



Standard and Non-standard Suppositions and Presuppositions

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Abstract

In this paper, I argue that the distinction between standard and non-standard pragmatic implicatures, originally used to differentiate among types of conversational implicatures, applies to the family of contents—traditionally referred to as ‘presuppositions’—that exhibit projective behaviour. Following the scholars working within the Question Under Discussion model of communication, I distinguish between two types of projective implicatures: suppositions and presuppositions narrowly construed. Next, I identify two rules of appropriateness that govern the use of, respectively, supposition-triggering and presupposition-triggering expressions. Finally, I argue that the ostentatious violation of the rules in question gives rise to non-standard projective implicatures, whereas their observance results in standard suppositions and presuppositions; I also use the idea of discourse coherence to develop a sketchy account of the mechanisms underlying the functioning of non-standard projective implicatures.

Keywords Appropriateness · Conversational implicatures · Pragmatic implications · Projective contents · Presuppositions · Suppositions · At-issueness · Question under discussion

1 Introduction

My goal in this article is to use the distinction between standard and non-standard pragmatic implicatures found in models of conversational implicature (Grice 1975; Levinson 1983) to discuss the communicative function of suppositions and presuppositions understood as types of projective contents. Referring to the works of Craige Roberts, Mandy Simons, Judith Tonhauser, Judith Degen and David Beaver (Roberts 2015; Simons 2003, 2013; Simons et al. 2010; Tonhauser

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et al. 2018), and in particular to the Question Under Discussion (QUD) model they develop (Roberts et al. 2009; Beaver et al. 2017), I distinguish in the class of projective contents, that are traditionally described as *presuppositions* (Karttunen 1974; Stalnaker 2002, 2014; von Stechow 2008), two types of pragmatic implications: suppositions and narrowly construed presuppositions. I then demonstrate that for each of the distinguished types, a distinction can be made between standard and non-standard pragmatic implications, i.e., implications based on the assumption that the speaker is observing the pragmatic principles governing verbal communication and those related to the ostentatious violation of a pragmatic rule, respectively.

To set the stage for my argument, in Sect. 2, I start with a brief discussion of the notion of projective content; in particular, I compare projective implications to conversational implicatures, explain what it is for the latter to be standard or non-standard pragmatic implications, and discuss rules of appropriateness—understood as pragmatic principles—that underlie the functioning of the former. In Sect. 3, I offer a more extensive discussion of the distinction between two types of projective implications or presuppositions broadly construed: *suppositions* and *presuppositions narrowly construed*. In Sect. 4, I argue that the distinction between standard and non-standard pragmatic implications, originally attributed to conversational implicatures, can also be used to account for different mechanisms underlying the functioning of suppositions and narrowly construed presuppositions. Finally, in Sect. 5, I discuss the main result of the study.

Before I get into the details, it is instructive to stress that my aim in this paper is not to allow for the whole range of projective meaning triggers (Simons et al. 2010; Tonhauser et al. 2013, 2018) and develop a comprehensive account of all types of projective contents. Rather, my focus is on the family of pragmatic implications that are traditionally described as *presuppositions* (Karttunen 1974; Stalnaker 2002, 2014; von Stechow 2008) and defined in term of the requirements that certain words or constructions—which are grouped under the label of *presupposition triggers* (Levinson 1983)—put on the context in which they are used. In what follows, I refer to the members of the family in questions as *presuppositions broadly construed* and argue, following Craige Roberts (2015), that they can be divided into two subclasses: *suppositions* and *narrowly understood presuppositions*. The take home message is that both suppositions and narrowly understood presuppositions can, depending on whether they involve the observance or ostentatious violation of certain pragmatic rules, take effect either as standard or non-standard projective implications.

2 Projective Implications and Rules of Appropriateness

Pragmatic implications constitute a broad and heterogeneous class of communicative phenomena. Generally speaking, the pragmatic implication of an utterance is part of its overall meaning, but in one way or another goes beyond what the utterer literally says. For instance, by participating in the following dialogue:

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- (1) A: Will you come to the meeting tomorrow?
 B: I'm picking my sister up from the airport tomorrow
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speaker A, who before the exchange took place had no idea whether speaker B had any brother or sister, has the right to formulate the following two pragmatic implications and, although they go beyond what B says, take them to contribute to the overall meaning of interlocutor B's utterances:

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- (a) B will not come to the meeting tomorrow
 (b) B has at least one sister
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Pragmatic implication (a) is a conversational implicature of B's utterance, while content (b) is traditionally (Karttunen 1974; Stalnaker 2002, 2014; von Stechow 2008) described as what B pragmatically presupposes. The most important (in this work) difference between them is that pragmatic presuppositions—that is to say, presuppositions broadly construed—in contrast to conversational implicatures, exhibit the so-called projective behaviour. We shall say about the pragmatic implication of a given utterance that it is projective if it survives the embedding of the spoken sentence in the scope of negation or another entailment-cancelling operator. In the case of a modified version of the above dialogue:

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- (1') A: Will you come to the meeting tomorrow?
 B: I'm not picking my sister up from the airport tomorrow
-

interlocutor A still has the right to acknowledge content (b), but—assuming that exchange (1') takes place in the same context—can hardly be expected to take speaker B to communicate content (a). In addition, unlike the sentence uttered by B in dialogue (1), the sentence she utters in dialogue (1')—or, more specifically, the proposition it expresses in the context under discussion—does not entail that B is picking up someone from the airport tomorrow. However, what the utterance of “I am picking my sister up from the airport tomorrow” presupposes in dialogue (1) carries over to the utterance of “I am not picking my sister up from the airport tomorrow” appearing in dialogue (1'). In sum, unlike entailments and conversational implicatures, presuppositions broadly construed survive embedding under negation and other operators; in short, they exhibit projective behaviour.

In this paper, I assume, following Mandy Simons (2003, 2013), that at least some projective contents—or, in other words, some broadly construed presuppositions—have, like conversational implicatures, their sources in some general principles governing communication. I also claim that the principles in question may be either followed or flagrantly violated by speakers. In my view, however, the principles underlying the functioning of projective implications—which I call ‘rules of appropriateness’ (Witek 2016)—do not constitute a new type of conversational maxims understood as norms of efficient cooperative communication but, rather, can be likened to what Austin called felicity conditions for the performance of speech acts.

Paradigmatic examples of rules regarding conversational implicatures are conversational maxims formulated by Paul Grice (1975): the maxim of quantity (“make your contribution as informative as required”), the maxim of quality (“do not say what you believe to be false and for which you lack adequate evidence”), the maxim of relevance (“be relevant”), and the maxim of manner (“be perspicuous”). As Marina Sbisà observes, the Gricean maxims “encode regulative advice for optimal speech act performance in the perspective of the participants in the current verbal interaction.” (Sbisà 2019: 24). In other words, they are best seen as prescriptions addressed to rational speakers who want to act in accordance with the Cooperative Principle:

Make your contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged. (Grice 1975: 45).

Usually, the speaker implying a certain proposition conversationally does so by following conversational maxims, and the recipient, interpreting such an utterance, assumes that the speaker is complying with these maxims (Levinson 1983: 104). In this case, we will say that the implicature involved is standard. However, the speaker can ostentatiously or flagrantly violate a certain maxim in order to communicate a certain proposition. We shall say that the latter is a non-standard implication (Levinson 1983: 109). For example, by saying:

(2) Iwona has three children

the speaker means not only that Iwona has three children, but also that she has exactly three of them. When establishing the latter implication, the recipient assumes that the speaker, by saying sentence (2), is complying with the maxim of quantity, i.e., she is as informative as required and utters the most informative *true* sentence of the form “Iwona has n children”. By contrast, hearing the utterance:

(3) Michał will come or will not come

the speaker must use slightly different reasoning to determine its implicature. The point is that the speaker ostentatiously breaks the maxim of quantity by proclaims a certain obvious truth by means of a sentence which is a substitution for a tautology and as such has no informational content at all. Depending on the context in which the utterance functions, however, it may, for example, express the speaker’s doubt about whether Michał will come or even express his attitude towards Michał and suggest some personality trait in him. This is possible due to the use of a non-standard conversational implicature, in this case involving the *exploitation* of the maxim of quantity, that is, its *ostentatious and flagrant violation*: at the level of what the speaker of (3) says, no information is provided. In summary, the implicature of sentence (2) is standard because it is related to the speaker’s observance of the maxim of quantity; by contrast, the implicature of sentence (3) is non-standard because it involves ostentatious violation, i.e. the exploitation of this maxim.

As Grice put it, the “presence of a conversational implicature must be capable of being worked out” (Grice 1975: 50). In other words, to justify his hypothesis that in saying that p speaker N implicated that q , the hearer should be ready to develop an argument whose inferential structure is given by the following schema (see *Ibid.*):

1. N has said that p ;
2. there is no reason to suppose that N is not observing the maxims, or at least the Cooperative Principle;
3. N could not be doing this unless he thought that q ;
4. N knows (and knows that I know that she knows) that I can see that the suppositions that she thinks that q is required;
5. N has done nothing to stop me thinking that q ; so N intends me to think, or is at least willing to allow me to think, that q ;
6. therefore, N implicated conversationally that q .

It is instructive to stress that the above inferential pattern—which can be called the *working-out schema*—begins with the premise of the form “ N said that p ”. I return to this topic in Sect. 4 below, which discusses the structure of inferential processes underlying the interpretation of projective implications.

An extensive discussion of the distinction between standard and non-standard implicatures can be found in Chapter 3 of Levinson’s *Pragmatics* (Levinson 1983). The distinction is implicit in Grice’s (1975) original discussion of conversational implicatures, in which he distinguished between A-cases and C-cases, i.e., between “examples in which no maxim is violated, or at least in which it is not clear that any maxim is violated” (Grice 1975: 51) and “examples that involve exploitation, that is, a procedure by which a maxim is flouted for the purpose of getting a conversational implicature.” (*Ibid.*: 52).

The conversational maxims indicated by Grice do not exhaust the repertoire of pragmatic principles governing language communication. Researchers working within the neo-Gricean tradition postulates the existence of further norms regulating verbal interactions, e.g., heuristics that allow generalized conversational implicatures (Levinson 2000), principles of politeness (Brown and Levinson 1987) and other principles of efficient communication (Horn 1984; for a discussion of this topic, see Chapter 3 of Lepore and Stone 2015). Based on the works on pragmatic presuppositions (Karttunen 1974; Stalnaker 2002, 2014; von Stechow 2000, 2008; cf. Witek 2016, 2019a), further principles governing communication can be indicated, the observance or ostentatious violation of which can give rise to pragmatic implications called presuppositions. These principles specify the conditions for wording utterances containing the so-called presupposition triggers: anaphoric pronouns, definite descriptions, possessive noun phrases, factive verbs, change-of-state verbs, and so on (for a list of triggers, see Levinson 1983; cf. Włodarczyk 2019). In what follows I claim that they also enable us to account for the functioning of two types of projective pragmatic implication: supposition and narrowly construed presupposition. To initially illustrate the difference

between the two types of projective implications highlighted above, and, above all, to indicate the underlying pragmatic principles, let us return to example (1). Recipients hearing the utterance of interlocutor *B* not only easily recognize its standard conversational implicature, i.e. content (a). Assuming that this utterance was formulated among people who do not know the speaker well, the recipients will learn, as new information, content (b), i.e., they will discover that the speaker has at least one sister. Traditionally, it is assumed (Stalnaker 2002, 2014; von Stechow 2000, 2008) that this content constitutes an informative presupposition (see von Stechow 2000, Simons 2003) of *B*'s utterance: 'informative' in that it constitutes, from the recipients' point of view, new information; 'presupposition,' because it exhibits projective behaviour.

There are at least two competing proposals regarding pragmatic principles governing the use of sentences, the utterance of which leads to projective implications, i.e. presuppositions in the broad sense. The first of them is implicit in Levinson's definition of pragmatic presupposition:

An utterance *A* pragmatically presupposes a proposition *B* iff *A* is *appropriate* only if *B* is *mutually known* by participants. (Levinson 1983: 205).

which is a variant of Lauri Karttunen's definition to be found in his classical paper "Presupposition in linguistic context":

Surface sentence *A* pragmatically presupposes a logical form *L* if and only if it is the case that *A* can be felicitously uttered in only in contexts which entail *L*. (Karttunen 1974: 181; for a discussion, see Stalnaker 2014: 55–58).

In other words, in putting forth the above-mentioned definitions, Levinson and Karttunen assume that it is appropriate to use a certain sentence to perform a speech act of a certain type, only if some proposition—which is further identified with what the utterance pragmatically presupposes—is part of the common ground among the conversing agents or, in other words, belongs to the set of their mutually accepted propositions (a similar position is advocated by Karttunen and Peters (1975); for a discussion of their proposal, see Stalnaker 2002: 712). As Craig Roberts puts it, on "that account, a speaker in making a given utterance presupposes proposition *P* just in case the felicity of the utterance necessitates that *P* be entailed by the interlocutors' common ground at the time of utterance" (Roberts 2015: 347). In particular, the utterance of (1B) is an appropriate conversational move, only if its context construed as the common ground of conversation (1) entails the proposition that the speaker has a sister. A similar position can be found in Stalnaker's paper "Common Ground", where we read:

If it is mutually recognized that a certain utterance type is standardly used, in some conventional linguistic practice, only when some proposition is (or is not) common belief, it will be possible to exploit this recognition, sometimes to bring it about that something is (or is not) common belief, sometimes to create a divergence between a conventionalized common ground and what speaker and hearer take to be the beliefs that they actually hold in common. (Stalnaker 2002: 705; italics are mine—the author).

The context understood as the set of beliefs mutually shared by speakers A and B does not meet the requirements imposed on it by the conditions for the appropriate use of this content, and therefore the utterance (1B) is inappropriate in the light of the above-mentioned criterion. However, this would mean that all utterances containing informative presuppositions are inappropriate utterances and as such trigger mechanisms of accommodation construed as a context-fixing or context-repairing process (for a discussion of the idea of accommodation as a context-fixing process, see Witek 2019a).

As a matter of fact, however, Stalnaker officially proposes an alternative definition of pragmatic presuppositions, which is associated with a different account of the rules governing the appropriate use of presupposing sentences. For instance, in “Common Ground” he defines pragmatic presupposition as a type of a conversation-oriented proposition attitude of the speaker:

To presuppose something is to take it for granted, or at least to act as if one takes it for granted, as background information – as *common ground* among the participants in the conversation. (*Ibid.*: 701).

He claims that “the sentence ‘I have to pick up my sister at the airport’ is appropriately used only if the speaker is presupposing that she has a sister” (Stalnaker 2002: 709) or, in other words, only if the speaker believes, or at least accepts for the sake of the conversation she finds herself in, that the proposition in question is part of the common ground between her and her interlocutors. Thus, in the light of Stalnaker’s official position, the appropriateness of the utterance of sentence (1B) depends not so much on whether proposition (b) belongs to the common ground, but on whether the speaker presupposes this proposition, i.e., whether she believes—or at least accepts for the sake of the conversation—that this proposition belongs to the common ground of exchange (1).

Levinson and Stalnaker—and in the case of the latter I mean his official position—therefore apply different criteria for the appropriate use of presupposing sentences. Levinson’s criterion seems to impose stronger requirements of appropriateness than the one offered by Stalnaker. In order for an utterance to be appropriate, Levinson requires that what is presupposed be in the common ground. Otherwise, the use of a sentence bearing the presupposition is inappropriate (although in this case the accommodation mechanism, understood as repairing the faulty context, may work). Stalnaker, on the other hand, seems to treat sentences carrying informative presuppositions as sentences whose proper use depends on the speaker’s intentional states—i.e., of his states of believing or accepting that a given proposition is part of the common ground. After the speaker explicitly uses informative presupposition and it is recognized as such, it is possible to start the accommodation mechanism understood as context-adjustment rather than context-fixing (more below about distinguishing accommodation mechanisms into processes that repair or adapt the context).

In summary, Levinson’s criterion of appropriate use of presupposing sentences imposes strong conditions on the context in which they are uttered. A situation in which the conditions are not met can trigger the process of accommodation construed as context-repairing. Stalnaker’s criterion, on the other hand, seems to impose

weaker conditions of appropriateness. As a result, the presupposed content of an utterance can be introduced into the common ground not in order to repair the context, but to adjust it provided *nothing prevents* this accommodating change. In the previous sentence, the key phrase is ‘nothing prevents,’ the explication of which leads to an interesting criterion for the appropriate use of a certain class of presuppositional sentences in the sense of Stalnaker (2002) or, more precisely, suppositional sentences in the sense introduced by Craige Roberts (2015).

However, before formulating the above-mentioned criterion, let us consider dialogue (1) once again and then compare it with another example. The information that B has a sister, which is conveyed in example (1), is not really relevant from the point of view of the main topic of the current discourse, i.e. from the point of view of determining whether B will come to tomorrow’s meeting. In the light of the Question Under Discussion (QUD) model (Beaver et al. 2017; Roberts et al. 2009; Simons 2003, 2013; Simons et al. 2010; Tonhauser et al. 2018), such content is called ‘not-at-issue relative to the main point of the speaker’ or, more technically, ‘not-at-issue relative to the current Question Under Discussion (QUD)’.

The QUD is a semantic question (i.e. a set of alternative propositions) which corresponds to the current discourse topic. The QUD may be the value of an actual question that has been asked; more typically, it is implicit in the discourse. Once a question is under discussion, it remains so until it has been answered or determined to be practically unanswerable. We will say that such a question is *resolved*. Felicitous conversational moves must constitute attempts to resolve the current QUD. We will say that an utterance which constitutes such an attempt, or a speaker who produces an utterance which constitutes such an attempt, *addresses the QUD*. (Simons et al. 2010: 316).

In the case of dialogue (1), speaker B addresses the current QUD which is explicitly introduced by speaker A’s opening remark and can be represented as a set {“B will come to the meeting tomorrow”, “B will not come to the meeting tomorrow”}. Her utterance of (1B) provides content (a) as an indirect answer to this question: ‘indirect’ in that it is communicated at the level of conversational implicature; at the same time the utterance conveys content (b), which is not at issue relative to the current QUD. As Bart Geurts would put it, content (b) is best understood as a piece of *backgrounded information* the function of which is “to anchor the foregrounded information to the context” (Geurts 2016: 195) and thereby “set the stage for the utterance’s main point” (*Ibid.*: 196).

Dialogue (1), which involves content traditionally called presupposition (Levinson 1983: 238), seems clearly different from the next example, also involving content traditionally referred to as presupposition. Let us imagine a situation in which Anna and Kasia, two childhood friends, who meet in the street after several years, are interested in the changes that have happened to each of them. Anna utters the following two sentences (see Roberts 2015: 351 for a discussion of a similar example):

- (4) a: I’m getting married
b: He’s a pilot

In order to deduce what Anna wants to convey, Kasia has to perform a certain inference. The point is that the sentence uttered by Anna contains an anaphoric pronoun ‘he’ which requires, for its appropriate use, an available discourse referent with which it can be identified. However, the preceding utterance provides no such object. Therefore, to maintain the default assumption that Anna’s utterance constitutes an appropriate conversation move, Kasia has to repair it by providing the required referent. One way to provide it—and thereby to fix the faulty context—is to provide a *bridging assumption* (see *Ibid*) to the effect that Anna is getting married *to a certain male person*, where the indefinite description ‘a certain male person’ introduces the required referent. The assumption of the existence of such a man and his contextual availability as a reference object is presupposed by Anna. For the sake of comparison, let us consider a situation in which Anna utters the following words:

- (4) _____
 a: I’m getting married
 b: He’s not a pilot

In short, rather than uttering sentence (4b), she uses its negated version. Nevertheless, the utterance of sentence (4b) still involves the same presupposition and releases the same bridging assumption. Therefore, we can say that the total meaning of Anna’s utterance of (4b)—and the same can be said of the total meaning of her utterance of (4’b)—contains the presupposition of contextual accessibility “There is a contextually available individual that was introduced by a previous utterance to which this token of ‘he’ can be bound”, which imposes a certain requirement on the context of its production. The recognition of this requirement triggers the accommodating mechanism of context-repair, which involves the formation of a certain bridging assumption.

It is instructive to note that the appropriateness of the utterance of (4b) imposes on its context a requirement which can be described along the lines of Levinson’s criterion of appropriateness. By contrast, the appropriateness of the utterance of (1B) depends on Stalnaker’s criterion. More specifically, it is appropriate for speaker B to perform a speech act by saying that she is picking her sister up from the airport only if in saying this she presupposes that she has a sister. In other words, her utterance constitutes an appropriate speech act of a certain type provided she takes the proposition that she has a sister as background information. Viewed from the perspective of the QUD model, however, one can felicitously convey a proposition by keeping it in the background—for instance, to convey that one has a sister by using the possessive description ‘my sister’—only if the proposition is not-at-issue relative to the current Question Under Discussion. As Geurts notes, “backgrounded information need not to be given” (Geurts 2016: 196). In other words, felicitously conveyed Stalnakerian presuppositions do not have to be part of prior context. Rather, we expect them to be not-at-issue relative to the speaker’s main point. That’s why they can be easily accommodated if ‘nothing prevents’ it. In the case of dialogue (1), then, the appropriateness of the utterance of (1B) requires that the backgrounded information that B has a sister—i.e., proposition (b) conveyed with the help of the possessive description ‘my sister’—is not-at-issue relative the current

QUD determined by the utterance of (1A). Therefore, if nothing prevents it—i.e., if A has no overriding reasons to think that B has no sister at all—the common ground among A and B can be easily adjusted and proposition (b) can be accommodated “quietly and without fuss” (von Fintel 2008: 141).

Following Craige Roberts (2015), I assume that the family of contents, which until now were collectively called presuppositions broadly and considered to be a homogeneous class, can be divided into two subclasses: *suppositions* or *backgrounded implications* (Roberts 2015: 355), which are contents required to be not-at-issue relative to the current Question Under Discussion, and *narrowly construed presuppositions*, understood as strong conditions that utterances impose on prior context.

What characterizes projective meaning triggers as a class, and the factives and possessives in particular, is not that their felicitous use requires that the relevant proposition be contextually given *prior* to utterance—i.e. entailed by the interlocutors’ common ground, but instead that what is presupposed be *not at issue* relative to the question under discussion at the time of utterance. (Roberts 2015: 350).

To sum up, utterances (1B) and (4b) give rise to certain projective implications which can be described as a *supposition* and a *narrowly construed presupposition*, respectively (Roberts 2015: 353). Consistently, we can distinguish between supposition-triggering expressions, e.g. possessive descriptions, and narrow presupposition-triggering expressions or presupposition triggers, for short, e.g., anaphoric pronouns. I elaborate on the distinction between suppositions and narrowly construed presupposition below in Sect. 3. For the current purposes it suffices to note that the two types of projective meaning triggers under discussion—i.e., supposition triggers and presupposition triggers—are subject to different standards of appropriateness. Roughly speaking, the supposition’s not being at issue relative to the current QUD is the condition for the appropriate use of the supposing sentence under consideration. On the other hand, what an utterance narrowly presupposes must belong to the context in which the utterance was formulated in order for it to be a correct conversational move. Therefore strong conditions of appropriateness are imposed on it, in accordance with Levinson’s criterion. If there is no projective content in the context, and, therefore, the speaker uses informative projective content, the accommodation mechanism may be activated. In the case of suppositions, when they do not appear in the context preceding the formulation of the utterance, it is enough that nothing prevents their introduction into the context, which only results in its adjustment. In the case of narrowly construed presuppositions, on the other hand, their absence in the context preceding the utterance makes them inappropriate in the light of the rule of appropriate use of narrow presupposition-triggering expressions. This rule says that they must belong to the context before the formulation of the utterance, and the context in this case requires repair or fixing rather than adjustment.

In the rest of the work, I discuss in more detail the distinction between suppositions and narrowly construed presuppositions, as well as the conditions for the appropriate use of supposition-triggering and narrow presupposition-triggering expressions (i.e., of supposition triggers and presupposition triggers, respectively).

Next, I present examples showing that the following rules—(R1) on supposition and (R2) on narrowly construed presupposition—can be observed or ostentatiously flouted when formulating utterances. This allows me to show that the cited distinction between standard and non-standard pragmatic implications also applies to the class of projective contents, within which I distinguish, following Roberts, suppositions and narrowly construed presuppositions.

(R1) It is appropriate to use sentence ‘s’ to perform a speech act of a certain type, only if what the utterance of ‘s’ supposes is not-at-issue relative to the current Question Under Discussion

(R2) It is appropriate to use sentence ‘p’ to perform a speech act of a certain type, only if what the utterance of ‘p’ presupposes is entailed by the common ground of the conversation before ‘p’ is uttered

It is instructive to note that (R1) and (R2) are not conversational maxims understood along Gricean lines. As I quoted before, the function of the latter is to “encode regulative advice for optimal speech act performance” (Sbisà 2019: 24); in other words, they are norms of efficient cooperative communication (for a discussion of this idea, see Chapter 3. of Lepore and Stone 2015). Rules (R1) and (R2), by contrast, set out conditions of the *appropriate* rather than *effective* or *optimal* performance of conversational moves, and, as such, are akin to what Austin (1962) called felicitous conditions for the performance of speech acts. Therefore, in the remainder of this paper I refer to them by means of the phrase ‘rules of appropriateness’.

3 Suppositions and presuppositions

Following Craig Roberts (2015), I distinguish between two types of projective implication triggers or, more accurately, between two types of expressions that trigger broadly construed presuppositions. First, there are expressions—e.g. possessive nominal phrases like ‘my sister’ used in sentence (1B), factive verbs with their compliments, and so on—whose linguistic meaning suffices to determine the content of the projective implications they trigger.¹ As a result, their perception by the addressee gives rise not only to the recognition *that* something is pragmatically implicated, but also *what* this something is. In other words, it enables the addressee to recognize *what* is pragmatically implicated and, provided the implicated proposition constitutes new information, it triggers the accommodating process of context-adjustment. The expressions in question can be called, following Roberts (2015), *supposition triggers*; consistently, the projective implications they trigger are *suppositions*. Second, there are expressions—e.g., anaphoric pronouns like ‘he’ used in (4b), additive phrases, and so on—whose linguistic meaning fails to determine the content of the projective implications they trigger. As

¹ More accurately, it suffices to determine the implication in question provided certain contextual information is available. For instance, the linguistic meaning of the phrase ‘my sister’ occurring in (1B) determines its referent against the background of available contextual information which enables the hearer to fix the value of the possessive pronoun ‘my’.

the corollary of this, even though their perception gives rise to the recognition that something is missing and as such is to be accommodated, it does not enable the addressee to identify what this something is; normally, “practical reasoning based on abduction is used to (try to) ascertain what that missing content might be” (Roberts 2015: 356). Let us call the expressions of this second type and the projective implications they trigger *narrow presupposition triggers* and *narrowly construed presuppositions*, respectively.

Corresponding to the contrast between suppositions and narrowly construed presuppositions there are two further distinctions: *between* two rules of appropriateness for projective implication triggers and *between* two types of accommodation. Suppositions are subject to rule (R1) according to which it is appropriate to use a certain supposition trigger only if the proposition it triggers is not at issue relative to the main point of the utterance. As a result, the accommodation of suppositions is a context-adjusting process that operates “quietly and without fuss” (von Stechow 2008: 141) provided nothing prevents it. By contrast, the practice of using presupposition triggers is subject to rule (R2) which says that it is appropriate to utter a presupposing sentence only if the proposition it triggers is part of the common ground before the utterance is made. The accommodation of narrowly construed presuppositions, then, involves context-repair rather than context-adjustment and, at least in some cases, requires the addressee to perform an abductive reasoning to ascertain what the presupposed material is.

Let us have a closer look at the phenomenon of accommodation. Recall that according to the received view (Karttunen 1974; Levinson 1983), what an utterance pragmatically presupposes is to be defined in terms of the requirements that the appropriateness of the utterance puts on the context of its production. The context, which can be represented either as common ground (Stalnaker 2002, 2014) or conversational score (Lewis 1979), is not a permanent structure. It is constantly updated during the course of the discourse by conversational moves performed by the interlocutors. This is possible due to the direct mechanism of illocution—e.g., that of assertion of question—or the indirect mechanism of accommodation (see Witek 2019b).

Accommodation is a mechanism that enable us to repair or adjust the faulty context in which our speech acts function, so that the requirements they place on that context are met. The term ‘accommodation’ was introduced by David Lewis in his work “Scorekeeping in a language game” (Lewis 1979), in which he introduced the notion of conversational score. According to him, the conversational score at a given stage of a language game is a structure of abstract elements representing contextual factors—presupposed propositions, rankings of comparative salience, permissibility facts, deontic relations, and so on—relative to which every speech act performed at this stage is to be interpreted and evaluated. What is more, the score evolves as the conversation proceeds in that its elements are modified by the moves made by the conversing agents. The crucial point is that the process whereby the score is modified or updated by the moves made by the conversing agents is rule-governed. According to Lewis (1979), it is governed by the rules of score kinematic, one type of which are rules of accommodation of the following form:

If at time t something is said that requires component s_n of conversational score to have a value in the range r if what is said is to be true, or otherwise acceptable; and if s_n does not have a value in the range r just before t ; and if such-and-such further conditions hold; then at t the score-component s_n takes some value in the range r . (Lewis 1979: 347).

3.1 In Particular, there are Rules of Accommodation for Presuppositions

If at time t something is said that requires presupposition P to be acceptable, and if P is not presupposed just before t , then—*ceteris paribus* and within certain limits—presupposition P comes into existence at t . (*Ibid.*: 340).

Thanks to the phenomenon of accommodation, we can convey informative presuppositions (Stalnaker 2002; von Stechow 2008), i.e., to perform *felicitous* speech acts by uttering sentences whose presuppositions are not part of the prior common ground.²

Let us recall that accommodation construed along the broadly Lewisian lines as a context-redressive “action on the part of the addressee” (Simons 2003: 258) comes in two types. Accommodation of some projective implications is a process triggered by certain recognizable conditions imposed on the prior context. We call these conditions presuppositions narrowly construed. Their accommodation involves a kind of context-fixing. At the same time, we allow the existence of projective contents that do not have to belong to the common ground for the utterances to be correct conversational moves. In other words, these contents—which we call, following Roberts (2015), suppositions—do not impose any restrictions on the previous context. However, they are introduced into it when conveyed by the speaker. The accommodation of suppositions, therefore, is best understood in terms of context-adjustment rather than context-fixing.

Craig Roberts proposes the division of traditionally or broadly construed presuppositions into suppositions and narrowly construed presuppositions. Even though this division is defined in terms of the contrast between two types of projective meaning triggers, it is closely related to the roles that individual projective implications play in discourse. The projective content of an utterance may be either at-issue or not-at-issue relative to the current QUD. According to the authors of the QUD model, if the content of a given pragmatic implication is at-issue, it makes some possible answers to the questions raised in the discussion false and thereby narrows the class of propositions representing the current QUD. Otherwise, it is unreasonable content. In addition, only content that is not-at-issue relative to the current QUD can project, in accordance with the projection principle:

² As a matter of fact, the Stalnakerian (Stalnaker 2002, 2014) account of informative presuppositions assumes a model of accommodation that in certain respects differs from the one offered by Lewis. Elaborating on these differences, however, goes beyond the scope of the present paper. For an extensive discussion of this topic see Witek 2019a.

Projection Principle: If content *C* is expressed by a constituent embedded under an entailment-cancelling operator, then *C* projects if and only if *C* is not at-issue. (Beaver, Roberts, Simons, Tonhauser 2017: 280).

Let's return to example (1) considered in the introduction—below it is embedded in the Family of Sentences containing entailment-cancelling operators, which is treated as the basic test for content projection:

-
- (1) A: Will you come to the meeting tomorrow?
 B: I'm picking my sister up from the airport tomorrow
- (1a) Negation:
 I'm not picking my sister up from the airport tomorrow
- (1b) Question:
 Am I picking my sister up from the airport tomorrow?
- (1c) Modal operator:
 I may be picking my sister up from the airport tomorrow
- (1d) Conditional:
 If I'm picking my sister up from the airport tomorrow, I
 shan't be able to come
-

Despite placing sentences with projective content in the scope of entailment-cancelling operators, the implication that the speaker of the sentence has a sister, which is associated with the use of a possessive noun phrase 'my sister' as a trigger of projective content, is preserved in each of the above sentences from (1a) to (1d). Presupposition triggers function as explicit representations of presuppositions in the language structure of spoken sentences. As aware language users, we are sensitive to certain lexical constructions knowing that they convey presuppositions. These lexical constructions include, among others, factive verbs, change-of-state verbs, cleft sentences, unreal conditionals, or, as in the case of example (1), possessive noun phrases (see Levinson 1983, Włodarczyk, 2019). Retention of the implication resulting from the use of this structure after embedding the original presupposing sentence in the context of an entailment-cancelling operator means that this content is projective. In addition, predictability results from the principle of projection: if a certain implication of an utterance is projective, it should be not-at-issue relative to the QUD.

The projective content conveyed by speaker B in dialogue (1) does not bring the interlocutors closer to answering the current QUD—which is explicitly determined by speaker A's opening utterance—in the sense that it does not result directly in narrowing the class of propositions representing this question. What is more, what speaker B says—i.e., the official or main content of her utterance—does not address the question asked by speaker A. However, speaker B addresses this question at the level of what she conversationally implicates, i.e., by communicating content (a). The current QUD in this case is whether B will appear at tomorrow's meeting. It is instructive to stress that the additional conclusion (b) contained in the overall meaning of the utterance B is not-at-issue relative to this question. Its introduction into the context in a situation in which it was used in an informative manner requires only an

adjustment of the context. With this in mind, one can, like Roberts, distinguish this type of content from the content that is required, in the light of Levinson’s criterion, to be entailed by the context preceding the utterance of the sentence carrying presupposition, thereby dividing the until-now classically considered homogeneous class of presuppositions, into suppositions and narrowly construed presuppositions:

Unlike what is often assumed in the literature, many projective triggers, including factives and possessive descriptions, are not presuppositional but merely suppositional, backgrounding the content in question so that it is “not at issue”—merely explicitly assumed by the speaker without discussion. (Roberts 2015:353).

The supposition expressed in example (1) and its variants from (1a) to (1d) does not narrow the scope of alternative answers to the question raised in the discussion, thus it is not-at-issue content. Being not-at-issue content is a requirement imposed on the appropriate use of expressions that trigger projective contents construed as suppositions.

By way of comparison, let us consider example (4) once again:

- (4) a: I’m getting married
 b: He’s a pilot

Considering this example, I refer to elements of the model offered by Discourse Representation Theory (DRT), which enable us to discuss the distinctions between standard and non-standard projective implication made in the later part of this paper. I do not want to offer a detailed discussion of this model. For the current purposes it suffices to recall that according to a central tenet of DRT the felicitous use of an anaphoric expression presupposes that there is an available discourse referent to which the expression can be bound. The utterance of sentence (4b) is a motive for looking for a discursive referent which can be introduced to the discourse thanks to the bridging assumption. This referent is a certain man. Let us recall that an additional implication of the utterance (4b) is the contextually significant, from the point of view of the conducted discourse, existence of a man to whom the author of the speech is getting married. Thanks to his earlier introduction to the universe of the discourse in utterance (4a), the recipient is able to understand by means of accommodation that it is to this man that the speaker of the utterance is getting married. Thus, the content that is the pragmatic implication related to the use of ‘he’ as an anaphora has the following form: “There is a certain male contextually available.” According to Guerts, Beaver and Maier, the interpretation of anaphoric expressions that involves accommodation is not an easy task because pronouns are descriptively weak in that their linguistic meaning underdetermines what their referent are (Guerts, Beaver, Maier 2016: 27). According to DRT, ‘he’, which is an anaphora, introduces into the Discourse Representation Structure (DRS) a new discourse referent x and the condition of identifying “ $x=y$ ”, where y is a previously introduced or otherwise salient discourse referent to which x can be bound. In the case of discourse (4), the required referent is provided through accommodation that involves constructing the bridging assumption “Anna is getting married to a certain male

person”, where the indefinite description ‘a certain male person’ introduces referent y with which x can be identified. This condition allows us to identify the referent x introduced in the utterance of sentence (4b) whom we only know to be a pilot with a mail person y to whom Anna is getting married. In example (1), where accommodation occurs without problems, there is also an anaphora, in the form of a possessive noun phrase ‘my sister’, and two referents are introduced into the DRS: v and w , and the condition ‘Sister-of (v , w)’ and the condition of identification ‘ $w=z$ ’, where z is the speaker of the utterance. The difference between example (1) and example (4) is that in the context of utterance (1) one knows what ‘my’—which is part of the possessive noun phrase ‘my sister’—refers to, whereas the discursive referent to which the anaphora refers must be introduced to the context of utterance (4), for which an additional abductive inference is required. The *difficulty* of accommodation, therefore, depends on the richness of descriptive content and what the phrase brings to the DRS.

The richness of descriptive content is a broad continuum, and various lexical constructions, which are the triggers of presupposition, can occupy different positions upon it, thus possessing a different degree of richness of descriptive content. Personal pronouns are closer to the end of the continuum containing constructions with poor descriptive content. Descriptive phrases with possessive pronouns (as ‘my sister’ used in example (1)) have rich descriptive content. When considering an utterance containing this construction, it is not necessary to refer to the context, and new, uncontroversial and not particularly interesting information is easily accommodated, in contrast to the pragmatic implication resulting from the pronoun used in example (4).

However, Roberts’s approach assumes that since the pronoun does not have sufficiently rich descriptive content in itself, the use of this expression requires that this missing content (that is, information that is intended to supplement the poor descriptive content of ‘he’) be in the context of the expression. Therefore, in example (4) there is accommodation, which is possible thanks to the bridging assumption. Because of the requirements imposed on the context preceding the utterance in example (4), we can talk about *presupposition*, not just supposition, as in example (1).

4 Standard and Non-standard Projective Contents

In the previous section, I described the conditions for the appropriate use of expressions triggering suppositions and expressions triggering narrowly construed presuppositions, thus developing the content of the rules (R1) and (R2), respectively. In the case of narrowly construed presuppositions, in order that their triggers should be used appropriately, it is necessary that these contents belong to a set of propositions representing the context of the utterance. In the case of a supposition, however, the appropriateness of using its trigger depends on whether the supposition is at-issue or not-at-issue relative to the current QUD representing the main point behind the utterance. Using these findings, I present below

examples of explicit and ostentatious violation of the rules of appropriateness (R1) and (R2) regarding, respectively, suppositions and presuppositions narrowly construed.

As has been established, in example (1) the phrase ‘my sister’ was used, which triggers the supposition “The speaker has at least one sister”, whose content is not-at-issue relative to the current QUD explicitly determined by the question asked by speaker A. Let’s modify this discourse and consider example (5), in which interlocutors A, on the weekend before prom, went to meet with people from school. He is still looking for a prom partner and asks for help his newly met friend from another class. Knowing, that all girls from their school have prom partners, B is considering other options:

-
- (5) A: I am looking for someone to go to the prom with. Do you know any nice girls?
 B: I’m picking my sister up from the airport tomorrow
-

Despite the fact that interlocutor B utters the same sentence in dialogue (5) as interlocutor B in dialogue (1), the utterance of this sentence plays a different role in discourse (5) from that in discourse (1). The pragmatic conclusion of sentence (5B)—that is, the supposition that speaker B has a sister—does not belong to a set of propositions representing the context of the utterance prior to its formulation. However, the current question that was raised in the discussion, and against which this supposition is assessed, is, in this case, “Do you know any nice girls with whom I could go to the prom?” The question, as signalled by A, can be represented as a class of alternative propositions {B knows X : X is a certain girl and A can go with X to the prom}. Utterance B narrows—thanks to what is communicated at the level of supposition—this class to a one-element set, i.e. containing the proposition “B knows a nice girl who is his sister and A can go with her to the prom.” The phrase ‘my sister’ allows one to identify X with the ‘nice girl’ sought by A. The emphasis on ‘my sister’ signals that what is supposed by the use of this phrase plays a key role in B’s communicative plan. That is to say, the fact that it is communicated as a projective content of his utterance triggers a pragmatic inference whereby A is expected to recognize B’s conversational implicature.

It is instructive to note that the supposition triggered by the possessive noun phrase ‘my sister’ plays a key role in the communicative plan underlying the utterance of “I’m picking my sister up from the airport tomorrow” in dialogue (5). Roughly speaking, the plan goes as follows: to convey that (i) she knows a nice girl who would be willing to go with A to the prom, speaker B lets A know that (ii) she has a sister. In my view, content (i) is communicated at the level of what is conversationally implicated, whereas content (ii) constitutes what is supposed by B in uttering the sentence “I’m picking my sister up from the airport tomorrow”. One can ask, therefore, whether this *conversationally* or *communicatively* supposed proposition (ii) is at-issue relative to the current Question Under Discussion; in other words, one can ask whether the utterance of the sentence “I’m picking my sister up from the airport tomorrow” is appropriate in the light of rule (R1). My answer to these questions consists of two claims and base on assumption that in some cases the content of the level of projective implications can give

rise to the conversational implicature (Geurts2019: 273). First, proposition (ii), as such, is not *directly* at-issue relative to the Current Question Under Discussion—that is to say, it does not automatically narrow down the set of propositions representing the question—and, as the corollary of this, exhibit projective behaviour (see the discussion of the Projection Principle in Sect. 3). At the same time, however, it is *indirectly* at-issue, since the observation that speaker B communicates content (ii) at the level of what is supposed by her utterance provides a starting premise for the pragmatic reasoning whereby speaker A recognizes conversational implicature (i), which, in turn, addresses the current Question Under Discussion and narrows down the relevant set of propositions. In other words, implicature (i) enables us to maintain the default presumption that dialogue (5) is coherent or, more specifically, that, contrary to appearances, the utterance of sentence (5B) constitutes an answer to the question signalled by the utterance of (5A).

Let us recall that, according to Grice (1975: 50), a “general pattern for the working out of a conversational implicature” begins with the premise that the speaker “has said that p ”. Taking into account the communicative phenomenon under discussion, however, we should make it more general and say that the pragmatic reasoning whereby the hearer determines what the speaker conversationally implicates starts with a premise that the speaker has said that p or that in saying this she has presupposed or supposed that q . The latter act—that is, the speaker’s presupposition or supposition that q —is a non-standard projective implication of her act, because it is communicated by exploiting appropriateness rule (R1). In the case of dialogue (5), for instance, speaker B ostensibly flouts the rule—i.e., she communicates in the background what is at least *indirectly* at-issue relative to the current QUD—for the purpose of communicating conversational implicature (i).

The utterances (1B) and (5B) are the same in terms of lexical and grammatical features, so the utterance (5B), similar to (1B), should pass the projective content test. However, this may seem difficult to reconcile with what results from the Projection Principle, which states that content within the scope of the entailment-cancelling operator can be projective only if it is at-issue content. In my view, however, this difficulty can be easily overcome. It suffices to stipulate that the Projection Principle says that content C supposed or presupposed by a given utterance projects only if it is not *directly* at-issue—i.e., only if it is not the case that C directly narrows down the set of propositions representing the current Question Under Discussion—whereas according to rule (R1) it is appropriate to use sentence ‘s’ to perform a speech act of certain type, only if what the utterance of ‘s’ supposes is neither *directly* nor *indirectly* at-issue relative to the current QUD.

Note that in examples (5) and (1) there is a possessive noun phrase that releases the pragmatic implications already described regarding the existence of an object that satisfies the descriptive content of this phrase. The difference between them is that in (1) the speaker observes the condition (R1) of the appropriate use of this content (i.e., the content is neither directly nor indirectly at-issue relative to the current Question Under Discussion), while in (5) it exploits it (i.e., the supposed content is indirectly—that is, through the mechanism of conversational implicature—at-issue relative to the current QUD).

For comparison, let's also consider an example from Kai von Fintel (2008: 163), illustrating that we can consider content not only in relation to the questions raised in the discussion. In this example, a daughter informs her father that she has a fiancé, by formulating the utterance:

-
- (6) O dad, I forgot to tell you that my fiancé and I are moving to Seattle next week
-

In a situation where the father did not know that the daughter had got engaged, it seems inappropriate to formulate such an utterance. However, the recipient, who is the father, is aware of the fact that by saying the above sentence, the daughter wanted to achieve a certain intended effect by intentionally using informative supposition. Performing such a conversational move serves to add this information to the context or, in other words, to get the recipient to accommodate it. The addition resulting from the use in this example of the possessive noun phrase, 'my fiancé', as in example (1) and (5) states that there is an object that meets the descriptive content of this phrase, in this case the daughter's fiancé. However, this content is not-at-issue relative to the question currently being discussed, which is the daughter's plans for the following week. However, it seems to be vitally important and to be at-issue due to a whole range of questions independent of the current course of interaction, which are constructed on the basis of the relationship between father and daughter and constantly function 'in the background'—fathers usually want to know the matrimonial plans of their daughters. Therefore, despite the fact that, in this example, the currently discussed question suggested by the daughter means that the fact of her having a fiancé should not be at-issue, it is content that is at-issue because of the questions that are constantly relevant to the father, due to his being the father. So the role played by the supposition in the example above is defined by the relationship between the interlocutors.

Let us now move to discussing the second rule set out in Sect. 2 for the proper use of projective triggers, i.e., rule (R2). It states that constructions that trigger narrowly construed presuppositions can be used appropriately when these presuppositions result from a set of propositions representing the context of an utterance. Consider, however, the following dialogue:

-
- (7) A: Why Eliza is so happy?
B: He's a pilot
-

Let us assume that it is common ground among speakers A and B that Eliza recently was permanently depressed by the fact that she had no boyfriend. For the purposes of the current discussion let us distinguish between two questions: the official question "Why Eliza is so happy?" and the accommodated question "Who is Eliza's boyfriend?" (accommodated due to the need to maintain the assumption of the rhetorical coherence of discourse, of which more below). This distinction is necessary to describe the complex arrangement of content and presupposition constituting the structure of the interlocutor B's communication plan: the utterance of sentence (7B), based on the assumption of discourse coherence, allows the introduction of an accommodated question whose presupposition addresses the official

question and, as the corollary of this, helps to resolve it. Utterance (7B) presupposes that there is a certain contextually significant man to whom the anaphora ‘he’ refers. The official question is directly communicated in the utterance (7A). Interlocutor A, believing that speaker B has formulated an utterance consistent with the previous one—that is to say, that in uttering the sentence “He’s a pilot” speaker B completed the reproduction of a question–answer pair *QAP* construed as a rhetorical relation in the sense of Asher and Lascarides (2001, 2003)—introduces the additional question “Who is Eliza’s boyfriend?” accommodated to the semantic representation of the discourse based on the assumption of its coherence. This question, in turn, contains a presupposition that there is a man who is Eliza’s boyfriend.

According to Segmented Discourse Representation Theory (SDRT) developed by Nicolas Asher and Alex Lascarides (2003), the interpretation of conversational moves is governed by the assumption that each subsequent utterance contributes to building a coherent discourse. Asher and Lascarides note, however, that in many cases the coherence of discourse depends not so much on the conversational implicatures of its constituent utterances—as is the case in the above-mentioned dialogue (5)—but on the existence between these utterances of various types of rhetorical relations. For example, to maintain the assumption of the coherence of dialogue (7), it can be assumed that the utterance of sentence (7B) together with the utterance of sentence (7A) constitutes the Indirect Question Answer Pair (*IQAP*) relation. Additionally, thanks to the introduction of the question “Who is Eliza’s boyfriend?” we can say that there is a *QAP* relationship between this question and the utterance of (7B). This makes the utterance of the interlocutor B, indirectly answering the official question negatively, appropriate. Accommodation in this case is a complex process, because despite the use of the pronoun, whose descriptive content is poor, there is no contextual support, i.e. in contrast to example (4), it is not easy to find the appropriate bridging assumption. The presupposition of the accommodated question, to which the utterance of (7B) is a direct answer, allows one to narrow down the alternative answers to the official question posed (7A). That is why we will say that this presupposition is at-issue. We note, however, that not only did it not result from a set of propositions representing the context of the utterance prior to its formulation, but it should not even belong to the at-issue discourse, because then question (7A) would be unnecessary. Speaker B, on the other hand, deliberately used informative presupposition—i.e. the presupposition of an accommodated question—to simultaneously answer the question posed by A and introduce a new assumption into the discourse, knowingly exploiting the rule (R2) of appropriate use of presupposition, thus using non-standard presupposition.

The rules governing the use of supposition and presupposition triggers allow one not only to systematize this content and determine its place in the structure of discourse, but also to identify the appropriate and intentionally inappropriate use of the triggers brought into play. In examples (1) and (4), speakers appear to act in accordance with the principle of discourse consistency, generating related utterances that attempt to resolve the current question raised in the discussion. At the same time, they act in accordance with the principles of the appropriate use of the triggers they use—in example (1) the supposition trigger, and in example (4) the presupposition trigger. However, the freedom of language use allows for the formulation of

utterances that may seem to be inappropriate uses, but are recognized as deliberate actions intended to cause a certain expected effect on the recipient. Such situations are presented in examples (5) and (7). To read the implications that were included in the utterances presented there requires recipients to use implications that go beyond the scope of inferences used to read standard projective implications, i.e. implications related to the appropriate use of the triggers involved. This is because, when formulating their utterances, the speakers have explicitly exploited the principles of the appropriate use of expressions that trigger projective content. Therefore, the recipients must first determine the current QUD and assume that their interlocutors have formulated an utterance consistent with the rest of the discourse: they follow thanks to conversational implicature relations, as is the case with dialogue (5), or thanks to posited rhetorical relations, for example in the analysis of dialogue (7); then, recipients can deduce not only the content that has been conveyed despite the ostentatious violation of (R1) and (R2) rules, but also the purpose for which the speaker has broken this rule. They thus obtain some additional information that results from the way in which this content has been communicated.

The above described exploitation of the rules of appropriateness (R1) and (R2), therefore, has a similar purpose to that which the speakers of the utterance want to achieve using non-standard implications, violating Grice's conversational maxims. Note that the mere use of implicature, even in a standard way, introduces information to the discourse that goes beyond what was said, as in example (2). On the other hand, using non-standard implicature, i.e. exploiting one of the maxims, allows one to strengthen the assumption of compliance with the principle of cooperation and allows for more complicated inferences, while bringing more information to the context, as in example (3).

Thus, the distinction between standard pragmatic implications related to compliance with the rules governing communication, and non-standard pragmatic implications resulting from the exploitation of these principles, known from Paul Grice's theory of implicature, can be also applied to suppositions and narrowly construed presuppositions understood as two types of projective contents. In short, we can talk about standard and non-standard suppositions and presuppositions.

Below is a table summarizing the examples used, showing the standard and non-standard uses of implicatures, suppositions and presuppositions (Table 1).

5 Summary

My main goal, which I have tried to achieve in this paper, was to show that the distinction between standard and non-standard pragmatic implications, originally used to account for the variety of Gricean conversational implicatures, can also be applied to the family of projective implications that are traditionally described as pragmatic presuppositions broadly construed (Karttunen 1974; Levinson 1983; Stalnaker 2002, 2014).

To this end, I have used elements of the Question Under Discussion model—constructed by Roberts, Simons, Beaver and Tonhauser—which is an attempt to uniformly

Table 1 Standard and non-standard uses of implicatures, suppositions and presuppositions

	Implicatures	Suppositions	Presuppositions
Standard	(2) Iwona has three children	(1) A: Will you come to the meeting tomorrow? B: I'm picking my sister up from the airport tomorrow	(4) a: I'm getting married b: He's a pilot
Non-standard	(3) Michał will come or will not come	(5) A: I am looking for someone to go to the prom with. Do you know any nice girls? B: I'm picking my sister up from the airport tomorrow	(7) A: Why Eliza is so happy? B: He's a pilot

explain two phenomena, i.e. presuppositions and information structure. It allows one to look at discourse as a hierarchically organized structure, enabling the use of various types of strategies to find answers to the questions related to the subject of the discourse, constantly arising during its course. Depending on the role of projective contents—most of which are traditionally described as pragmatic presuppositions broadly construed—in relation to the question raised in the discussion, I have divided them, following Roberts (2015), into suppositions and narrowly construed presuppositions. The roles of the projective contents under consideration are determined by the conditions for the appropriate use of their triggers. Suppositions are subject to rule (R1) according to which one can appropriately use a certain supposition trigger only if the supposition it triggers is not-at-issue relative to the main point behind the utterance or, more technically, relative to the current QUD. Presuppositions, by contrast, are subject to rule (R2) that states that one can use a certain presupposition trigger only if what one thereby presupposes is part of the prior common ground.

After defining the above-mentioned principles—i.e. the rules of appropriateness (R1) and (R2)—on the basis of examples presenting utterances containing projective content triggers, the use of which was associated with compliance with these principles, in the remainder of the work, I presented modified versions of the considered examples, presenting the use of rules governing the appropriate use of supposition and presupposition triggers. Ostentatiously violating the rules, as presented in examples (5) and (7), was associated with specific strategies used by speakers who deliberately used explicit exploitation to guide the recipient to read their utterances at a deeper level than what was literally said. Thanks to this, the recipients could deduce additional content. It turns out that what plays a key role in the mechanism underlying the communicative function of both non-standard suppositions and non-standard presuppositions narrowly construed is the need to maintain the default assumption that the utterances under discussion contribute to the constitution of a coherent discourse: coherent *either* in virtue of certain conversational implicatures triggered by acts of non-standardly supposing something, as it takes place in the case of dialogue (5), *or* in virtue of the rhetorical relations posited in the course of discourse interpretation, as it takes place in the case of dialogue (7).

Then, by way of analogy, I juxtaposed the standard and non-standard conversational implicatures used in the introduction, and examples illustrating the use of supposition and presupposition in accordance with the rules and by exploiting them, thus translating the same standard/non-standard distinction onto suppositions and presuppositions, and achieving the goal assumed.

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References

- Asher N, Lascarides A (2003) *Logics of conversation*. Cambridge University Press, Cambridge
- Austin JL (1962) *How to do things with words*. Oxford University Press, Oxford
- Beaver D, Roberts C, Simons M, Tonhauser J (2017) Question under discussion: where information structure meets projective content. *Annu Rev Linguist* 3:265–284
- Brown P, Levinson SC (1987) *Politeness some universals in language usage*. Cambridge University Press, Cambridge
- Geurts B (2019) Implicature as a discourse phenomenon. *Proc Sinn Und Bedeutung* 11:261–275
- Grice PH (1975) Logic and Conversation. In: Cole P, Morgan JL (eds) *Syntax and semantics*, vol 3. Speech Acts. Academic Press, New York, pp 41–58
- Guerts B, Beaver D, Maier E (2016) Discourse representation theory. In: *Stanford encyclopedia of philosophy* (Spring 2016 Edition). Zalta E (ed) *Metaphysics research lab center for the study of language and information stanford university*
- Horn LR (1984) Toward a new taxonomy for pragmatic inference: Q-based and R-based implicature. In: Schiffrin D (ed) *Meaning, form, and use in context: linguistic applications*. Georgetown University Press, Washington, pp 11–42
- Karttunen L (1974) Presupposition and linguistic context. *Theor Linguist* 1:181–194
- Karttunen L (1975) Conversational implicature in Montague grammar. *Annu Meet Berkeley Linguist Soc* 1:266–278
- Lepore E, Stone M (2015) *Imagination and convention distinguishing grammar and inference in language*. Oxford University Press, Oxford, pp 128–146
- Levinson SC (1983) *Pragmatics*. Cambridge University Press, Cambridge
- Levinson SC (2000) *Presumptive meanings The theory of generalized conversational implicature*. MIT Press, Cambridge
- Lewis D (1979) Scorekeeping in a Language game. *J Philos Logic* 8:339–359
- Roberts C (2015) Accommodation in language game. In: Loewer B, Schaffer J (eds) *The blackwell companion to david lewis*. Blackwell, Oxford, pp 345–366
- Roberts C, Simons M, Beaver D, Tonhauser J (2009) Presupposition, conventional implicature, and beyond: a unified account of projection. In: Klinedinst N, Rothschild D (eds) *Proceedings of new directions in the theory of presupposition*. ESSLLI, Bordeaux
- Sbisà M (2019) Varieties of speech act norms. In: Witek M, Witczak-Plisiecka I (eds) *Normativity and variety of speech actions (Poznań studies in the philosophy of the sciences and the humanities)*. Brill, Leiden
- Simons M (2003) Presupposition and accommodation. *Underst Stalnakerian Pict Philos Stud* 112:251–278
- Simons M (2013) On the conversation basis of some presuppositions. In: Capone A, LoPiparo F, Caparezza M (eds) *Perspectives on linguistic pragmatics*. Springer, Cham, pp 329–348
- Simons M, Tonhauser J, Beaver D, Roberts C (2010) What projects and why? *Proc Semant Linguist Theory Conf (SALT)* 20:309–327
- Stalnaker R (2002) Common Ground. *Linguist Philos* 25:701–721
- Stalnaker R (2014) *Context*. Oxford University Press, Oxford
- Tonhauser J, Beaver D, Roberts C, Simons M (2013) Toward a taxonomy of projective content. *Language* 89(1):66–109
- Tonhauser J, Beaver D, Degen J (2018) How projective is projective content? gradience in projectivity and at-issueness. *J Semant* 35:495–542
- von Fintel K. (2000) What is presupposition accommodation? Unpublished manuscript, MIT
- von Fintel K (2008) What is presupposition accommodation, again? *Philos Perspect* 22:137–170
- Witek M (2016) Accommodation and convention. *Polish J Philos* 10(1):101–116
- Witek M (2019a) Accommodation in linguistic interaction. on the so-called triggering problem. In: Stalmaszczyk P, De Gruyter B (eds) *Philosophical insights into pragmatics*. De Gruyter, Boston, pp 163–192
- Witek M (2019b) Illocution and accommodation in the functioning of presumptions. *Synthese*. <https://doi.org/10.1007/s11229-019-02459-4>

Włodarczyk M (2019) Are Implicative Verbs Presupposition Triggers? Evidence from Polish. In: Witek M, Witczak-Plisiecka I (eds) Normativity and variety of speech actions (Poznań studies in the philosophy of the sciences and the humanities. Brill, Leiden

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