreover, high-level predicates connect the meaning of the discourse moves (Asher and Lascarides 2003, chap. 7) with their intended effect on the interlocutor (their dialogical conclusion). The role of such predicates is not to represent the logical relationship between the sequences, but the connection between a move and its dialogical conclusion (or goal) within a specific context. The level is not the text, but the meaning of the text. The question is not how and why a text expresses a meaning, but what meaning it expresses. For instance, if we consider (4) above as a statement in a dialogue, the first interpretative problem to be solved is what it is uttered for. In order to understand its intended dialogical conclusion, we need to

<sup>1</sup> These felicity or “meaning” (in Grice’s sense) conditions will be referred to simply as “presuppositions” in this paper, considering the dialogical or pragmatic meaning of this concept.



**Fig. 1** Presuppositions of inter-sequence predicates

take into consideration the whole dialogical setting, including the interlocutors and their mutual knowledge, their role, and the whole system of presumptions they share. For instance, in an everyday situation (4) can be uttered to elicit a negative value judgment from the hearer, or to lead him or her to adopt a specific course of action. Such an effect cannot be found in the words stated. It is presupposed as a condition of the statement imposed by a more abstract relational predicate. Depending on the communicative situation, the conclusion may vary. If uttered by a gangster, it may be used to praise the hearer; if stated by a judge, it is used to condemn him. We can represent the structure of a dialogical predicate in Fig. 2.

Such an abstract predicate is not placed between sequences in a text, but between moves in a dialogue. It does not establish the logically missing premise between sentences, but it assigns a move its function in a dialogue based on what the interlocutors share, and who the interlocutors are. Third-level predicates do not govern the logical and semantic meaning of a text. Instead, at this level the logical and semantic meaning becomes a prerequisite for understanding which conclusion, or effect, the interlocutor intends his hearer to reach with such a text. For instance, the aforementioned sentence would have obtained a different dialogical effect if uttered in a context in which the interlocutor maintains that killing friends is an act of bravery. Would the move be successful in such a case, or would it simply be an infelicitous, or mistaken, move? The speaker meant to achieve a specific conclusion, but the effect was completely different.

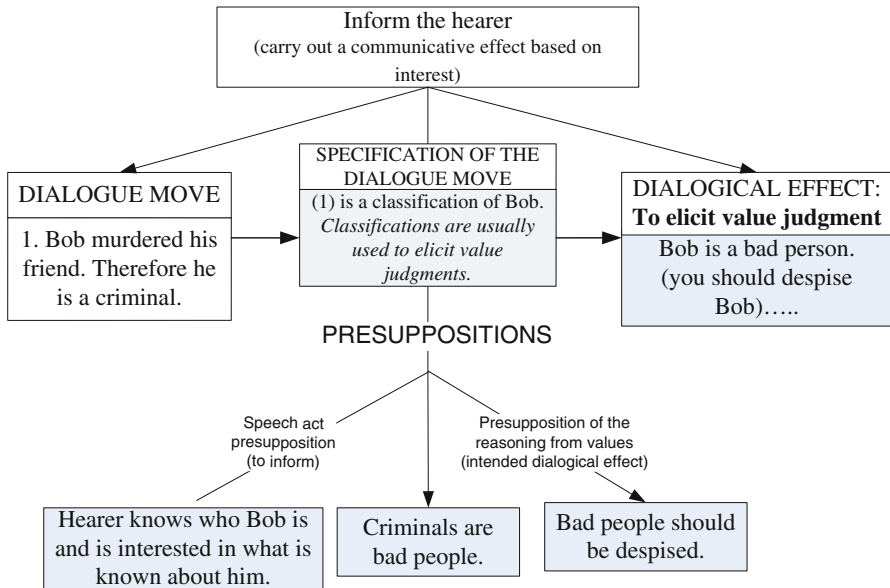


Fig. 2 Presuppositions of dialogical predicates

### 3.2 Dialogical Predicates and Contextual Information

What is the relation between speaker’s meaning, utterance meaning, and hearer’s meaning? An utterance is made to achieve a specific discursive goal, and its felicity, or meaningfulness, depends on whether such a goal can be achieved or not. However, how can the speaker frame the contextual knowledge needed to draw the correct inferences?

The relationship between the contextual information presupposed by a move and the meaning thereof emerges in cases in which the relation between a text and its function is not immediately clear. For instance, the first mate’s sentence in (implicature 2) above may pursue different goals depending on the presuppositions deployed by the dialogue move. If the first mate and the captain were at a party, the dialogical move “The Captain has been sober all day” would hardly achieve the purpose of triggering a negative judgment. In this example, the first mate’s move presupposes a set of information about the whole dialogical situation, including factual knowledge (what is a log book), the interlocutors’ roles (captain and first mate), and shared habits and common behavior. For instance, the move would have a different meaning if the hearer did not know that only unusual or exceptional facts or the ship’s route are recorded in the log book, or that ship captains are expected to be sober on duty.

Unlikely inter-sequence predicates (connectors) and discourse relations need to be reconstructed from discourse signs. Just as interrogative sentences are signs that the move intends to be a question, in (implicature 2) the context (writing the statement in the log book) is a sign that the speaker wants to convey exceptional

information. However, the relation between the sign and the (presumptive) purpose of the move is defeasible. In (implicature 2), the purpose of reporting in the log book an event commonly considered as ordinary seems to be missing. In case (3) above (mentioned again below) the purpose of the interrogative sentence (to elicit an answer presumed to be unknown) conflicts with the information provided by the sentence (presumed to be shared by the interlocutors):

### 3. Can you pass the salt?

In both cases the moves seem to lack the dialogical effect they are meant to pursue. The speaker's intention, represented by the predicate reconstructed from the linguistic signs, appears to be not fulfilled by the move. Move and intention appear to be in conflict and such a disagreement between presumed purpose and presumed content needs to be solved. In the first case, the intention of informing the interlocutor of an exceptional event is maintained, and it is the ordinary character of the captain's soberness that is reinterpreted. In the second case the process of interpretation affects the meaning of the presumed high-level predicate, leaving unaltered the common knowledge associated with the sentence meaning. This second type of re-elaboration of meaning is meta-dialogical, as it consists in a reinterpretation of the presumed purpose of the move. The hearer does not retrieve *the information* the speaker wants to convey, but he reconstructs *the act* he intends to perform through his move, the purpose he intends to achieve.

As argued above, dialogical relations can perform their function through presuppositions, which can be different in nature. Not only can facts, entities and qualities be presupposed, but also the dialogical setting and the values, presumptions and expectations of the interlocutors. There is, however, a difference between a predicate and its use. A predicate requires a set of meaningfulness conditions, or presuppositions, to be fulfilled. However, such conditions depend on information that cannot be known. How can the speaker know the other's mind? How can he know that the hearer is interested in what he is talking about? How can he know that the hearer shares some specific piece of information? The speaker can only *presume* that some pieces of information are shared, or that the hearer is interested in some facts, entities or events and that shares specific values. Shifting the focus from predicates to agents, we need to analyze the linguistic notions of predicates and presuppositions from an epistemic perspective. In the next section, the relationship between the speaker and the use of predicates will be investigated, and the presumptive grounds of presupposition and meaning examined.

## 4 Framing the Presumptions

In logic, presuppositions need to be true in order for the sentence to be verifiable or meaningful (Strawson 1952; Levinson 1983, p. 168). If we consider a more relativistic notion of truth, they need to be present at least in a possible world, the interlocutor's world. In order for the utterance "I have assassinated Bob" to make sense, Bob needs to be known to be a human being. However, a dilemma seems to arise: How is it possible to set a possible world independently of the hearer? Or how

is it possible to know another's "world", or rather, mind? A possible answer can be found by combining the two horns of the dilemma. On one hand, presuppositions can be conceived as acts, and on the other, as forms of guesses.

Ducrot first introduced the notion of the act of presupposing: In his view, by subordinating a statement to the acceptance (or truth) of its presuppositions, the speaker performs a specific implicit speech act (Ducrot 1968, p. 87):

Comme le joueur d'échecs doit accepter le champ de possibilités que crée pour lui la manœuvre de son adversaire, le participant d'un dialogue doit reprendre à son compte certains au moins des présupposés introduits par les phrases auxquelles il répond.

For instance, if I utter the sentence "I went shopping with my girlfriend yesterday", I "presuppose" that I have a girlfriend. I establish a dialogical world in which I have a girlfriend, and only in such a world can my statement make sense. In Ducrot's view, by presupposing I modify the dialogical situation, and set the boundaries of the interlocutor's future actions (Ducrot 1972).<sup>2</sup> Presupposing is conceived as the act of setting the conditions for the continuation of the future dialogue game (Ducrot 1991, p. 91). The failure to accept a presupposition amounts to a refusal to continue the dialogue, something like knocking over the chessboard. This dimension of presupposition is clear in the dialogical predicates. For instance, in (implicature 2) the meaningfulness of the first mates' move depends on the conditions that "what is written in the log book is usually exceptional" and "the interlocutors know the captain". The speaker actually frames these presuppositions by performing the act in a specific context. In other words, he conveys the meaning not only through the explicit act of assertion, but also through the implicit act of presupposing.

However, some presuppositions cannot be accepted by the interlocutor. For instance, if the interlocutor does not know who Bob is or what train station the speaker is talking about, the presuppositions of the utterance "Bob is waiting next to the train station" cannot be accepted because they cannot be reconstructed. From a pragmatic perspective, Bob and the train station cannot be identified or connected with the hearer's knowledge, even though their existence can be assumed and retrieved from the semantic information (Asher and Lascarides 1998). The utterance "Bob's sister went to the cinema last night" presupposes that Bob has a sister; such a presupposition can be *reconstructed* from the sentence structure (Lewis 1979, p. 340), but cannot be *accepted* by a hearer who knows that Bob has no sisters. The difference between reconstruction and acceptance of a presupposition is clear in the following absurd statements (Chesterton 1904, p. 53):

<sup>2</sup> In Ducrot's view, the communicative game resembles a chess game, in which the possibilities are set by means of presuppositions: "dans ce combat simulé –qui substitue aux possibilités réelles, dues à la force, les possibilités morales dues aux conventions- les règles permettent aux joueurs de se contraindre mutuellement à certaines actions, et de s'en interdire certaines autres" (Ducrot 1968, p. 83); "pour trouver une description sémantique satisfaisante d'un phénomène comme la présupposition, phénomène qui est repérable selon des critères syntaxiques précis, il nous a été nécessaire de la relier aux règles qui définissent conventionnellement le jeu du langage, et de décrire la présupposition par rapport aux manœuvres dont elle fournit le thème: sa réalité, comme celle d'une règle des échecs, consiste seulement à rendre possible un jeu" (Ducrot 1972, p. 27).

I can faintly resist when a man says that if the earth were a globe cats would not have four legs; but when he says that if the earth were a globe cats would not have five legs I am crushed.

These two conditional propositions depend on the presupposition “The number of cat legs depends on the shape of the earth” that can be reconstructed, but not accepted by a reasonable hearer. Moreover, the second sentence presupposes that cats have five legs, which is contrary to common experience. In order to account for the meaningfulness of a move, we need to consider the hearer’s knowledge. But how is it possible to know the other’s mind?

Stalnaker (1974) and Burton-Roberts (1989) point out that the act of presupposition does not imply prior assumption of the interlocutor’s knowledge of the presupposed proposition. They maintain that from a linguistic point of view a predicate needs some conditions to be fulfilled. However, the setting of such conditions cannot be considered as an act of displacing a world, but rather a dialogical act of guessing on the grounds of shared information (Stalnaker 1998, p. 8). From an argumentative perspective, this is an act of presumption (Freeman 2005, p. 43), defined as reasoning in lack of evidence (Rescher 1977, p. 1). In law, presumptions have been analyzed in three components (Ullman-Margalit 1983, p. 147): (1) the presumption-raising fact in a particular case at issue, (2) the presumption formula, a defeasible rule that sanctions the passage from the presumed fact to the conclusion, (3) the conclusion, which is a proposition that is presumed to be true on the basis of (1) and (2). Rescher (2006, p. 33) helpfully outlined the structure of this type of inference as follows:

**Premise 1:** *P* (the proposition representing the presumption) obtains whenever the condition *C* obtains unless and until the standard default proviso *D* (to the effect that countervailing evidence is at hand) obtains (Rule).

**Premise 2:** Condition *C* obtains (Fact).

**Premise 3:** Proviso *D* does not obtain (Exception).

**Conclusion:** *P* obtains.

In law, the proposition representing the presumption formula (*rule*) can be drawn from rules or policies of law (presumptions of law) or from experience (presumptions of fact). They are both grounded on the same probabilistic nature, but while presumptions of law are rules, presumptions of fact are mere connections grounded on experience or probability of any kind (Thayer 1898, p. 314; Greenleaf 1866, p. 49; see McBaine 1938, p. 525). Such rules are defeasible, meaning that they hold until an exception or a contrary argument is advanced. In other words, they *may* shift the burden of proof depending on the probability of the connection between the fact (*C*) and the conclusion (*P*) (Best et al. 1875, p. 571; see also Walton 1993, pp. 139–140).

It is possible to describe as presumptive several ordinary communicative processes as well (Kauffeld 2003, 1998). When the speaker performs a dialogical move whose dialogical effect depends on the hearer’s acceptance of its presuppositions, he acts in conditions of lack of evidence. He cannot have time or resources to verify everything, and therefore he can only presume that the hearer accepts the



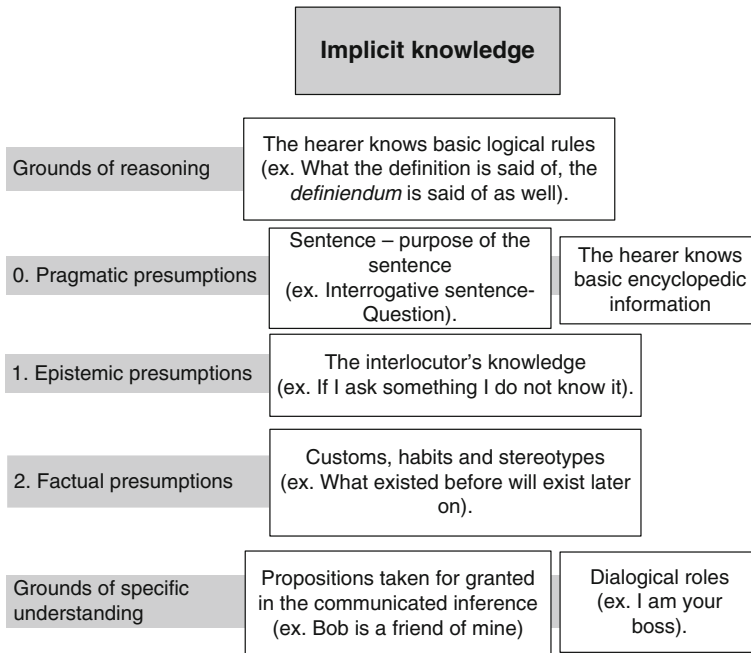
preconditions of his move based on generally accepted principles. For instance, a speaker can utter to a friend that “I met Bob yesterday” because he is acting on the presumptions that “People know their friends” and that “Information relative to a friend is interesting”, and because he is relying on the reasoning from classification leading to the conclusion that “Bob is the hearer’s friend” (Kauffeld 2003, p. 140; cf. Kauffeld 1995, p. 510). As Kauffeld noticed, such ordinary presumptions do not always shift the burden of proof. However, they place on the interlocutor a different type of burden, the “risk of resentment, criticism, reprobation, loss of esteem” in the event he or she does not accept a presumptive conclusion (Kauffeld 1998, p. 264). If we apply such a principle to the epistemic presumptions underlying presupposition, we can notice that the risk of negative judgment is often associated with the presumptions of knowledge or interest. For instance, a refusal of the aforementioned presumptions can provoke replies of the kind “Everyone knows his own friends!” or “How can you be disinterested in your friends?” The force of an act of presupposing also consists of an implicit threat of a negative ethical, epistemic or communicative judgment.

In ordinary reasoning we also use a different type of presumption, less strong than the ones analyzed by Kauffeld, confined in the field of epistemic or meta-dialogical presumptions (hereinafter referred to as presumption<sub>1</sub>). This weaker kind of presumption can be illustrated with an example. For instance, the meaning of (implicature 2) above depends on the presumption that “Captains are usually sober”. Such rules of inference are close to the legal notion of presumptions of fact, and represent a form of reasoning drawn from the ordinary course of events and the common associations between facts or entities (hereinafter referred to as presumption<sub>2</sub>). In everyday reasoning, we use such presumptions<sub>2</sub> whenever we talk about a person’s character or most of the objects by which we are surrounded. We go to the supermarket presuming that it has not been destroyed. We trust a friend presuming that he has not become unreliable in the last few hours. The character of our friend or the continuance of existence of the supermarket are not proven, but simply inferred from a type of knowledge that does not reflect how things are (or how things are perceived by us), but how things are usually related to each other. Finally, as mentioned above, the relationship between a sentence and its meaning, or the act performed by using it, can also be conceived as a presumption of a kind: we can call it a pragmatic presumption, or presumption<sub>0</sub>.

Presumptions are therefore a specific type of shared knowledge, which can be represented in Fig. 3.

If we analyze dialogues, we can notice how there are different types of presumptions. Presumptions may be factual, namely be about a fact or a state of affairs. They can be linguistic, that is, and concern our expectations about the purpose of a move. They can be epistemic, and regard the interlocutor’s knowledge or commitments. For instance, I can presume that the speaker means what he says, that an interrogative statement is used to express a question, or that the answer of a question is not known by the hearer.

The dialogical act of presupposing is therefore distinguished from the presupposition. While the presupposition is a linguistic fact, referring to the condition of meaningfulness, presupposing is the act of using meta-dialogical or dialogical



**Fig. 3** Types of shared knowledge

presumptions and subjecting the meaning of the move to them. When we speak, we not only assert, request, and command, but also “presuppose”, that is, we ground the meaning of our move on presumptions.

## 5 Implicature Triggers

Grice (1975, pp. 44–45) distinguished between conventional and conversational implicatures. He notices a difference between (implicature 1), (implicature 2) or (implicature 3) above, and the following (Grice 1989, p. 25):

### Implicature 4: Brave Englishmen

He is an Englishman. Therefore he is brave.

In (implicature 4) the implicit meaning is already determined: the second sentence is indicated to be a consequence of the first, and the utterance itself would be false or meaningless if the consequence did not hold or follow from the antecedent. In (implicature 1) there is nothing in the linguistic structure of the sentence that indicates that the type of job Bob is carrying out is not completely honest. In the first case the implicature is within a text, and is governed by a second level predicate. In the second case the dialogical move is connected to an implicit effect by a third level predicate. Why does the speaker say that the friend has not been to prison yet, considering the fact that a bank employee is commonly presumed not to incur the

risk of being imprisoned? Implicatures of this latter kind (hereinafter simply referred to as implicatures) can be considered as explanations (see Green 2010) of an exceptional communicative event, and, in particular, of an apparent lack of dialogical effect. As seen above, we usually thematize what is unusual because of our need to bring situations to normality and stability (Schutz and Luckmann 1973). However, how can a lack of dialogical effect be brought about and solved? A possible solution can be found in the conflicts and explanations of presumptions.

### 5.1 Implicatures as Rejections of Factual Presumptions

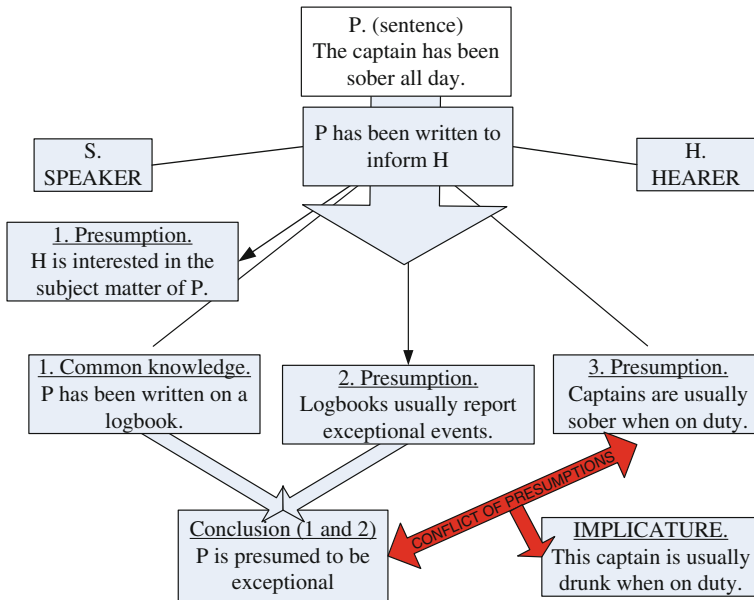
Implicatures, as mentioned above, are triggered by an unusual event, and in particular by a possible communicative failure caused by inconsistencies between pragmatic presumptions (presumptions<sub>0</sub>) and factual presumptions (presumptions<sub>2</sub>). The possible communicative failure can be solved and explained by rejecting a factual presumption.

Conflicts of presumptions represent inconsistencies between what a move is expected to perform by representing or altering reality, and how things are commonly expected to be. For instance, we can consider the typical cases of implicature analyzed by Grice. In (implicature 2) above, a log book is presumed<sub>0</sub> to report significant incidents as well as other noticeable information on the route or routine events. On the other hand, a captain's soberness cannot be considered as an exceptional event, as captains are usually presumed<sub>2</sub> to be sober. In this case one of the two presumptions does not hold, and the weaker of the two, the factual expectation in this case, is more likely to be rejected. The inconsistency triggering the implicature is not a real contradiction. It is rather a conflict of expectations which we can represent in Fig. 4.

In (implicature 3) the reader of the laconic recommendation letter is faced with a conflict between what a reference letter is presumed<sub>0</sub> to state, namely all the exceptional academic qualities of the student, and the fact that students are presumed<sub>2</sub> to attend classes regularly and master spoken and written English. The presumed communicative purpose conflicts with the presumed behavior of a student. As a result, what is presumed<sub>0</sub> to be exceptional is actually presumed<sub>2</sub> to be absolutely unexceptional. Also in this case, the purpose of informing the colleague of a student's abilities is maintained and the content of the move (his judgment) is modified.

The relation between the specific purpose of the move and its apparent lack of function also emerges in (implicature 1). In the conversation about Bob, the statement "he has not been to prison yet" is presumed<sub>0</sub> to answer a question about Bob's job by providing information unknown to the hearer. However, by performing such a move, the speaker triggers a presumption incompatible with the purpose of the move: bank employees are presumed<sub>2</sub> not to incur the risk of being convicted. This apparent contradiction of expectations leads the interlocutor to reject the factual presumption and interpret it as stating that Bob's job is not totally legal.

The conflict of presumptions can lead to a modification of the factual presumptions. In this view, a dialogue move advancing a presumption inconsistent with the one deployed by the discourse relation can become a request to draw a



**Fig. 4** Conflicts of presumptions in (implicature 12)

conclusion in contradiction with the factual presumption. A captain is presumed to be sober, but in (implicature 2) his sobriety is exceptional. Attendance is presumed to be irrelevant for a recommendation, but in (implicature 3) it is the only thing the student is said to excel in. Normal employees are presumed not to risk prison, but in (implicature 1) it is exceptional that Bob has not been convicted yet, considering the nature of his job.

## 5.2 Implicatures as Reinterpretations of Dialogical Predicates

Questions are usually presumed to express demands, but they may be used for other purposes. From a dialogical perspective, where the actions of the interlocutors need to be described in terms of reciprocal obligations, we can call such predictions or rules of interpretation linguistic, or rather pragmatic presumptions, that is, expectations about how an act needs to be understood (Kauffeld 2003, p. 142; 1995, p. 511). The linguistic form of a speech act is presumed to indicate a specific act. For instance, an utterance is presumed<sub>0</sub> to be used for its typical use, namely to convey the information meant by its words, just like a question is presumed<sub>0</sub> to be used to make a request (Lyons 1977, p. 848). However, sometimes questions and assertions are uttered to command, or some questions are asked to affirm something (Meibauer 1986). From our perspective, the mechanism triggering the implicature in such cases is a conflict of presumptions which is not solved at the factual level (the level of our knowledge of how things are) but at the level of the purpose of the dialogical move. The presumption which is changed is not an expected state of affairs

(presumption<sub>2</sub>) but the link between what has been said and its purpose (presumption<sub>0</sub>). Consider this question again:

**Implicature 5: Indirect Speech Act**

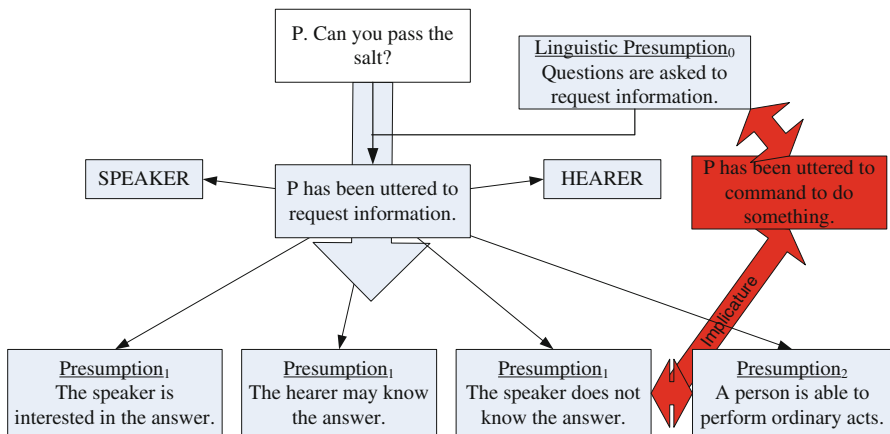
Can you pass the salt?

The conflict in this case is between an epistemic and a factual presumption. The speaker is presumed<sub>1</sub> not to know the answer of the question (otherwise it would be pointless to ask it), but at the same time he is presumed<sub>2</sub> to be able to carry out elementary actions (it would be meaningless to ask “Can you mutter?”). Such a conflict needs therefore to be solved, and in particular the first presumption needs to be explained. The possible explanation is that the question does not express a request for information, but a request to perform the action whose condition is expressed in the propositional content (Fig. 5).

A similar type of implicature is triggered by leading questions. When leading questions are used in court, the speaker presumes<sub>1</sub> that both parties already know the answer. However, the purpose of such questions is not to retrieve information, but to lead the interlocutor to express a commitment. For instance, the question “You were at the scene of the crime, correct?” is aimed at eliciting an explicit commitment to a proposition. Similarly, conflicts can be triggered by presuppositions such as in the following cases:

1. Why are you so silly?
2. Yesterday I went shopping with my girlfriend (*the speaker has not told anyone before he is in a relationship*).

In (1) the speaker utters a question which is grounded on the presupposition “you are silly”. He presumes<sub>1</sub> that the hearer accepts or knows such a proposition (see Burton-Roberts 1989). At the same time, however, in an ordinary context the hearer is presumed<sub>2</sub> not to accept a negative classification of his person. Such a conflict of presumptions highlights a future communicative failure (the presupposition will not



**Fig. 5** Rejecting pragmatic presumptions

be accepted). Therefore, the purpose of the move needs to be explained otherwise: instead of requesting information, the speaker intends to assert what is presupposed without committing himself to such move. The structure of the implicature trigger in (2) is similar: in this case the speaker utters the statement in a specific context in which the presupposed information cannot be presumed<sub>1</sub> to be shared.

While factual implicatures modify the content of the act (a letter is written to inform that the student is not exceptional; a report is written to inform that the sobriety of the captain is exceptional), pragmatic (or linguistic) implicatures modify the interpretation of the linguistic form of an act (a question does not express a request; a statement is not intended to inform). Obviously, indirect speech acts often used with the same non-prototypical intended effect tend to crystallize the complex process of interpretation in a new presumptive meaning. For instance, polite questions (“Can you help me with this job?”) are usually considered as forms of polite requests. The conflict of presumptions and explanation in these cases is avoided. A new presumption, like a shortcut, bypasses the complex process of reconstruction of meaning.

### 5.3 Nonsense and Implicature Triggers

Implicatures have been explained as conflicts of presumptions, or rather, conflicts between different types of presumptions. As mentioned above, presumptions are forms of knowledge that work in conditions of lack of knowledge, and their purpose is to move the discussion further. Implicatures account for apparent failures in expectations, which can be solved by accommodating presumed knowledge considering new evidence. However, sometimes it is not possible to “save” the meaningfulness of a dialogue move. For instance, we can consider the following statement written in the log book of a ship:

#### **Implicature 2bis**

The captain is tall today.

If the hearer cannot reconstruct the lacking information needed to make the statement informative, the purpose of the move cannot be retrieved. In (implicature 2) above, if the crew knew that the captain was a teetotaler, the statement would be meaningless. At a different level, writing the same statement on a ship without a captain would be equally infelicitous, as the speaker would presume<sub>1</sub> that the hearer knows a proposition that is not shared. In this case the presumption would conflict with a fact, and cannot be saved unless the relationship between names and reference is renegotiated (was the speaker actually meaning an officer acting as a captain?).

False presumptions can provoke nonsense at all levels. For instance, the act of asking a question presumes that the speaker does not know the answer. However, when uttered in a context in which the hearer evidently knows the answer (“Are you a human being?”), the question makes little sense.<sup>3</sup> For instance, the request for the

<sup>3</sup> In this case, we can notice that the speaker risks a negative judgment (“Are you teasing me?”).

salt or the time (Can you tell me the time?) cannot be saved when the hearer cannot move or is in a swimming pool and has not a watch. Expressions of desire (“I would like a coffee”) cannot perform their intended purpose if uttered in the wrong place (at the butcher’s).

## 6 The Argumentative Structure of Implicatures: Reasoning from Best Explanation

Green pointed out (Green 2010, pp. 64–65) that indirect speech acts can be interpreted as forms of inference from best explanation. The assertion or the question is from such a perspective a clue, a sign requiring a process of explanation that can lead to only one possible conclusion, or multiple potential explanations:

All else being equal, the best explanation of my asking whether you can pass the salt is that I mean to be requesting that you do so. All else equal, the best explanation of my remarking that you are standing on my foot, particularly if I use a stentorian tone of voice, is that I mean to be demanding that you desist. By contrast, it is doubtful that the best explanation of my asking whether you intend to quit smoking is my intention to suggest that you do so. Another explanation at least as plausible is my hope that you do so.

Such a treatment of indirect speech acts can shed light on the more general phenomenon of implicatures.

### 6.1 Implicatures and Reasoning to One Explanation

Inconsistencies in presumptions can be treated as signs for explanations. The structure of the reasoning underlying the relationship between a fact and an explanation can be represented as an argument scheme. In Walton (2002, p. 44), the process of explaining an event has been described in the following scheme (cf. Harman’s inference to the best explanation: Harman 1965):

#### Argumentation Scheme: Best Explanation

*F* is a finding or given set of facts.

*E* is a satisfactory explanation of *F*.

No alternative explanation *E'* given so far is as satisfactory as *E*.

Therefore, *E* is plausible, as a hypothesis.

This process of reasoning consists of two steps: the abduction of an explanation, and the comparison between the explanations. In abductive reasoning a state of affairs needs to be explained, and a cause or an antecedent needs to be found. For instance, if we notice the tracks of a bear on a path, we can conclude that a bear has passed by, as we rely on the causal rule providing that if a bear walks on a path it usually leaves tracks on it. Similarly, in an event of apparent nonsense, we will try to explain and solve the communicative failure by giving a word a new meaning, or reconstructing some missing pieces of information. Such a passage proceeds from

the consequent of an inference to its antecedent. However, more than one explanation may be found for the same event or fact. For instance, bear tracks may have been made by a practical joker or by an animal similar to a bear. The second step consists in comparing the possible explanations and establishing the best one based on the evidence provided. For instance, the presence of a bear is the most likely cause of bear tracks in normal conditions. A clear example of reasoning from explanation in which the hearer cannot perform the second step of reasoning is the following conversation between a girl and her boyfriend (Greenall 2009, p. 2301):

He assures her that she isn't a bad girlfriend, and asks her to stop saying that she is.

The following is the girl's description of their ensuing conversation:

(3) then he started talking about something else, and I looked upset, cause i was still crying and he was all "whats wrong" so I told him i felt like a shitty gf.. and he said "I thought we dropped that" and I was all "you asked me what was wrong" and *he went silent*. so I dropped it. now, he went to bed and I am left here crying again.

In this example, the silence of the boyfriend is an extremely effective dialogical move (for the notion of silence as an indirect speech act, see Ephratt 2008, p. 1922). He provides no clues to explain his failure to continue the discussion, and in doing so he opens up an extremely wide paradigm of possible explanations (the boyfriend is angry at her; the boyfriend wants to leave her; the boyfriend does not want to talk to her anymore ...), none of which apparently prevails over the others.

From this argumentative perspective, we can consider implicatures as guided arguments from best explanation. The dialogical force of an implicature consists in leading the interlocutor to draw one specific conclusion. The structure of the implicature curbs the possible explanations and reduces them to one. Such a reasoning structure can be described using the concept of presumption and conflict of presumptions. As seen above, implicatures are triggered by conflicts of expectations. In this perspective, a dialogue move is expected to achieve a specific effect, but the facts mentioned are expected to have qualities different from what is required by the dialogical predicate. Such a conflict provides a path of interpretation, narrowing down the possible explanations.

## 6.2 Conversational Implicatures as Explanations

Presumptions can be different in nature, and conflicts between them can be triggered and solved in different fashions, depending on the context. The first crucial dimension of the explanatory origin of implicatures is the hierarchy of presumptions. As noticed above, implicatures may derive from defaults of pragmatic, factual, or epistemic presumptions. These presumptions are ranked according to their defeasibility, which can be affected by the evidence available to the interlocutors or the context of dialogue. For instance, pragmatic presumptions are theoretically stronger than factual presumptions, as it would be more reasonable to assume that additional information is not known to the hearer than that the speaker



intends to perform a different speech act, or not communicate at all, or refuse to continue the dialogue. However, in implicature 5 and other indirect speech acts the context provides evidence enough to support the conclusion that the factual presumption is not subject to default. Therefore, the weakest presumption becomes the pragmatic one. This model allows one to account for interpretation in specific contexts of dialogue, where communication is not cooperative. For instance, in law one of the most important rules of cross-examination is that the lawyer needs to avoid possible evasions (Goodwin 2001). In the following case of cross-examination, the lawyer asked a question to the defendant, and retrieved the answer by resorting to implicatures (*Bronston v. U.S.*, 409 U.S. 359, 1973):

### **Implicature 6: Presumption of Evasion**

“Q. Do you have any bank accounts in Swiss banks, Mr. Bronston?”

“A. No, sir.”

“Q. Have you ever?”

“A. The company had an account there for about 6 months, in Zurich.”

The defendant actually held a bank account in a Swiss bank, but was found to have testified the truth as he never stated the contrary. The lawyer should have avoided being cooperative, and should have led the defendant to a direct and explicit answer to his question. We can notice that in this case the speaker and the hearer differently rank the presumptions. The lawyer takes into consideration the ordinary hierarchy established in normal dialogues, whereas the defendant grounds his answer on a different one, based on the strongest presumption that the speaker can be expected to be uncooperative. This difference in hierarchies can explain the misunderstanding that derived from the defendant's answer. The presumption<sub>2</sub> that “the company's past possession of a bank account does not correspond to the fact that defendant has never held one” conflicts with the presumption<sub>0</sub> that “an affirmative statement in reply to a question is presumed to be intended to answer it”. In ordinary conversation the explanations conflicting with presumptions<sub>0</sub> are usually weaker than the corrections of the factual ones. However, in legal cross-examination the defendant is presumed to be unwilling to cooperate and answer the questions. For this reason, the presumption of reply was rejected and the factual one became the criterion of interpretation of the move.

Implicatures involve two steps of explanatory reasoning. The first step is the explanation of an apparent lack of dialogical effect. For instance, in (implicature 2) above, the sentence “The captain was sober all day” written in a log book is apparently infelicitous or purposeless. An assertion in a log book needs to be exceptional to be informative, and the fact that a captain was sober is not informative. The interlocutor can explain such inconsistency in different ways: (1) the speaker made a mistake; or (2) he wanted to communicate something obvious; or (3) he wanted his affirmation to be considered as exceptional. The best explanation in this case is grounded on the presumption<sub>0</sub> that the speaker wants to inform the hearer, and therefore the statement needs to be considered in the given context as exceptional. The second reasoning step consists of the process of providing a specific explanation, in this case the exceptionality of the captain's

soberness. A paradigm of possible explanations is opened: for instance, (1) that day all the crew were drunk (there was a party); or (2) captains are usually drunk; or (3) the captain was sick and needed to drink to recover; or (4) the captain was an alcoholic. Also in this case, the best explanation is the one rebuttable by the weakest contrary presumption<sub>2</sub> (see Asher and Lascarides 1995). If we consider that: (1) that day there was no party on the ship, that (2) the crew are usually not drunk on duty, nor is the captain, and (3) that illness is not usually treated with alcohol, we need to accept the conclusion that the captain was a drunkard. Such presumptions<sub>2</sub> represent relative principles of classification or inference in lack of evidence. For instance, in our case it is not absolutely true that captains are always sober when on duty, but, all being equal, it is more probable to find a sober captain than a drunk one (see also Quasthoff 1978). The process of establishing the best explanation is a type of defeasible reasoning from paradigms (Macagno and Walton 2010). The elements of the paradigm are the possible explanations, and the alternatives are excluded when confronted with contrary presumptions. The remaining explanation is the best one within as it is relative to the paradigm taken into consideration. We can represent the two-step reasoning process in Fig. 6.

Reasoning from explanation can be applied to analyze the reasoning process underlying other types of implicatures. For instance, consider the following example:

#### **Implicature 7: Well-Dressed Speaker**

- A. How did you like the guest speaker?
- B. His suit was really nice.

B's answer is apparently not informative. The question dialogically presumed an answer concerning the quality of the speaker as a speaker, and the answer is a comment on his clothes and not on his ability. The presumption<sub>0</sub> that the speaker is reasonable and wants to answer the question conflicts with the presumption<sub>2</sub> that the quality of clothes is not a sign of the quality of public speech abilities. This second presumption is weaker and defaults, and the relation between the quality of clothes and the quality of forensic abilities needs to be explained. Several explanations can also be found in this case: (1) the speaker was good because well dressed; or (2) people in that context judge a speaker from his clothes; or (3) the only good thing about the speaker was his suit. The last explanation broadens the scope of the judgment from the speaker's forensic abilities to the whole person, and points out the best quality of the person at that given time, excluding all the other abilities such as being brilliant, funny, interesting and so on.

The two-step reasoning from best explanation can also account for the recommendation letter case (implicature 3). The implicature is triggered by an inconsistency. A recommendation letter is presumed<sub>0</sub> to provide useful information on the academic skills of an applicant. However, this presumption<sub>0</sub> is in conflict with the presumption<sub>2</sub> that usually a student's attendance and command of English is not an exceptional skill. Such a conflict of presumptions is explained by interpreting the letter as informative for the student's candidature. This interpretation can be explained in different ways: (1) a command of English is the only fundamental requirement for the job; (2) attendance is unusual at universities and a

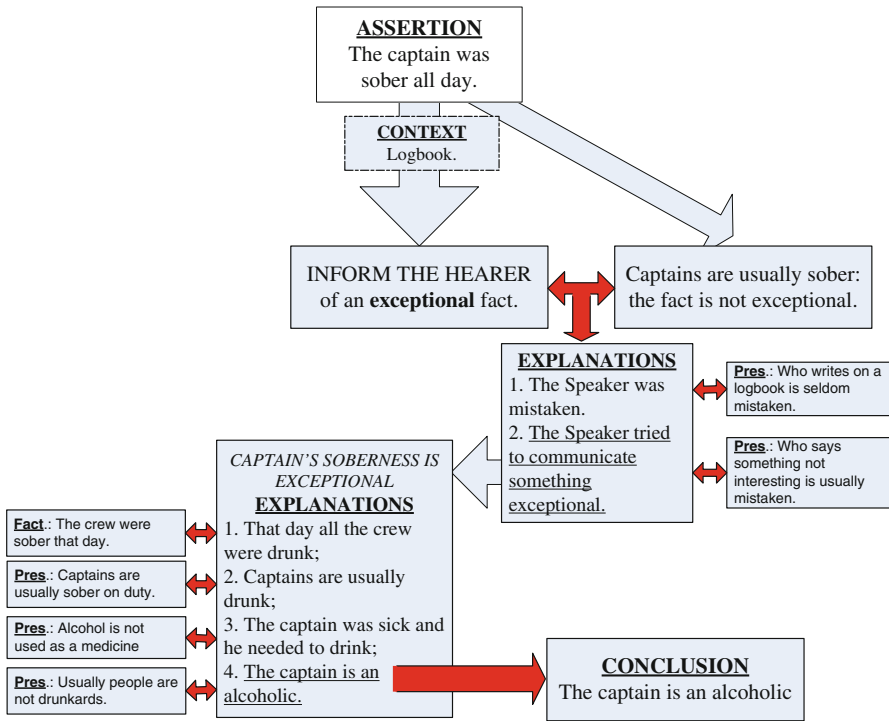


Fig. 6 Implicatures as reasoning from best explanation

sign of exceptionality; (3) the professor does not know any other information about the student; or (4) no other qualities of the student can be cited apart from his attendance and linguistic abilities (Walton 1999, p. 64). Only the last explanation is plausible in the given context, as professors are presumed<sub>2</sub> to know the qualities of their students, and the qualities mentioned are not suitable for supporting an application for an academic post.

To sum up, conversational, or rather dialogical, implicatures involve a conflict of presumptions that trigger a two-step process of reasoning from best explanation aimed at finding an explanation for the apparent communicative failure.

### 6.3 Conventional (Linguistic) Implicatures as Explanations

Conversational (or dialogical) implicatures can be analyzed in an argumentative perspective as the correction of a factual presumption conflicting with a pragmatic one. We can interpret conventional (or more generally linguistic) implicatures as the explanation of an inconsistency through the correction of a pragmatic (or linguistic) presumption, which may refer to the meaning of a speech act, or a predicate.

In linguistic implicatures the presumptive relationship between words, sentences or utterances and meaning or dialogical goal defaults and needs to be interpreted. For instance, the presumed<sub>0</sub> request for information “Can you pass the salt?” needs to be explained because it conflicts with the presumption<sub>1</sub> that its answer is expected

to be known by everyone. In this case, the process of selecting the best explanation works differently from dialogical implicatures. The hearer can explain the apparent contradiction by attacking either the epistemic presumption (the ability to pass the salt in this case cannot be known) or the pragmatic presumption (the speaker's communicative intention is not to request information). In an ordinary context, the best explanation is the second one, which in its turn needs to be explained. In the paradigm of the possible moves that can be performed through that utterance, the hearer excludes the informative and commissive act. The only remaining possibility is that the speaker intends to advance an order, which is a directive act of a different kind suggested by mentioning one of its preliminary conditions (the ability to carry out the action).

Linguistic implicatures can be at the semantic level. Sometimes the explanation concerns the scope of the negation, such as in cases like “I do not want *some* cake; I want *all* the cake” in which the hearer needs to interpret the negation as not acting on the relationship between sentence and reference, but on the adequacy of a linguistic choice. Other cases are more complex, such as the following one:

### **Implicature 8: Linguistic implicature**

It is not freezing (or cold) today (*context: both interlocutors are in the street*)

This assertion is poorly informative, as the hearer is presumed<sub>1</sub> to know the temperature (he is standing in the street). Moreover, the negation of a possibility does not provide specific information on the weather conditions. As mentioned above, every negation opens a set of positive alternatives or explanations (Pap 1960, p. 53; see also Gatti 2000). For instance, the statement, “This coat is not red” does not specify a quality, but a paradigm of the possible colors of the coat (blue, black, gray, etc.). The negation does not provide precise information, but excludes one element from a paradigm of possibilities. If a speaker says that, “This coat is not red” he does not provide any specific information, but only excludes one color from the paradigm (Macagno and Walton 2011). Such an assertion would be informative only in contexts where a coat not red is exceptional or unusual. How then can the assertion “It is not freezing (or cold) today?” be informative? The negation of such a predicate opens up a range of possibilities as represented in Fig. 7 (see Ducrot 1980).

Scalar predicates, such as ‘cold’ or ‘beautiful’, are lower-bound, meaning that, the negation usually implicates the affirmation of a paradigm of elements ranked on the scale just below the negated item. For instance, ‘not freezing’ implicates that it is cold or even cool (even though it rarely implicates that it is mild or warm), while ‘not cold’ usually implicates that it is cool or mild. However, it would be much more informative to state the exact temperature. Moreover, the speaker presumes<sub>1</sub> that the hearer already knows the temperature. The lack of informativeness needs to be explained through a reinterpretation of the purpose of the sentence. If we analyze (implicature 8), we notice that it is usually meant to express a positive condition. In an ordinary context, it would be extremely unsound to say “What a pity, it is not freezing today”, even though the sentence “What a pity, it is cold today” would not be perceived as strange. The first judgment would be reasonable only in some specific contexts in which the values commonly associated to ‘freezing’ and ‘mild’

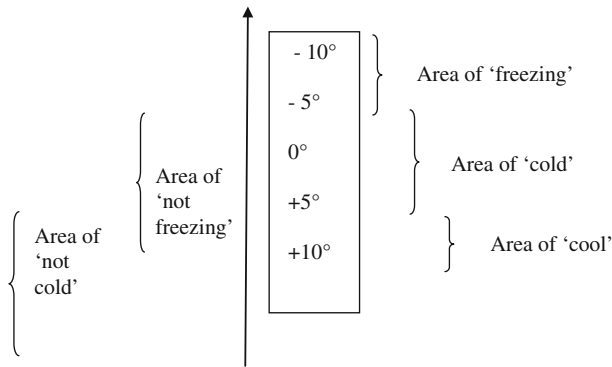


Fig. 7 A scalar paradigm eliciting an implicature

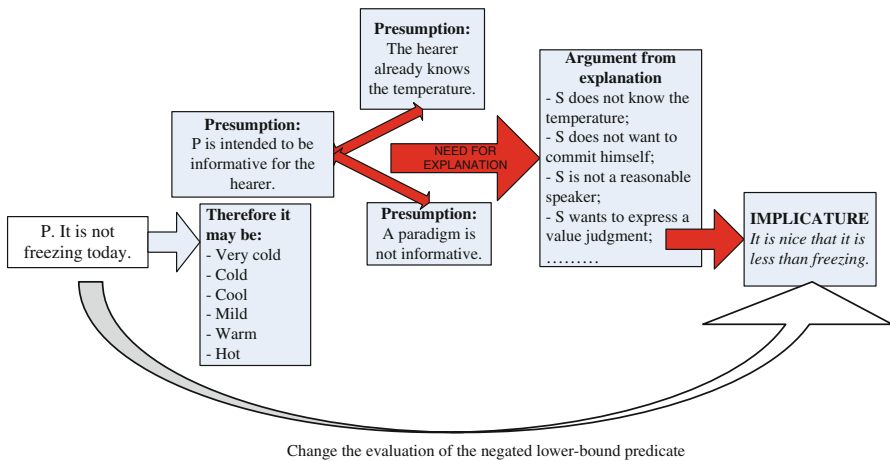


Fig. 8 Semantic implicatures

are inverted. The implicature triggered by the apparent lack of sufficient informativeness can therefore be explained as a reinterpretation of the value judgment of the negated predicate. ‘Not freezing’ (or ‘not cold’) needs to be explained by finding the only meaning that the other predicates cannot express, namely ‘It is positive that it is less than freezing (or cold)’. This chain of reasoning is shown in Fig. 8.

Linguistic implicatures are therefore analyzed as best explanations that affect the interpretation of predicates. The hearer can explain an inconsistency by reinterpreting the purpose of a speech act or the use of a sentence or a predicate.

### 7 Conclusion

The purpose of this paper is to provide an argumentative model of textual interpretation grounded on an approach to implicatures aimed at reconstructing the

underlying reasoning processes. This account can be applied to texts characterized by different contexts of dialogue and communicative expectations. The goal is to bring to the surface the quasi-logical structure of inferences classified as intuitive from a cognitive point of view. The focus of this proposal is on the reasoning patterns and mechanisms of interpretation presupposed by both conventional and unconventional implicatures. In the first case, the goal is to describe the quasi-logical steps ideally needed for the retrieval of a meaning already crystallized in the use of commonly shared implicatures. In the second case, this argumentative model wants to show the implicit mechanism of reconstruction of the purpose of a dialogue move in new or not prototypical situations. This proposal can be considered argumentative *lato sensu* (cf. Van Eemeren and Grootendorst 2004), as it describes a dialogical process of reasoning in which the speaker invites the interlocutor to draw a specific inference in order to reconstruct the purpose of a move.

This abstract structure is aimed at advancing a *possible* representation of the reasoning underlying implicatures and interpretation. Instead of providing norms that may not hold in specific contexts of dialogue, this model relies on the generic principle of presumptive meaning. In this view, the purpose of a dialogical move can be retrieved on the basis of presumptive reasoning grounded on pragmatic presumptions. Pragmatic presumptions can sometimes conflict with epistemic or factual presumptions, and the resulting contradiction needs to be solved considering the culturally and contextually dependent force of the contrasting propositions. This principle explains why the same implicatures are usually successful in the same context and community of speakers, all holding the same hierarchy of presumptions, while misunderstandings may occur when they are triggered in different types of dialogue or across cultures. In this view, implicatures can be conceived as explanations of the failure of a communicative expectation (Walton 2007b, pp. 274–281). They can be represented as forms of reasoning from best explanation aimed at reconstructing, in conditions of lack of evidence, the purpose of a move or a premise conflicting with what is generally expected. The concept of *best* explanation can account for the communicative force and the potential ambiguity of implicatures. The best explanation represents the most plausible way of reconstructing the missing communicative effect and bridges the apparent lack of communicative effect. However, depending on the context and culture, different explanations can be considered as the best ones. The possibility of several best explanations can also be the very purpose of a communicative move aimed at puzzling the hearer by not providing him or her with sufficient information to limit or choose among the alternatives.

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