

Implicatures and hierarchies of presumptions

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ABSTRACT: Implicatures are described as particular forms reasoning from best explanation, in which the paradigm of possible explanations consists of the possible semantic interpretations of a sentence or a word. The need for explanation will be shown to be triggered by conflicts between presumptions, namely hearer's dialogical expectations and the presumptive sentence meaning. What counts as the best explanation can be established on the grounds of hierarchies of presumptions, dependent on dialogue types and interlocutors' culture.

KEYWORDS: interpretation, implicatures, Grice, argumentation schemes, best explanation, presumptive reasoning.

1. INTRODUCTION

When we talk, discuss, argue or negotiate we use our utterances to achieve a specific communicative goal, consisting in producing a specific effect on our interlocutor. The addressee of our speech act can be affected by our move because he or she can understand our intention from what we say. Grice (1989: 220) pointed out this discursive dimension of meaning considering the relationship between the *conventional meaning* of the words used (the sentence), and the *dialogical goal* that they are aimed at pursuing (Grice 1975: 44). He noticed that we often use the explicit semantic content to communicate information different from what is semantically encoded; for instance, we can use interrogative or affirmative sentences to perform acts different from questions or assertions (Lyons 1977: 848). On this perspective, words are conceived as *instruments* to express what is said and communicate what is meant; they provide reasons to support the reconstruction of a specific dialogical intention (Grice 1989: 221). The relationship between what is said and what is meant is guaranteed by the "ordinary usage", a principle that Grice compares to the non-linguistic presumption that, "we usually intend the consequences of our actions" (Grice 1989: 222). However, what happens when this presumptive meaning defaults? What causes the failure of the presumptive association between expression and meaning? What is the reason or the process of reasoning underlying the recovery of the lost meaning?

On Grice's view, what a man says needs to be considered within the context of the expectations and presumptions of the community of speakers he belongs to (Grice 1975: 47). Grice collected such presumptions and expectations under general categories conceived as communicative norms (Sperber and Wilson 1986: 162). If an utterance superficially appears not to conform to the presumptions that the speaker is cooperative and is speaking truthfully, informatively, relevantly, perspicuously, and otherwise

appropriately, the hearer tries to explain this failure by reconstructing a new unconventional meaning for the sentence (Bach 2003: 155). How can a speaker recognize that a presumption has been violated? What reasoning process does he or she trigger to retrieve the speaker's meaning? Why can the same dialogical move be differently interpreted, and how can be different interpretations evaluated?

The purpose of this paper is to investigate the reasoning underlying the implicit reconstruction of meaning, analyzed in previous studies as intuitive or heuristic (Allott 2005: 234-235), from an argumentative perspective, where "argumentative" is conceived in a broader sense to include a reasoning process implicitly suggested by the speaker and implicitly performed by the hearer aimed at retrieving the goal of a discourse move. Implicatures will be analyzed as implicit arguments, based on a pattern of reasoning leading from an explicit premise and background knowledge to an implicit conclusion

2. INTENTIONS AS PREDICATES

Grice introduced a pragmatic account of meaning, where "meaning" is the effect on the interlocutor of a move, or act, in a dialogue. However, how can we describe the "dialogical effect" of a move? In argumentation, dialogical moves are considered as instruments to bind the interlocutors to dialogical obligations (Walton and Krabbe 1995): by performing a speech act, the speaker becomes tied to specific commitments, and at the same time he or she restricts the interlocutor's possible replies to some possible prosecutions of the dialogue (Walton 1989: 65-71). For instance, an assertion binds the speaker to the statement asserted, while the other party can keep a record in a dialogue of what has been said, and choose to continue the dialogue maintaining the subject matter mentioned in speaker's assertion, or interrupt the conversation (also by changing dialogue or dialogue game). Asking a question, similarly, commits the interlocutor to choosing between continuing the dialogue by answering, or interrupting the conversation by challenging the question. In both cases, the interlocutor is faced with a choice which he did not have before. He or she may accept the direction of the dialogue, and continue the conversation according to the new commitments; otherwise he or she can interrupt it, either by challenging its reasonableness or acceptability, or simply by not replying. However, the interlocutor needs to comply with new communicative constraints. 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?" The utterance changes the interlocutor's condition in the dialogue. The utterance faces him or her with a specific choice between some alternatives.

This dialogical perspective of meaning subordinates the performance of single speech acts to the compliance with high-level conditions imposed by an abstract dialogical intention. Grice represented such a dialogical meaning using the notion of "direction" of the dialogue, by which the possible future moves need to abide:

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. (Grice 1975: 45)

This dialogical intention connecting all discourse moves according to specific pragmatic conditions can be represented as a high-order predicate commonly referred to as a “rhetorical predicate” (Grimes 1975: 209), “logical-semantic connective” (Crothers 1979; Rigotti 2005) or “coherence relation” (Hobbs 1979: 68; Hobbs 1985). This abstract predicate connects discourse sequences explicitly or implicitly. In the first case the purpose of the predicate is made explicit and its set of coherence conditions imposed on its arguments (Grimes 1975: 162) represents a dimension of its semantic structure. Grice analyzed such conditions and implicit information, partially codified in the connector structure, as conventional implicatures (Grice 1975: 45). For instance, in the sentences,

- (1) I am very thirsty, but I cannot drink anything.
- (2) He is an Englishman. Therefore he is brave. (Grice 1975: 44)

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). Similarly, the connector ‘therefore’ presupposes that the second sequence (“being brave”) is a consequence of the first (“being an Englishman”). The discourse relation can be also implicit when the coherence requirements (presuppositions) are not part of the connector semantic structure, but need to be reconstructed (Ballard, Conrad and Longacre 1971) in order to understand the role of the discourse segments or sequences. For instance, coordination can express temporal, causal, explanation relations.

From a pragmatic perspective, discourse relations can be considered as high-level speech acts (Grice 1989: 362; Carston 2002: 107-108), indicating the role of the first level speech acts, or rather, their felicity conditions (Vanderveken 2002: 28). 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, of which the highest and most general could be “to impress the hearer”, or “to arouse his pity”, etc. and 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. Each move is reasonable only if specific conditions are complied with.

These conditions can be conceived as pragmatic presuppositions (see Vanderveken and Searle 1985: 66-67; Bach 2003: 163), as they express the conditions for a possible effect of a dialogical move. In addition to such conditions, speech acts need to be reasonable to be meaningful to the interlocutor and bring about a possible dialogical effect. They need to be connected to shared knowledge, namely the knowledge that participants in a dialogue share, such as encyclopedic information (knowledge of the world, of the news, of the common acquaintances...) or linguistic information (lexical meaning). Such information is taken for granted, pragmatically presupposed by the speaker. For instance the *utterance*

(3) Have you seen Bob?

will be “void” if the interlocutor does not know who Bob is, or if he or she has never seen Bob before (see Austin 1962: 50-51). Even if he or she can reconstruct (or rather *accommodate*, see Lewis 1979) the existence of an individual called Bob, he cannot relate him to his or her background knowledge (Asher and Lascarides 1998) and interests. Therefore, the hearer cannot continue the dialogue, as the conditions for its continuance are not fulfilled. These conditions can be different in nature. For instance, in (1) we need to know that “thirsty people need to drink”, and that “drinking quenches thirst”. At a dialogical level, dialogical moves need to comply with dialogical requirements. For instance, in all the aforementioned examples the hearer needs to know and be interested in the subject matter. Otherwise there would not be any need to continue the dialogue. 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 can represent the structure of a dialogical predicate as follows (see Rigotti 2005):

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

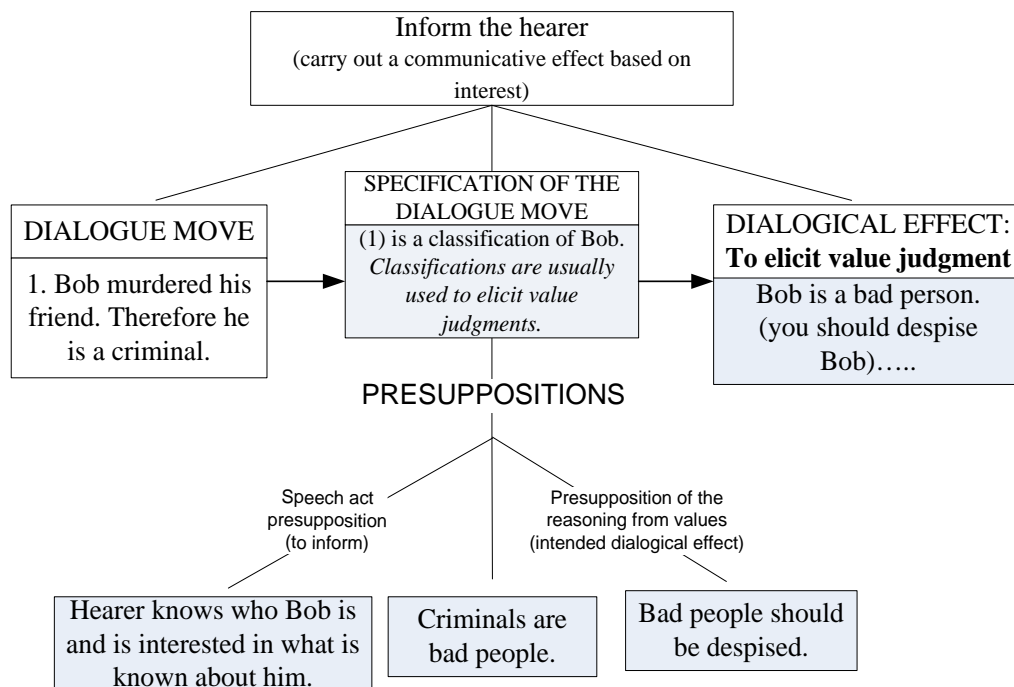


Fig. 1. Dialogical predicates and pragmatic presuppositions

Every discourse move is therefore connected to a conversational situation, including the interlocutors, their knowledge, their interests as well as previous and future moves, by an abstract relation imposing specific constraints and requirements relative to the listener’s knowledge, intentions and expectations. How is it possible to presuppose such information? How is it possible to know what our interlocutor knows, accepts or intends?

3. PRESUPPOSITIONS AS PRESUMPTIONS

Presuppositions are requirements for the felicity, or dialogical meaningfulness, of a move, but they depend on the other's mind. They display a world, and at the same time subordinate the reasonableness of displaying this world to the interlocutor's acceptance. This twofold dimension of presupposition can be described by considering presuppositions as implicit acts of a kind.

Ducrot first introduced the notion of act of presupposing: on his view, the speaker, by subordinating his statement to the acceptance, or (relative) truth, of its presuppositions, performs a specific implicit speech act (Ducrot 1968: 87). Presupposing is conceived as the act of setting the conditions for the continuation of the future dialogue game (Ducrot 1991: 91), while the refusal to accept a presupposition amounts to interrupting the dialogue, just like knocking over the chessboard. However, some presuppositions cannot be acceptable by the interlocutor. For instance, the following utterance,

(5) Bob's sister went to the cinema last night

presupposes that a person called Bob is known to the interlocutor, and that Bob has a sister; such presuppositions can be *reconstructed* from the sentence structure (Lewis 1979: 340), but cannot be *accepted* by a hearer who knows that Bob has no sisters, or who does not know Bob at all (Asher and Lascarides 1998). In order to account for the meaningfulness of a move, we need to consider not only the *possibility* of reconstructing a presupposition, but also the *acceptability* of such a reconstruction, which involves knowledge of the hearer's knowledge. But how is it possible to know the other's mind?

Stalnaker (1974) and Burton-Roberts (1989) point out that 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 (Stalnaker 1998: 8). Following Stalnaker's view, we can notice that this guess needs to be made on the grounds of information that everybody knows because it represents communicative or linguistic rules, normal human behavior or connections between facts. In an argumentative perspective, we can call it an act of *presumption* (Freeman 2005: 43), which can be defined as defeasible reasoning in lack of evidence (Rescher 1977: 1). Rescher 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. (Rescher 2006: 33)

The relationship between *P* and *C* (the *Rule*) can be grounded on rules (of law, behavior or language) or merely on experience (Thayer 1898: 314; Greenleaf 1866: 49; McBaine 1938: 525), and according to its probability it can shift the burden of proof (Best *et al.*

1875: 571; Walton 1993: 139-140). Presuppositions can be described as presumptions, as they are implicit conclusions on the other's behaviour or knowledge drawn in conditions of lack of evidence. For instance, a speaker can utter to a friend (5) above because he or she is acting on the presumptions that, "People know their friends and their friends' relatives" and "Information relative to friends is interesting" (Kauffeld 2003: 140; Kauffeld 1998). The speaker proceeds from these generic rules of behavior, from his own knowledge concerning Bob, and from the fact that Bob is a hearer's friend.

Dialogical presumptions are different in kind. The speaker can presume the other's knowledge of people or facts, or connections between events, or linguistic and dialogical rules. For instance, we can analyze the presumptions underlying the following example (*case A – the drunkard 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". (Fischer 1970: 272)

The first mate, in performing his dialogue move, presupposed that the crew knew who the captain was, but also that logbooks usually report exceptional events, and that captains are bound to be sober on duty. Moreover, he presupposed the relationship between the words uttered and their meaning and the values normally associated with a drunkard captain. Such presumptions are different in nature, strength, and dialogical effect. The relationship between a sentence and its effect, and more generally, the use of linguistic instruments and their purpose, is a pragmatic presumption, which can be referred to as presumption₀. The principles guiding the conclusion about the hearer's knowledge are epistemic presumptions, which we can also call presumptions₁. Finally, the usual connection between facts and events, representing the expected and ordinary course of things, are close to the legal notion of presumptions of fact and can be labeled as presumption₂. In everyday reasoning we use such presumptions₂ whenever we talk about a person's character, or most of the objects surrounding us. 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, 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 they are perceived by us), but how things *are usually related to each other*. The different types of presumption can be thought of as a specific type of shared knowledge, and can be represented as follows:

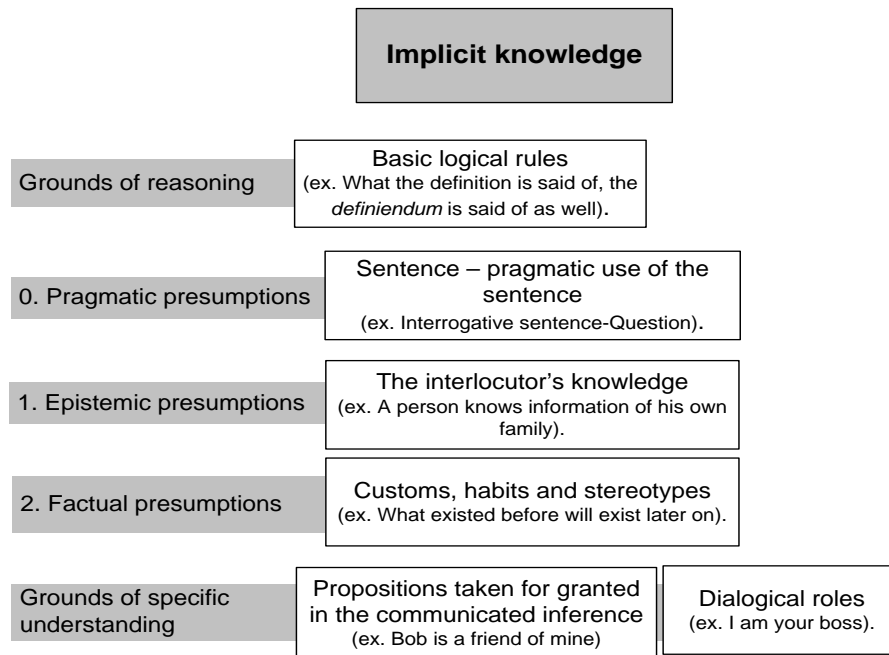


Fig. 2. Types of implicit knowledge and presumptions

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: 264). Depending on the strength and nature of the presumption, the communicative risk of criticism may vary. For instance, not sharing pragmatic presumptions may lead to criticism regarding a speaker’s ability to communicate; epistemic presumptions often carry a risk of negative judgment on the interlocutor’s interests and knowledge (“everyone knows that!” or “how can you be not interested in *x*?”); finally, failure to accept factual presumptions shared by everybody may result in the accuse of poor judgment. For instance, replying “Why?” to the arguments “This is a bird; therefore it flies”, or “He is a blind man. He cannot have seen the accident” would be usually perceived as awkward. The force of an act of presupposing also consists in an implicit threat of a negative ethical, epistemic or communicative judgment.

The dialogical act of presupposing is therefore distinguished from presupposition. While presupposition is a linguistic fact, referring to the conditions of meaningfulness of a dialogue move, presupposing is the act of deploying epistemic, pragmatic and factual presumptions and subjecting the meaning of the move to them. The act of speaking, or rather the act of performing dialogical moves, is therefore grounded on an implicit act of presuming, that is, reasoning from principles that are, or anyways *should be*, shared.

4. CONFLICTS OF PRESUMPTIONS

Dialogical moves are built on and communicated through different types of presumptions. The speaker can communicate his intention relying on the presumptive

relationship between sentence and purpose; he can convey a specific semantic meaning on the grounds of the usual association between word and content; he can take information for granted based on epistemic presumptions and correlations between things and events. The process of interpretation can be considered as a complex process of reasoning from presumptions, largely proceeding from the defeasible *modus ponens* (Lascarides and Asher 1991: 57). Sometimes, however, the speaker decides to convey the meaning resorting to a different strategy, consisting in breaching the dialogical expectations. Instead of relying on presumptions, the speaker can decide to deliberately presuppose inconsistent presumptions. He can ground the meaning of his moves on conflicts of presumptions, generating an apparent communicative failure. This process underlies the interpretative phenomenon of implicatures. For instance, we can analyse the following utterance:

(6) Can you pass the salt?

This interrogative sentence is presumed₀ to be used to request information; such a dialogical intention requires that the speaker does not know the answer, and presupposes that the interlocutor may know it. Such requirements can be met in a context in which the listener is a physically impaired person, or an interlocutor whose arm is in plaster. However, in a normal context, the requirements of the presumed dialogical intention conflicts with the factual presumption₂ that “people can usually perform ordinary actions”. This conflict leads to a failure of the presuppositions of the presumed speech act, which results in an apparent infelicity. The apparent lack of a communicative effect can be solved by attacking one of the two defaultive premises: either the dialogical predicate is interpreted excluding the prototypical association between sentence and intention, or the dialogical situation is considered as non-ordinary. In an ordinary context, the dialogical presumption is discarded and the act becomes “indirect”, that is, its meaning is not retrieved presumptively (see Bach 1994: 13). This conflict of presumptions can be represented as follows:

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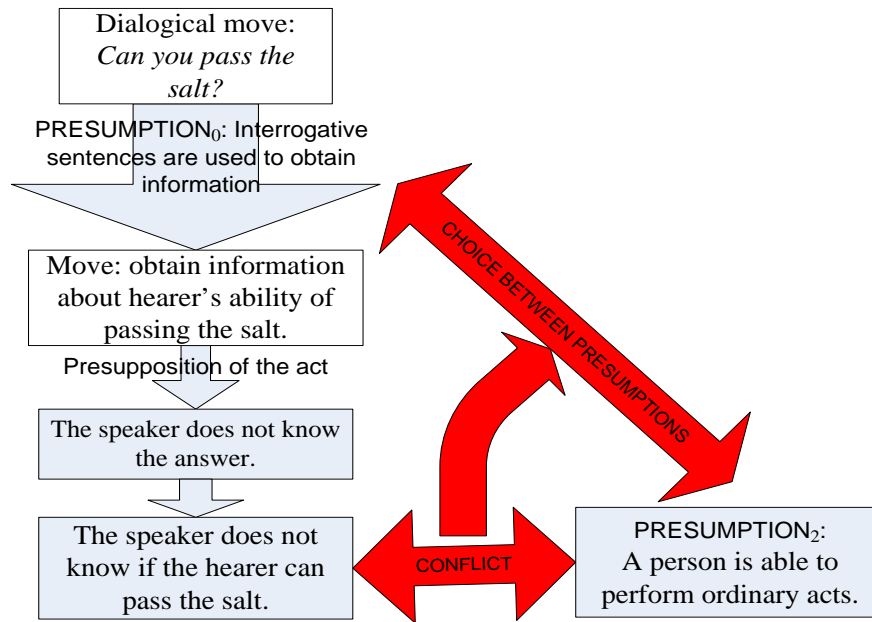


Fig. 3. Conflicts of presumptions and indirect speech acts

In this case, the context provides the information needed to establish the choice between the two presumptions without giving rise to ambiguity. As the interlocutor is physically capable and not injured, the weaker, and therefore defaulting, presumption is the dialogical one. The speaker therefore is led to find another possible intention manifested by the utterance (*to advance a request of action*, in this case). This process of reinterpretation of the discourse move (Asher and Lascarides 2006) can be also triggered by conflicts of pragmatic presumptions belonging to different levels, such as between a discourse relation abstracted from a speech act and the further dialogue moves. For instance, we can consider the following cases of particularized conversational implicatures:

- (7) Sam: Would you like to go to the theatre tonight?
Tom: I have to study.
- (8) Sam: Do you want another piece of chocolate cake?
Tom: Is the pope Catholic?

In both cases Sam is confronted with an apparent inconsistency between the requirements of the discourse relations he advances (presumed₀ to be proposals) and the pragmatic presumptions of Tom's reply (in 7, his move is presumed₀ to provide information; in 8, to request information).

The implicatures analyzed above can be considered as meta-dialogical, as they are forms of reinterpretation of a discourse move, whose presumptive meaning is subject to default. When pragmatic presumptions prevail over factual presumptions, the listener is not led to reconstruct the meaning of a move, but to retrieve the missing information. For instance, in case A above (the *Drunkard captain*), the first mate is presumed₀ to provide exceptional information; this presumption conflicts with the factual one that captains are (should be) usually sober on duty. The abstinence from alcohol is at the same

time presumed_0 to be exceptional and presumed_2 to be a normally expected condition. This conflict of presumptions can be represented as follows:

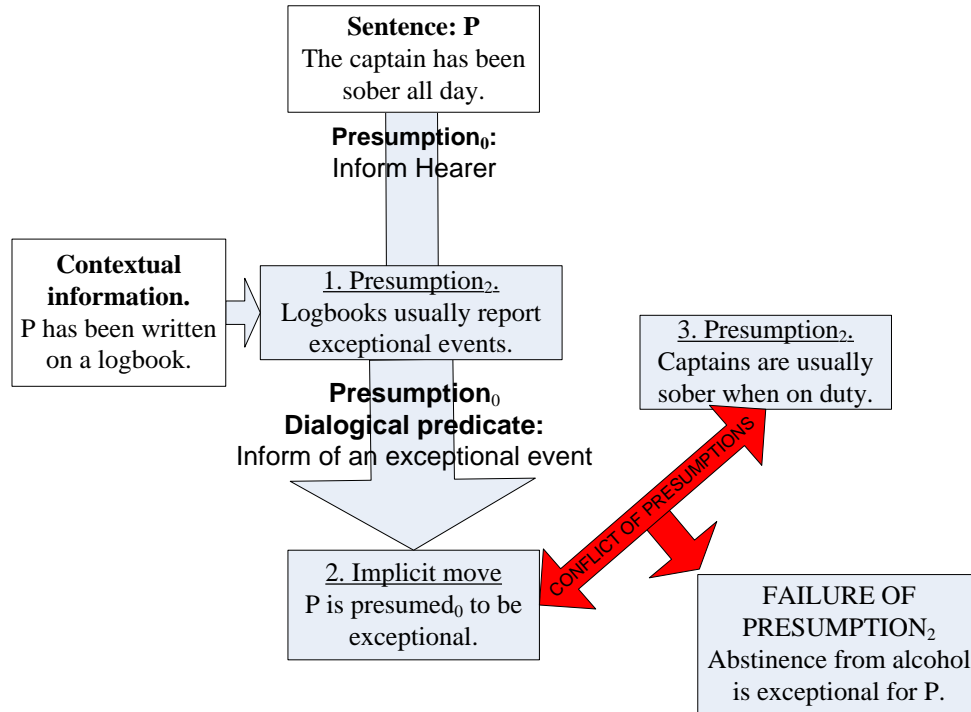


Fig. 4. Conflicts of presumptions and retrieval of missing information

This presumptive approach to meaning and implicatures shows how implicatures, or rather reinterpretation processes, are triggered. The following describes how the mechanism of reconstruction of meaning works. The claim of this paper is that implicatures can be analyzed as implicit arguments, involving a pattern of reasoning leading from a specific premise to a conclusion.

5. IMPLICATURES AS ARGUMENTS

How does the hearer reconstruct the meaning of a dialogue move when the presumptive guidance to interpretation fails or is inconsistent? In such cases a complex mechanism of reasoning is activated, based on different possible argument schemes. This reasoning is particularly evident in particularized conversational implicatures, where the process of meaning retrieval is not crystallized in a presumptive procedure like in conventional implicatures.

5.1. Reasoning from best explanation

The sentence written on a logbook indicating that the captain was sober all day can be differently interpreted in different contexts or cultures. For instance, if a party had been thrown on the ship, the captain would have been praised by that comment. If brought as evidence before a court, the statement would have been interpreted as representing only

the captain's abstinence from alcohol on that specific day. On a pirate ship it would have been almost a criticism against the captain's "temporary teetotalism". These different possible interpretations can be accounted for by distinguishing between two interpretative reasoning steps. The first one is aimed at resolving the conflict of presumptions establishing the weaker one to be rejected. The second step replaces the excluded presumptive conclusion with a different one.

In case A above, the interlocutor can explain in different ways the presumptive inconsistency between the presumption₀ (the information provided is exceptional) and the presumption₂ (captain's sobriety is normally expected): A) the speaker made a mistake (rejection of presumption₀); or B) he wanted to communicate something obvious because he was joking (rejection of presumption₀); or C) he wanted the crew to consider what he had written as exceptional (rejection of presumption₂). The best explanation in the given context is grounded on the presumption₀ that the speaker wants to inform the hearer, and therefore the presumption₂ needs to be rejected and the statement considered as exceptional. The second reasoning step consists in the process of explaining the exceptionality of the captain's soberness. A paradigm of possible explanations can be found: for instance, (1) that day the entire 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 presumption₂ (see Asher and Lascarides 1995). If we consider that: (1') that day there was no party on the ship, that (2') usually the crew is 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 an alcoholic. On this perspective, the best interpretation corresponds to the argument or reason that in a given context is less easily defeated by counter-presumptions, common knowledge or facts.

The two steps of reasoning involving a defeasible reasoning from paradigms (Macagno and Walton 2010) can be represented by the argument from best explanation:

Argument from 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 a plausible hypothesis, based on what is known so far. (Walton 2002: 44)

The argumentative structure underlying the particularized implicature of the drunkard captain can be represented in the following figure ("presumption" is shortened to Pr.):

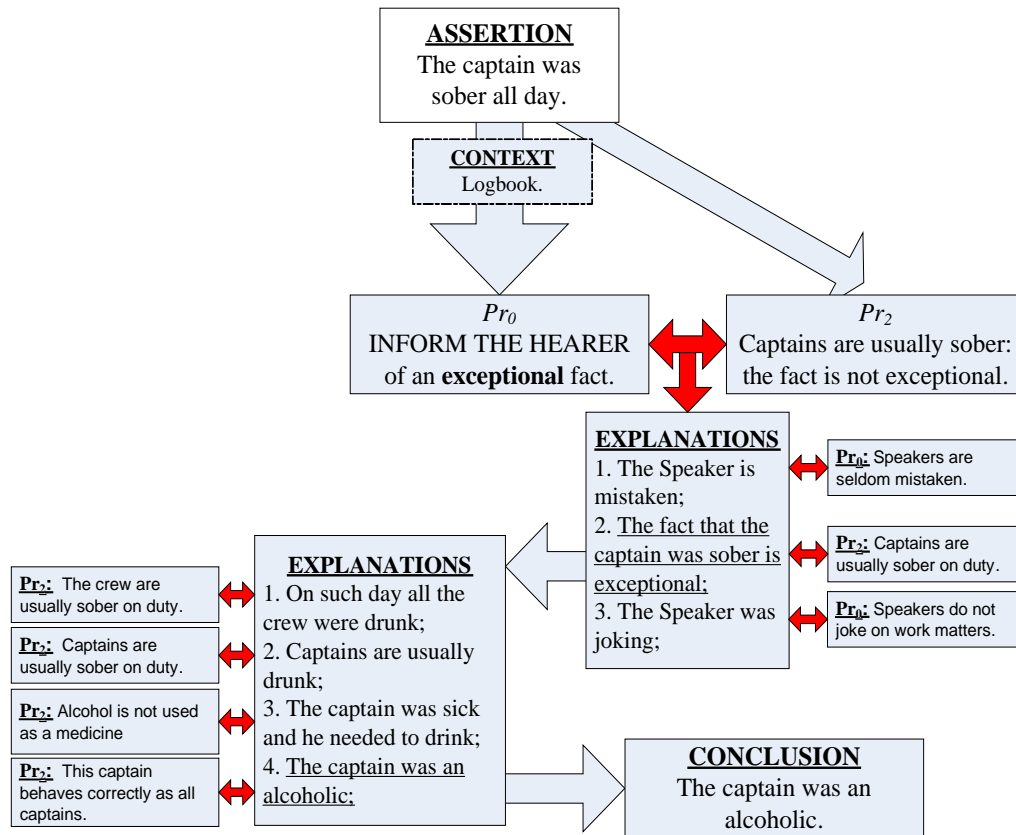


Fig. 5. Argumentative structure of the Drunkard Captain

The structure of this implicature consists in a meta-dialogical process of explanation and a dialogical one aimed at justifying the failure of a factual presumption. The first reasoning is aimed at establishing whether the presumptive interpretation of the dialogue move shall be sustained or replaced with another dialogical purpose. The mechanism of reinterpretation can stop at this level, should a better pragmatic interpretation of the move be found. In the drunkard captain case, however, the alternative pragmatic explanations conflict with stronger counter-presumptions₀, and therefore the interpretative reasoning proceeds to the second step, where factual explanations are advanced and compared with counter-presumptions₂.

5.2. Analogical reasoning

While the first meta-dialogical step is aimed at explaining an apparent lack of dialogical effect by determining the purpose of the move, the goal of the second phase is to specify the content, or rather the specific purpose, of the dialogical act. This second re-interpretative step can be grounded on different patterns or argument schemes, such as reasoning from best explanation, as seen above, or analogical reasoning. For instance, we can analyze (8) above and (9) below:

- (8) Sam: Do you want another piece of chocolate cake?
Tom: Is the Pope Catholic?

- (9) Sam: Do vegetarians eat hamburger?
 Tom: Do chickens have lips? (Yule 2008: 43-44)

In both cases, Tom's replies to obvious questions are not pointing out or attacking the triviality of the answer, but advance an implicit argument that we can represent as follows:

Argument from analogy

- *Major premise:* Generally, case C_1 is similar to case C_2 .
- *Minor premise:* Proposition A is true (false) in case C_1 .
- *Conclusion:* Proposition A is true (false) in case C_2 . (Walton 1995: 135-136; see also Walton, Reed and Macagno 2008: 315)

As argued in Macagno and Walton (2009), reasoning from analogy consists in abstracting a generic property, the functional genus, from the characteristics of the two compared entities or situations. This genus is an abstract category, a generic predicate under which the two instances fall not absolutely, but only for the purpose of the argument. For instance, a ship can be like a hotel from the point of view of passengers' rights, because it is a structure hosting guests. In (8) and (9) the abstract genus is the specific purpose of the move. The replies ("obviously yes/no") are abstracted from the analogy between Sam's and Tom's questions (falling under the same category of "obvious questions having obvious positive/negative answers"). However, other more specific generic predicates can be reconstructed according to the context. For instance, in (8) also the feature of "Being known to everyone" and (9) of "Being stupid". In both cases the interlocutor's question is affected also by a value judgment.

5.3. *Practical reasoning*

Assertive statements can be also used not to inform, but to lead the interlocutor to a specific action. In such cases, the inconsistency between the requirements of the prototypical act of informing and the factual presumptions, or shared knowledge, can be explained by resorting to practical reasoning, applied to different circumstances and dialogical goals. For instance, we can consider the following case:

- (10) Sam: I am out of petrol.
 Tom: There is a garage around the corner. (Grice 1975: 51)

The statement "I am out of petrol" contradicts the presupposition of interest of the dialectical predicate 'to inform the hearer' prototypically associated with assertive sentences. The speaker cannot presume that his lack of petrol may fall within an unknown hearer's desire of knowledge. The presumption of lack of interest however conflicts with the counter-presumption₂ that people should be interested in trying to help who is in a difficult situation. The epistemic presumption is replaced with a pragmatic one, which does not fulfill the requirement of a proper act of informing, but instead triggers an argument from appeal to pity:

Appeal to pity

- Individual x is in distress (is suffering).
- If y brings about A, it will relieve or help to relieve this distress.
- Therefore, y ought to bring about A. (Walton 1997: 105)

Sam's assertion is not a request for help, but triggers a recommendation to act. On the other hand, Tom's reply does not fulfil the requirement of the predicate imposed by Sam, to be "a commitment or non-commitment to help". Tom's act however is not only a piece of information, but an invitation to perform a specific action, as it triggers a pragmatic argument from practical reasoning in which the needed premise ("in garages it is possible to find some petrol") and the conclusion ("you should go to the garage") are missing. The scheme is the following:

Practical reasoning

- *Goal Premise:* My goal is to bring about A.
- *Alternatives Premise:* I reasonably consider on the given information that bringing about at least one of $[B_0, B_1, \dots, B_n]$ is necessary to bring about A.
- *Selection Premise:* I have selected one member B_i as an acceptable or as the most acceptable necessary condition for A.
- *Practicality Premise:* Nothing unchangeable prevents me from bringing about B_i as far as I know.
- *Side Effects Premise:* Bringing about A is more acceptable to me than not bringing about B_i .
- *Conclusion:* Therefore, it is required that I bring about B_i . (Walton 1992: 89-90)

Depending on the context, Tom's reply can be a refusal to help (in a context in which it is apparent that Sam cannot get there) or a helping action (providing guidance and instructions).

5.4. *Argument from sign*

Sometimes the speaker needs to specify the reasoning from explanation narrowing down the possible relation between the *explanandum* and the explanation and providing indications for the conclusion. For instance we can consider the following implicature:

- (11) Sam: What on earth has happened to the roast beef?
 Tom: The dog is looking very happy. (Levinson 1983: 126)

The representation of dog's happiness cannot be presumed to fulfill the role of "providing information on the disappearance of the roast beef". However, the relationship between "happiness of the dog" and "information on the roast beef" can be retrieved through an argument from sign:

Argument from sign

- Generally, if this type of indicator is found in a given case, it means that such-and-such a type of event has occurred, or that the presence of such-and-such a property may be inferred.

- This type of indicator has been found in this case
- Such-and-such a type of event has occurred, or that the presence of such-and-such a property may be inferred, in this case. (Walton 2002: 42)

The satisfaction of the dog is a result of a cause narrowed down to the food mentioned in Sam's question. The requirement of the predicate provides the information needed to specify the argument from sign. Sometimes this information is not explicit, but provided by the context or shared knowledge. We can consider the following case:

(12) Bill goes up to Scotland every weekend. (Carston 2002: 109)

Carston underscores that, "in different specific contexts this could implicate 'Bill's mother is ill', 'Bill has a girlfriend in Scotland', 'Bill gets as far away from London as he can when he can', 'Bill still hasn't got over his obsession with the Loch Ness monster', etc." (Carston 2002: 110). These conclusions are grounded on specific information and culturally and contextually dependent presumptions. For instance, contextual information can trigger the presumption₂ that "People ought to stay closer to their beloved in a condition of need", or "People wish to stay closer to whom they love", or "People tend to escape/chase what they hate/like".

6. CONCLUSION

The mechanism triggering an implicature can be considered as an apparent dialogical failure. The hearer is faced with a dialogical presumption conflicting with other presumptions or facts that are dialogical, factual or epistemic in nature. This inconsistency wants an explanation, which, depending on the culture, context and shared knowledge, can be found in a reinterpretation of the dialogical purpose, or in a default of a factual or epistemic presumption. Argumentation, interpreted in a broader sense covering the implicit reasoning underlying a dialogical activity, can provide an instrument accounting for the structure of sense reconstruction. On this view, the automatic processes of interpretation can be analyzed as forms of presumptive reasoning (defeasible *modus ponens*), while the heuristic processes aimed at recovering a possible communicative failure as complex arguments. Meaning is interpreted as a dialogical action often grounded on implicit reasons. The communication of an apparent inconsistency, a "lost" meaning, can be thought of as process of grounding a move on implicit reasons that need to be retrieved in order to understand the dialogical purpose.

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REFERENCES

- Allott, N. (2005). Paul Grice, reasoning and pragmatics. *UCL, Working papers in linguistics* 17, 217-243.
 Asher, N., and Lascarides, A. (2006). Indirect Speech acts. *Synthese* 128, 183-228.

- Asher, N., and Lascarides, A. (1995). Lexical Disambiguation in a Discourse Context. *Journal of Semantics* 12 (1), 69-108.
- Asher, N., and Lascarides, A. (1998). The Semantics and Pragmatics of Presupposition, *Journal of Semantics* 15, 239-299.
- Asher, N., and Lascarides, A. (2003). *Logics of Conversation*. Cambridge: Cambridge University Press.
- Austin, J.L. (1962). *How to Do Things With Words*. Oxford: Clarendon.
- Bach, K. (1994). Meaning, Speech Acts, and Communication. In Harnish, R.M. (ed.), *Basic Topics in the Philosophy of Language* (pp. 3-21), Englewood Cliffs, NJ: Prentice-Hall.
- Bach, K. (2003). Speech acts and pragmatics. In Devitt, M., and Hanley, R. (eds.), *Blackwell. Guide to the Philosophy of Language* (pp. 147-167), Oxford: Blackwell.
- Ballard, D., Conrad, R., and Longacre, R. (1971). The Deep and Surface Grammar of Interclausal Relations. *Foundations of Language* 7 (1), 70-118.
- Best, W.M. et al. (1875). *The principles of the law of evidence; with elementary rules for conducting the examination and cross-examination of witnesses*. Albany: Little and Co.
- Burton-Roberts, N. (1989). *The Limits to Debate: A Revised Theory of Semantic Presupposition*. Cambridge: Cambridge University Press.
- Carston, R. (2002). *Thoughts and Utterances*. Malden: Blackwell.
- Chesterton, G.K. (1904). *The Defendant*. London: R. Brimley and Johnson.
- Clark, H. (1996). *Using Language*. Cambridge, Cambridge University Press.
- Crothers, E. (1979). *Pragmatic Structure Inference*. Norwood: Ablex.
- Ducrot, O. (1968). Le structuralisme en linguistique. In Ducrot, O, Todorov, T., et al. (eds.), *Qu'est-ce que le structuralisme?* (pp. 13-96), Paris: Seuil.
- Ducrot, O. (1978). Deux Mais. *Cahier de linguistique* 8, 109-120.
- Ducrot, O. (1991). *Dire et ne pas dire*. Paris: Hermann.
- Fischer, D.H. (1970). *Historians' fallacies*. New York: Harper and Row.
- Freeman, J. (2005). *Acceptable Premises: An Epistemic Approach to an Informal Logic Problem*. Cambridge: Cambridge University Press.
- Greenleaf, S. (1866). *A Treatise on the Law of Evidence*. Vol. I. Boston: Little, Brown, and Company.
- Grice, P. (1975). *Logic and Conversation*. In Cole, P., and Morgan, J. (eds.), *Syntax and semantics 3: Speech acts* (pp. 41-58), New York: Academic Press.
- Grice, P. (1989). *Studies in the way of words*. Cambridge: Harvard University Press.
- Grimes, J. (1975). *The thread of discourse*. The Hague: Mouton.
- Hobbs, J. (1979). Coherence and coreference. *Cognitive science* 3, 67-90.
- Hobbs, J. (1985). *On the Coherence and Structure of Discourse*. Report No. CSLI-85-37, Center for the Study of Language and Information, Stanford University.
- Kauffeld, F. (1998). Presumptions and the Distribution of Argumentative Burdens in Acts of Proposing and Accusing. *Argumentation* 12, 245-266,
- Kauffeld, F. (2003). The ordinary practice of presuming and presumption with special attention to veracity and the burden of proof. In Eemeren, F.H. van, et al. (eds.), *Anyone Who Has a View: Theoretical Contributions to the Study of Argumentation* (pp. 136-146), Dordrecht: Kluwer.
- Lascarides, A., and Asher, N. (1991) Discourse Relations and Defeasible Knowledge. In ACL (ed.), *Proceedings to the 29th Annual Meeting of the Association of Computational Linguistics* (pp. 55-63), Berkeley: ACL.
- Levinson, S.C. (1983). *Pragmatics*. Cambridge: Cambridge University Press.
- Lewis, D. (1979). Scorekeeping in a Language Game. *Journal of Philosophical Logic* 8, 339-359.
- Lyons, J. (1977) *Semantics*. Vol. 2. New York: Cambridge University Press.
- Macagno, F., and Walton, D. (2009). Argument from Analogy in Law, the Classical Tradition, and Recent Theories. *Philosophy and Rhetoric* 42 (2), 154-182.
- Macagno, F., and Walton, D. (2010). Dichotomies and Oppositions in Legal Argumentation. *Ratio Juris* 23 (2), 229-57

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- McBaine, J.P. (1938). Presumptions; Are They Evidence? *California Law Review* 26 (5), 519-563.
- Rescher, N. (1977). *Dialectics: a controversy-oriented approach to the theory of knowledge*. Albany: State University of New York Press.
- Rescher, N. (2006). *Presumption and the Practices of Tentative Cognition*. New York: Cambridge University Press.
- Rigotti, E. (2005). Congruity Theory and Argumentation. *Studies in Communication Sciences*, 75-96.
- Sperber, D., and Wilson, D. (1986). *Relevance: Communication and cognition*. Oxford: Blackwell.
- Stalnaker, R. (1974). Pragmatic Presuppositions. In Munitz, M., and Unger, P. (eds.), *Semantics and Philosophy* (pp. 197-213), New York: New York University Press.
- Stalnaker, R. (1998). On the Representation of Context. *Journal of Logic, Language, and Information* 7 (1), 3-19.
- Thayer, J.B. (1898). *A Preliminary Treatise on Evidence at the Common Law*. Boston: Little Brown and Co.
- Vanderveken, D., and Searle, J. (1985). *Foundations of illocutionary logic*. Cambridge: Cambridge University Press.
- Vanderveken, D. (2002). Universal Grammar and Speech act theory. In D. Vanderveken and S. Kubo (eds.), *Essays in Speech Act Theory* (pp. 25-62), Amsterdam: John Benjamins.
- Walton, D., and Krabbe, E.C.W. (1995). *Commitment in Dialogue*. Albany: State University of New York Press.
- Walton, D. (1989). *Informal Logic*. New York: Cambridge University Press.
- Walton, D. (1992). *Slippery Slope Arguments*. Newport News: Vale Press.
- Walton, D. (1993). The speech act of presumption. *Pragmatics and Cognition* 1, 125–148.
- Walton, D. (1995). *A Pragmatic Theory of Fallacy*. Tuscaloosa and London: The University of Alabama Press.
- Walton, D. (2002). *Legal Argumentation and Evidence*. University Park: The Pennsylvania State University Press.
- Walton, D., Reed, C., and Macagno, F. (2008). *Argumentation Schemes*. New York: Cambridge University Press.
- Yule, G. (2008). *Pragmatics*. Oxford: Oxford University Press.