

# The speech act of presumption

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*This paper presents a speech act analysis of presumption, using the framework of a dialogue in which two parties reason together. In the speech act of presumption, as opposed to that of assertion, the burden of proof resides not on the proponent to prove, but on the respondent to rebut. Some connections of this account with nonmonotonic reasoning and informal fallacies in argumentation are explored.*

Presumption is shown, in the analysis given below, to be a distinctive kind of speech act half way between assertion and (mere) assumption (supposition).<sup>1</sup> The distinction between these three important types of speech act is analyzed within a theory of dialogue (Hamblin 1970; Barth and Krabbe 1982), or conversation (Grice 1975), in which there are two participants, usually called a proponent and a respondent, who take turns reasoning with each other. In such a dialogue, different types of speech acts are employed by the participants, in their moves, in a goal-directed sequence of exchanges.

Searle (1979) makes no room specifically for presumptions in his taxonomy of speech acts. But presumably, they would come under the heading of *assertives*, the point of the members of this class being "to commit the speaker (in varying degrees) to something's being the case" (p. 12). Much depends here, however, on what you mean by 'commitment'.<sup>2</sup> Presumption requires a notion of provisional commitment, not characterized by an obligation to defend the proposition in question, if challenged.

Vanderveken (1990: 180) does not mention presumption either, in his classification of assertives. However, he does leave a little room for possibly including presumption in or around his categories of "suggest", "guess", and "hypothesize". Although it is misleading to call presumption an "assertive" speech act, that is where it fits in, according to the current taxonomies of speech acts.

One puzzling question concerning presumptions is the nature of their relation to evidence in argumentation. It seems that presumptions can go forward in an argument without being based on evidence sufficient to prove them. This appears to make them suspicious, from a logical point of view. If they can outrange evidence, does it not mean that argumentation based on them can become rampant, even empty speculation — mere conjecture, perhaps masquerading as argumentation that compels rational acceptance?

Moreover if critical discussion, as a type of dialogue, is typically built on presumptions — *prima facie* cases and plausible assumptions that are generally accepted but cannot be definitively proved — does it not suggest that critical discussion does not ever really prove anything? Does this not confirm our worst suspicions about the subjective character of critical discussion as a way of proving something using evidence, or arguing from verified facts? These very general questions and worries are at the heart of our concern with the concept of presumption in this paper. It is shown that presumptive reasoning is a distinctive kind of reasoning in its own right, one that has a valuable pragmatic function in argumentation, and has specific dialogical characteristics as a kind of speech act.

### 1. Received views of presumption

According to Lewis and Short (1969: 1433) the meaning of *praesumptio* is "a taking up and answering in advance, an anticipation of possible or suspected objections". This explication of the Latin term is very revealing, because it is premised on the key concepts of (i) a sequence of questions and answers in an extended chain of argumentation running through an ongoing dialogue, (ii) an order in the sequence, and (iii) a set of "possible or suspected objections" or critical questions put forward by a respondent, at some appropriate point in the sequence of dialogue, to match an argument or speech act put forward by a proponent. The phrase *in advance* is very important here.

The idea seems to be that a presumption does meet a burden of proof, but in a manner different from an assertion or argument that is nonpresumptive. The presumption somehow takes up its meeting of this burden before any actual objection is made to it in a dialogue. How this is done, or why it is useful, is not made clear, however.

Whately (1963) described presumption using the metaphor of preoccupation of a ground, based on the idea of two parties alternately occupying and contesting a piece of terrain — it seems to be a kind of military metaphor suggesting a two-party adversarial exchange or relationship. The one party occupies the ground until the other can bring forward a sufficient weight or force to dislodge it, and then the second party occupies the ground.

This engaging metaphor was backed up by Whately by phrasing it in terms of burden of proof, a concept already recognized in legal argumentation. Whately wrote (p. 170) that when a presumption exists in favor of the proponent of an argument, "the burden of proof lies on the side of him who would dispute it". For example, in a criminal trial, there is a "presumption of innocence" (p. 171) until guilt is established by the trial.

Although Whately's account succeeded in linking the concept of presumption with its partner concept of burden of proof, he left open basic questions about the exact nature of this relationship and how it works in practice.

A continuing controversy (Reinard 1991: 252) is whether presumption is relevant only at the beginning of a discussion, or whether it continues to be important throughout the dialogue. The same kind of controversy surrounds the notion of burden of proof. Is it set at the initial stage of a dialogue once and for all, until the issue is resolved or the dialogue ends, or does it vary (shifting back and forth) as the dialogue proceeds? Indeed, given the lack of any rigorous analytical explication of the concepts of presumption and burden of proof, it is hard to distinguish between the two notions, or to show clearly where the difference lies.

Whately also brought forward the idea that there is a legitimate weight of presumption in argumentation in favor of existing institutions and practices, e.g., the Anglican Church. Naturally, this idea turned out to be very controversial. However, Whately's idea was backed up by an analysis of presumption offered by Perelman and Olbrechts-Tyteca (1969: 71) which linked it with degree of risk in practical reasoning designed to conclude towards a prudent course of action. According to Perelman and Olbrechts-Tyteca, current or traditional institutions and accepted practices have a presumption in their favor because we have an idea of what to expect from accepting them. Their likely consequences or potential side effects are known better than those of a system or practice that is yet untried. This suggestion tied presumption into practical reasoning under uncertainty in concluding towards a prudent course of action, a conceptual tie-up also later advocated by Clarke (1989: 10). The idea is that some presumptions at least can be justified on a practical basis because our practical knowledge of their expected consequences makes them a safer basis for prudential action.

This pragmatic view of presumption was developed into a fuller analysis of presumptive reasoning by Ullman-Margalit (1983a). According to this analysis, a presumptive inference from one proposition *A* to another proposition *B* is based on a rule of the following form: given that *A* is the case, you (the rule subject) shall proceed as if *B* were true, unless or until you have sufficient reason to believe that *B* is not the case (p. 147). This rule is not meant by Ullman-Margalit (p. 149) to make any claim on its subject's "cognitive or epistemic systems" which involves a commitment to, or guarantee of the truth value of the derived

presumption *B*. The analysis is meant as a pragmatic explication of presumption in the sense that it entitles one only to hold that *B* is true "for the purpose of concluding one's practical deliberation on the impending issue. . ." (p. 149). In this analysis, presumption is understood as based on a kind of practical inference which sanctions a pragmatic passage from one proposition to another in the context of some overarching practical deliberation or discussion on an issue regarding some contemplated course of action or policy. Ullman-Margalit (1983b) also shows how presumption relates to Grice's maxims (especially the Cooperative Principle), indicating how a presumption can be rebutted when it violates a maxim.

This pragmatic type of analysis suggested by Perelman and Olbrechts-Tyteca, Ullman-Margalit and Clarke is very promising, but it depends on how we are to understand practical reasoning as a distinctive type of reasoning.

Practical reasoning is a goal-directed sequence of linked practical inferences that seeks out a prudent line of conduct for an agent in a set of particular circumstances known by the agent. Where *a* is an agent, *A* an action, and *G* a goal, the two basic types of practical inferences are, respectively, the *necessary condition scheme* and the *sufficient condition scheme* (Walton 1990: 41).

*G* is a goal for *a*

Doing *A* is necessary for *a* to carry out *G*

Therefore, *a* ought to do *A*

*G* is a goal for *a*

Doing *A* is sufficient for *a* to carry out *G*

Therefore, *a* ought to do *A*

The second premise, in both types of inferences, is to be understood as relative to what *a* knows or reasonably takes to be the case, as far as he grasps the particular circumstances in the given case. These circumstances can change, and practical reasoning is therefore to be understood as a dynamic kind of reasoning that needs to be corrected or updated as new information comes in.

The concepts of necessary and sufficient conditions incorporated in the second premise need to be understood as typically flexible rather than strict relationships. Both need to be judged in relation to the given knowledge base of the agent, subject to exceptions and overriding circumstances that can come to light in a particular case. These are very special kinds of conditionals that have a special kind of logic in their own right, analyzed in section five below.

The conclusion of a practical inference guides an agent to a prudent course of action, subject to the conditions set in the premises. The conclusion is a practical imperative directing the prudentially wise to do something, given the circumstances, as the agent sees them, expressed in the premises. If the agent is

committed to the premises, then he ought (prudentially) to be committed to the course of action to which he is directed by the conclusion. Otherwise, his set of commitments is practically inconsistent.

As argumentation, practical reasoning is used in a context of dialogue. Most commonly, practical reasoning is used in deliberations, but it is also often used in advice-solicitation dialogues, and in critical discussions. Four kinds of critical questions function alongside a practical inference as a means of indicating a proper weight of commitment to be assigned to the conclusion in a given context of dialogue.

- Q1:** Are there alternative ways (other than *A*) of realizing *G*?
- Q2:** Is it possible for *a* to do *A*?
- Q3:** Does *a* have goals other than *G* that should be taken into account?
- Q4:** Are there other consequences of bringing about *A* that should be taken into account?

In weighing these critical questions against a practical inference in a given case, in a context of dialogue, burden of proof plays an important role. If the premises of a practical inference are well-supported as reasonable commitments for an agent, a weight of presumption is thrown against a respondent who questions the practical validity of the practical inference in the given situation. To shift the burden back onto the proponent, the respondent must pose one or more of these appropriate critical questions. Thus practical reasoning has a kind of validity that should be judged in relation to the requirements of burden of proof in a given situation.

The kind of analysis of practical reasoning briefly outlined above and further developed and elaborated in Walton (1990) makes room for the pragmatic view of presumption of the sort advocated by Perelman and Olbrechts-Tyteca, Ullman-Margalit and Clarke.<sup>3</sup> Presumptions can be justified in reasoning, on a practical basis, on the grounds that it can enable the line of reasoning to go ahead, even in the absence of absolute knowledge of what will happen in a particular situation where some commitment to action or inaction needs to be made. Guidance towards a prudent course of action typically necessitates operating on presumptions that could turn out to be wrong, and drawing conclusions (tentatively) from these presumptions by practical inferences, even if such reasoning is a kind of careful guesswork.

## 2. Nonmonotonic reasoning

Classical deductive logic has the property of *monotonicity*, meaning that if you have a valid argument, no matter how many new premises you add (even to the

point where they form an inconsistent set), the argument still remains valid. However, practical reasoning tends to be nonmonotonic, because if new information comes in which changes the circumstances of a given situation, the rational conclusion may be to opt for a different course of action which takes this updating of information into account. Practical reasoning is dynamic or variable in a sense in which the reasoning modelled by classical deductive logic is static or "fixed".

Nonmonotonic reasoning is currently an intense topic of interest in artificial intelligence, where the following example of an argument is often cited (Reiter 1987: 149).

*Case 1*

Birds fly.

Tweetie is a bird.

Therefore, Tweetie flies.

The problem concerns the interpretation of the first (major) premise. To make the argument deductively valid, you need to construe this premise as a universal (strict) conditional of the form, 'For all  $x$ , if  $x$  is a bird then  $x$  flies'. But what if Tweetie is a penguin, a type of bird that does not fly? The conclusion 'Tweetie flies' is false, but the second premise is true, therefore the major premise must be false, assuming the argument is deductively valid.

But this interpretation is problematic, because the major premise, in reality, still seems to be true, if interpreted in a less strict way. The major premise does not seem plausibly interpreted in this case as a universal conditional that asserts that all birds (without exception) fly. As Reiter (p. 149) puts it, a more natural reading of this premise is one that allows for possible exceptions, e.g., the possibility that Tweetie could be an exceptional type of bird with respect to the property of flying, i.e. "Normally, birds fly" or "If  $x$  is a typical bird, then we can assume by default that  $x$  flies". What is meant here by *default* is that in the absence of evidence that Tweetie is atypical, we can provisionally (subject to correction) assume that he flies. Thus the inference is *defeasible*, or subject to default, in the sense that it only goes forward provisionally, subject to defeat or rebuttal, should information come in showing that Tweetie is not typical.

Presenting an interesting example, Reiter (1987) linked default reasoning to what is called the *closed world assumption* in computer science, the assumption stating that all relevant, positive information has been presented in an argument or presentation of a case. This assumption licences any respondent to infer that if a proposition is not explicitly stated, its negation may be assumed to hold.

*Case 2*

To see why negative information poses a problem, consider the simple example of a database for an airline flight schedule representing flight

numbers and the city pairs they connect. We certainly would not want to include in this database all flights and the city pairs they do *not* connect, which clearly would be an overwhelming amount of information. For example, Air Canada flight 103 does not connect London with Paris, or Toronto with Montreal, or Moose Jaw with Athens, or . . . .

The basic principle behind this way of presenting the information, according to Reiter (1987: 150) is that there is far too much negative information to present explicitly. So this negative information is presented indirectly by licensing the respondent to draw conclusions by default reasoning.

Reiter's presentation of the problem of nonmonotonic reasoning in computer science reveals an important link with the literature on informal fallacies. For it is clear that case 2 is an excellent example of the use of the *argumentum ad ignorantiam* as a type of inference. Although this type of argument has traditionally been treated in logic textbooks as a fallacy, the kind of case cited by Reiter suggests that it also has correct uses as a reasonable type of default argumentation.

Reiter (1987) presented a survey of the range of different formal (deductive and inductive) systems that have been advanced in artificial intelligence studies to solve the problem posed by nonmonotonic reasoning. However, he concluded that the solution would not appear to be found in any single deductive or inductive system of logic, but rather (p. 180) in implicit conventions "of cooperative communication of information where it is understood by all participants that the informant is conveying all of the relevant information". In such an interactive framework of communication, any relevant item of information not conveyed is, by default, assumed to be false.

Another example Reiter gave (p. 180), interestingly, links it with yet a further traditional informal fallacy, the fallacy of many questions (complex question).

### Case 3

For example, if someone were to tell you that John has not stopped beating the rug, you would justifiably infer that John was beating the rug despite the fact that the original statement might be true precisely because John never was beating the rug to begin with. The point is that if this were the case, your informant should have told you. Since she didn't, convention dictates the appropriateness of your conclusion, despite its defeasibility.

Another type of case of default reasoning cited by Reiter is the use of pictures and diagrams where the contention is that an entity is not present if it is not depicted in the diagram or picture. Reiter (p. 180) comments that statistical reasoning does not seem to account for this kind of inference, because it is difficult to imagine

"what it could mean to assign a probability to the failure of a circuit diagram to depict a device's power supply, or what advantages there could possibly be in doing so". The conclusion to be drawn from these cases then is that the understanding of nonmonotonic reasoning is not to be sought in deductive or inductive formal systems of inference, but in a more broadly pragmatic account of how conventions function in licencing one participant to draw legitimate inferences in cooperative communication with another participant who conveys information, both directly and indirectly, through a dialogue.

Default conditionals — of the form 'For a typical  $x$ , if  $x$  has property F, then we can presume, subject to default in non-typical cases, that  $x$  has property G' — are inherently pragmatic because they must be evaluated in relation to a given type of dialogue and the goals for that type of dialogue, which impose practical requirements on commitments in argumentation, including prior requirements of global burden of proof. As Rescher (1977: 6) put it, the kind of conditional involved here is "provisoed" to how things go "normally" or "naturally", subject to dialectical countermoves that could possibly defeat it in the future course of a disputation. Rescher concludes (p. 19) that the logic of this defeasible type of conditional has to be evaluated in relation to a sequencing of moves and countermoves in an organized argumentative exchange of disputation.

Case 3 links several factors together in a way that reveals the fundamental importance of presumptive reasoning in argumentation. First, it shows that the fallacy of many questions is linked to the argument from ignorance (see section seven below). To understand how the rug-beating question functions as a fallacy, you have to see the underlying inference as the drawing of a conclusion from something unsaid. If something is not specifically stated as an item in a knowledge base as true (false), then we go ahead and presume it must be false (true).

Second, case 3 shows how such presumptive arguments from ignorance are involved in argumentation at the metalogical level of conventions of successful communication between two or more participants in argumentation. At this level Gricean maxims of communication (Grice 1975) both govern presumptions, and are at the same time, themselves kinds of presumptions that typically licence inferences on a basis of what is left unsaid in a discussion. To understand how presumptive reasoning works, we need to ascend to a higher level of seeing how it is used in dialogue.

### 3. Burden of proof

A *dialogue* is an orderly sequence of exchanges between two participants where each participant has a goal and the dialogue, as a whole, has a goal. In some main

types of dialogues that are especially important as contexts of argumentation the goal of one or both participants is to prove that a proposition is true.

The critical discussion is a dialogue of this type. The goal of a critical discussion (Van Eemeren and Grootendorst 1984) is to resolve a conflict of opinions. In a simple critical discussion, the goal of one participant is to prove that his thesis (point of view) is true (right), and the goal of the other participant is to raise doubts (critical questions). In a compound critical discussion, both participants have a thesis to be proved, and the one thesis is the opposite of the other.

Other types of dialogues, outlined in Walton (1989a: 10), include the information-seeking dialogue, where the goal is for information to be transmitted from the one participant to the other, and the negotiation dialogue, where the goal is for the parties to "make a deal" by dividing up some goods or interests that are in short supply.

The concept of an obligation applies to all types of dialogue. The obligation is the function the participant has to perform, according to the rules of the dialogue, in order to fulfill his goal in the dialogue. Burden of proof is a subcategory of obligation. In a type of dialogue, called a *probative dialogue*, where the goal of a participant is to prove (or disprove) something, his obligation is matched with a *weight*, a rough rating (heavy, medium, or light) which is an estimate of how difficult or easy it is to prove that particular proposition in the given context of dialogue.

Burden of proof can be thought of as a balance in a compound critical discussion. Where the burden of the one side is relatively light, the burden of the other side will be matchingly heavy (and vice versa), at the beginning (opening stage) of the dialogue (Walton 1988).

A critical discussion (Van Eemeren and Grootendorst 1984: 85-87) has four stages: the opening stage, the confrontation stage, the argumentation stage, and the closing stage. The global (technical) burden of proof is set in the confrontation stage, and fixed for the duration of the discussion, through to the closing stage. However the local burden of proof (burden of proceedings) varies during the course of the discussion, depending on the type of speech act put forward by a participant at a particular move, and the state of his commitment-set at that move. The commitment-set of a participant (Hamblin 1970: 263), varies during the sequence of the dialogue.

The argumentation stage of a dialogue is best thought of as a sequence of connected subarguments on both sides, as one side is pictured in figure 1. The burden of proof is the obligation to prove the initial thesis, set at the beginning of the dialogue. But this changes as the dialogue proceeds. Burden of proof, at the local level, depends not only on the argumentation scheme (type of argument)

which has been put forward at that move, but also on the sequence of argumentation the proponent has put forward at prior moves. Depending on the strength of a participant's sequence of argumentation at a particular point in the sequence of a dialogue, the burden of proof can shift towards the other participant, meaning that he must reply with a correspondingly strong argument if he is to successfully fulfill his obligation in the dialogue.

Burden of proof is an important and useful idea where conclusive resolution of a disputed issue by appeal to decisive evidence (knowledge) is not practical or possible. The problem, in such a case, is that the argumentation could go on and on, and never reach a resolution. Burden of proof is a practical solution to this problem which works by setting a required weight of strength of argumentation

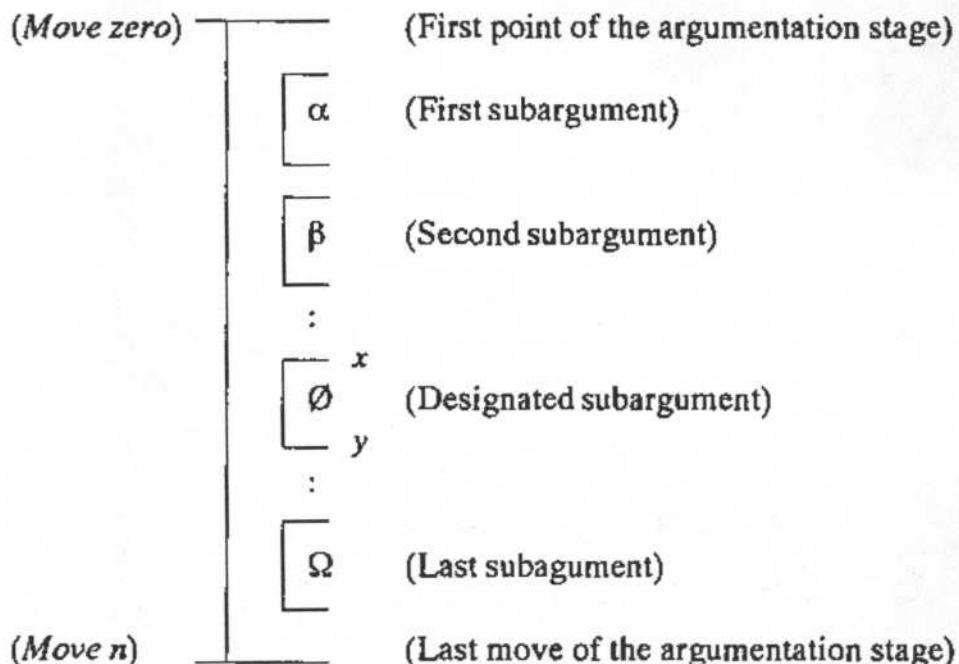


Figure 1. Subarguments (rounds) in the argumentation stage of a dialogue

as sufficient to prove (disprove) the contention, and thereby close the dialogue off from further argumentation.

At the global level, burden of proof can be set in various ways — by preponderance of evidence, by convincing evidence, or beyond reasonable doubt, for example — on a scale of increasing heaviness of the burden. At the local level, some ways of apportioning burden of proof are relatively clear, e.g., "He who asserts must prove". In the case of speech acts other than assertions, e.g., questions, the apportionment of the burden may depend on many factors, like the type of question, in judging whether the asker or respondent is committed to presuppositions of the question.

But the most fundamental problem, for this paper, is how the speech act of presumption is related to, or determined by the burden of proof. Traditionally these two notions have been thought of as partners, but the exact nature of their relationship has never been clearly defined. Indeed, presumption and burden of proof are often confused, or treated as the same thing. Can we help to clarify this situation?

The way to begin is to observe that presumptive reasoning often plays an important role in argumentation at a local level of a dialogue, represented by subargument  $\emptyset$  in figure 1. At this level, for example, there may be a weight of presumption in favor of a particular proposition that is brought forward in a dialogue, even if hard evidence, of the sort normally required to meet a burden of proof in that type of dialogue, is not forthcoming. Presumption seems to function as a way of absolving or excusing a subargument from the usual demands of burden of proof.

#### 4. Commitment and burden shifting

In refining Hamblin's notion of commitment in dialogue, we have to make two important distinctions between kinds of commitments. First, we need to distinguish between concessions and substantive commitments. A *substantive commitment* is a proposition that a participant in dialogue is obliged to defend, or retract, if challenged by the other party to give reasons to support it. In a word, it has a burden of proof attached to it. This is the type of commitment to a proposition that goes along with having asserted it in a dialogue. A *concession* is a commitment where there is no such obligation to defend, if challenged. Concessions are assumptions agreed to "for the sake of argument". By nature, they are temporary, and do not necessarily represent an arguer's position in a dialogue.<sup>4</sup>

Second, we need to distinguish between explicit commitments and implicit commitments. The commitment-set of each participant in a dialogue is divided into two sides, a *light side*, a set of propositions known, or on view, to all the participants, and a *dark side*, a set of propositions not known to, or visible to, some or all of the participants. This dark side set represents the implicit commitments of a participant in a dialogue. These are propositions that he is committed to, but has not explicitly agreed to, or otherwise given a clear indication in the dialogue of his commitment to them. They have to be guessed, or plausibly conjectured from what we know about the nature of his explicit commitments, as they have become apparent in the dialogue. For example, if George has been consistently socialist in a dialogue, so far, and shows plenty of evidence of being a committed socialist, we can make plausible conjectures about his commitments

on an issue on which he has, so far in the dialogue, expressed no explicit opinions, e.g., on how to finance the postal service. Although he has not explicitly committed himself to the proposition that the postal service should be funded by the government, and we do not know that he is committed to this proposition on the evidence of the dialogue, still, we can conjecture that he is likely to be committed to it, as a plausible guess, based on what we know of his position so far.

The games CAVE and CAVE+ in Walton (1989b: 296-311) have this dark-side commitment feature, and the reader who wishes a fuller exposition of how the rules of a dialogue incorporate this notion can find some answers there. Suffice it to note here that many of an arguer's commitments in argumentation are not explicitly stated, or agreed to as such, in a dialogue, and therefore have to be inferred or conjectured, on a provisional or presumptive basis. Otherwise, we could not make sense of ordinary argumentation in everyday conversations based on unexpressed premises and other kinds of important but unstated presumptions.

Given these distinctions then, how can we give a clear and useful account of the distinction between presumption and burden of proof? What is the essential difference between these two concepts?

Presumption is clearly connected to burden of proof in argumentation, but how? To begin with, we should note the difference between (pure) supposition and assertion as kinds of speech acts. Assertion always carries with it a burden of proof, because assertion implies substantive commitment to the proposition asserted. Supposition (or assumption) however, requires only the agreement of the respondent, and carries with it no burden of proof on either side. Presumption, as a speech act, is half way between (mere) supposition and assertion. Presumption essentially means that the proponent of the proposition in question does not have a burden of proof, only a burden to disprove contrary evidence, should it arise in the future sequence of dialogue. The burden here has three important characteristics — it is a future, conditional, and negative burden of proof. It could perhaps be called a burden to rebut, in appropriate circumstances.

Presumption is functionally opposed to burden of proof, meaning that presumption removes or absolves one side from the burden, and shifts the burden to the other side. In this respect, presumption functions as a speech act in dialogue, as a switching of roles of the two participants. Fallacies can arise, however, because this shifting back and forth can be tricky.

One fallacy that can be explained in relation to this shifting of the burden of proof from one party to the other in a dialogue is *petitio principii*, the fallacy of circular reasoning or begging the question. If the proponent of a thesis *A* in a critical discussion has the burden of proving *A*, but then puts *A* forward as a presumption in the discussion, his argument is circular. He is "begging the

question" in the sense that he is begging the respondent to accept, as a presumption, i.e. without proof, a proposition that he is obliged to prove. This type of move is dialectically incoherent, in the sense that the arguer asks to be granted, without having to prove it, a proposition he is supposed to be proving.

The fallacy of begging the question is actually much more complicated than this simple sketch of it indicates, when it comes to the interpretation and evaluation of particular cases (See Walton 1991). But even this bare conceptual sketch of the basis of the fallacy shows that burden of proof is different from presumption. The existence of the fallacy of begging the question as a fallacy proves that there is a difference, in general, between burden of proof and presumption. The fallacy is precisely the fusing (or confusing) of the difference between these two things.

Whately (1963: 113) saw astutely how failure to be attuned to shifts in a burden of proof in argumentation can be disastrous in allowing one party to unfairly get the best of another in an exchange. Ignorance of such matters can be a major tactical failure in argumentation. Whately compared it to the case of troops in a fort who are strong enough to defend it against all attacks, but foolishly sally forth to engage the enemy in the field, and are defeated. Whately (p. 114) asks us to imagine a case where a person who, confronted with an unsupported accusation, tries to prove his own innocence by collecting all the facts he can muster, instead of defying his accuser to prove the charge. Such a reply would be ineffective, and even rouse a strong suspicion of guilt by appearing too defensive. The attacked person has overlooked his strongest weapon of defence — the burden of proof. The problem is that the attacker falsely appears to have the weight of presumption on his side, to the extent that the underlying shift in the burden of proof has gone unnoticed.

It is this kind of tricky, unperceived, and unlicenced shift in a burden of proof in a speech act of presumption in dialogue that underlies the working mechanism behind other fallacies as well, like the *ad ignorantiam* and the fallacy of many questions, as we have seen. In the next section, a set of speech act conditions defining the movement and sequencing in the functioning of presumption in dialogue are given. This set of conditions shows how the back and forth shifting of presumption should work as a speech act in any sequence of argumentative dialogue generally. In conjunction with the requirements for a particular type of dialogue in a given case, this set of conditions can be used as a general framework for evaluating presumptive reasoning.

## 5. Speech act conditions defining presumption

In the speech act analysis of presumption given by the twelve conditions below, presumption is understood as a kind of speech act that is half way between assertion and (mere) assumption. An assertion normally carries with itself in argumentation a burden of proof: "He who asserts must prove!". By contrast, if a participant in argumentation puts forward a (mere) assumption, she (or anyone in the dialogue) is free to retract it at any subsequent point in the dialogue without having to give evidence or reasons that would refute it. Assumptions are freely undertaken and can freely be rejected in a dialogue.

Presumptions are between these other two types of speech acts somewhere. A presumption is a proposition put in place as a commitment tentatively in argumentation to facilitate the goals of a dialogue. Presumptions are often put forward for practical reasons, to enable the dialogue or an action to go ahead, even if there is a lack of hard evidence that would confirm or refute the proposition in question definitively, one way or the other.

The key thing about the speech act of presumption in argumentation, according to the analysis given below, is that it reverses the burden of proof in a dialogue. More generally speaking, presumption reverses the roles of the two participants in argumentation. Normally, the burden to prove is on the one who asserts a proposition *A* in argumentation, as something he is committed to in the dialogue. However, when a presumption is brought forward by a proponent, the burden is on the respondent to refute it, or otherwise it goes into place as a commitment.

The basic idea is that a dialogue is an extended (global) sequence of exchanges of speech acts that has a goal-directed over-all structure. But within this global structure there are "rounds" or subarguments that are woven together into the larger fabric of the dialogue. For example, a dialogue could be a critical discussion of whether the practice of tipping is generally a good thing or not, and a subargument within the larger dialogue could be a discussion of whether or not tipping creates some problems for fairly assessing income tax.

The idea is that a presumption stays in place for a certain number of moves in a dialogue, but is not a permanent or non-retractable commitment for either party that must stay in place for the whole duration of the dialogue. Typically, a presumption stays in place long enough for the participants to finish the round of argumentation in which they are currently engaged. In order to be useful, presumptions must have a certain amount of "sticking power", but by their nature, they are tentative and subject to later retraction.

In the analysis below, we will speak of the subargument as a "round", a sequence of argumentation that can be isolated as having a structure (premises,

conclusions, inferences) of its own. This round provides a useful place, a localized setting, where a presumption can be set in place, during the opening moves of the round. We will call the actual point at which a presumption is brought forward for consideration "move  $x$ ". The round also has a duration, lasting to a move or point  $y$ , where the presumption can be given up or cancelled.

#### I. *Preparatory conditions*

1. There is a context of dialogue that involves two participants, a proponent and a respondent.
2. The dialogue provides a context within which a sequence of reasoning could go forward with a proposition  $A$  as a useful assumption in the sequence.

#### II. *Placement conditions*

1. At some point  $x$  in the sequence of dialogue,  $A$  is brought forward by the proponent, either as a proposition he explicitly asks the respondent to accept for the sake of argument, or as a non-explicit assumption that is part of the proponent's sequence of reasoning.
2. The respondent has an opportunity at  $x$  to reject  $A$ .
3. If the respondent fails to reject  $A$  at  $x$ , then  $A$  becomes a commitment of both parties during the subsequent sequence of dialogue.

#### III. *Retraction conditions*

1. If, at some subsequent point  $y$  in the dialogue ( $x < y$ ), any party wants to rebut  $A$  as a presumption, then that party can do so, provided she can give a good reason for doing so. Giving a good reason means showing that the circumstances of the particular case are exceptional, or that new evidence has come in that falsifies the presumption.
2. Once having accepted  $A$  at  $x$  however, the respondent is obliged to let the presumption  $A$  stay in place during the dialogue for a sufficient time to allow the proponent to use it for his purposes of argumentation (unless a good reason for rebuttal under clause 1 above can be given).

#### IV. *Burden conditions*

1. Generally, at point  $x$ , the burden of showing that  $A$  has some practical value as a useful presumption in a sequence of argumentation is on the proponent who proposes to use  $A$  as a presumption in his argument.

2. Past point  $x$  in the dialogue, once  $A$  is in place as a working presumption (either explicitly or implicitly) the burden is on the respondent to rebut the presumption by giving a good reason for rejecting it.

These essential conditions for the speech act of presumption in dialogue make it clear that the key idea is the shifting of the burden of rebuttal. At a particular point in the dialogue, the participants switch roles. The burden was first on the proponent, but then at this particular point, the burden of providing a good reason shifts to the respondent.

The basic way that a presumption operates in a dialogue is to give the argument some provisional basis for going ahead, even in the absence of firm premises known to be true. Once the presumption is lodged into place, the respondent is obliged temporarily to leave it in place for a while, giving the proponent a fair chance to draw conclusions using it as a premise. How firm a weight of commitment is put into place in such a lodging depends on the type of dialogue, and other global factors like the burden of proof, as well as local requirements defined by the type of argumentation scheme used at the local level. But quite generally, in any of the contexts of dialogue suitable as frameworks for argumentation as considered above, this set of speech act conditions for presumption shows how the shifting back and forth of presumptive argumentation should work. Thus it provides a general normative framework for the use of presumptive reasoning in dialogue which can help in the determination of certain kinds of argumentation as fallacious or nonfallacious.

## 6. Presumptions and presuppositions

Presumption is a notion that is fundamental to philosophy as a subject, but has generally been ignored as a concept for serious investigation. In contrast, presupposition is a concept that has been studied in great intensity by both philosophers and linguists, resulting in a prolific variety of different theories, summarized by Levinson (1983). Both concepts can be put to use for varying purposes, and there is some flexibility in how they can be interpreted. Consequently, it is not easy to tell the two apart, or to firmly fix their key differences. It seems that, in many cases, they refer to roughly the same thing. Given the existing literature, it is especially hard to say what presupposition is, briefly, with much confidence.

However, in what follows, a brief sketch is given of what is taken to be the key differences between the concept of presumption that is the target of analysis for this paper, and the broad notion of presupposition that seems — if not very clearly — to have emerged as a technical term in linguistics and the philosophy of language.

Presupposition relates to a specific type of speech act and the appropriate type of response when that type of speech act is used in a dialogue. It is not so much a question of burden of proof, or of bringing forward evidence, but of what happens to the respondent's commitments when he gives the normal or appropriate type of response in a dialogue. For example, the concept of a presupposition of a question can be defined pragmatically as follows. A presupposition of a question asked by a proponent in dialogue with a respondent is any proposition the respondent becomes committed to in giving any direct answer to the question. For example, a presupposition of 'Have you stopped cheating on your income tax?' is the proposition 'You (the respondent) have cheated on your income tax.'. It is a presupposition because no matter which direct answer the respondent gives, the preferred answer (yes), or the nonpreferred answer (no), he becomes committed to that proposition (Walton 1989a: chapter 1).

The proposition that the respondent has cheated on his income tax could also be described as a presumption of the proponent's question, meaning that once the respondent commits himself to it by giving a direct answer, a burden is put on him to then disprove it, if he decides that he no longer accepts it. And in general, presuppositions can often be described or explained as presumptions. But there is a key difference. When you describe a proposition as a presupposition, the essential thing is not the burden of proof, or the shifting of it from one party to the other, as it is in a presumption.

Presupposition has to do with the order in which a sequence of propositions put forward by a proponent in a dialogue are taken on as commitments by a respondent. With the income tax question above, the problem is that asking it in a dialogue, in such a way that a direct answer can be given, presumes (prior to this, in the logical sequence of dialogue) that the respondent has already committed himself to the proposition that he has cheated on his income tax. But this may or may not be the case.

If it is the case, there may be no problem. But if it is not the case in the real context of dialogue in a given, particular instance of the asking of this question, there could be a serious problem. The fallacy of many questions (complex question) could have been committed.

Of course, the respondent can always reply: "Your question has a false presupposition — I have never cheated on my income tax!". In other words, he could refuse to give a direct answer by questioning, or objecting to the question. In most ordinary contexts of conversation, fortunately, this option is available.

But if there is textual evidence from the context of dialogue that the proponent is adopting a tactic of trying to seal off this option, or badger the respondent into not taking advantage of it, this is precisely the type of context where the charge that he is committing the fallacy of many questions is appropriate.

In many cases of everyday conversation, for example in asking directions, the proponent is operating on the presumption that the proposition advanced by the respondent is right or reliable. But he is not thereby (necessarily) presupposing that the answer will be right. Nor is it a presupposition of his question "Which way to room C300?" that the answer given by the respondent is right. The proponent waits until he gets the answer, and then if it seems reasonable, and there is no reason to question it, or think it is wrong, he goes ahead and presumes that it is (plausibly) right. This shows a difference between presumption and presupposition, because the questioner is not presupposing that the answer is right, in asking his question.

The question has presuppositions, it is true. For example, the question presupposes that room C300 exists, that there is a way to get there, and so forth. These can also be described as presumptions inherent in the asking of the question. But although the questioner presumes that the answer given is correct or reliable, it is not (necessarily) the case that he, or his question, presupposes that the answer given is correct or reliable. That would only be the case if the proponent (questioner) had some reason, to which he was committed previously, to believe that this particular respondent was a particularly reliable source, who could be trusted to give a correct answer to this question — for example, if he had been told previously that this person was a security officer who was expert in his knowledge of all the corridors and rooms in this building. Here, the very strong presumption of correctness, in advance, could be described as a presupposition.

With regard to the notion of presupposition, it is important to distinguish (1) what the question presupposes, as opposed to (2) what asking the question presupposes, and (3) what the questioner presupposes, in asking that question. In keeping with the orientation of the traditional literature, we have concentrated on (1). But perhaps you could say that (3) comes closest to the idea of presumption.

## 7. Implications and wider issues

Presumption, as characterized in this paper, is an essentially pragmatic notion which enables a discussion or action to go ahead on a rational, even if provisional basis, where access to evidence that would definitively resolve the question is lacking. For even if the evidence is insufficient, there may be enough of it to indicate the wisdom of a provisional course of action, in given circumstances. Such a procedure can be rationally justified, if, for practical but good reasons, a burden of proof can be set to tilt the resolution of the issue in one direction or the other.

For example, in a potentially hazardous situation, it may be prudentially wise to tilt the burden of proof in the direction of safety. The principle behind this

way of proceeding is called tutiorism, sticking to the safest known way of proceeding where there is doubt, or lack of knowledge on how best to proceed in a given set of circumstances. The maxim is to "err on the side of safety", where doubt creates the potential for danger.

A simple case is the accepted procedure for handling weapons on a firing range. The principle is always to assume a weapon is loaded (or at least, to act on that presumption by forbearing from waving it around, or pointing it at someone), unless you are sure that it is not loaded. The test of whether you are sure of this is that you have, just before, inspected the chamber and perceived clearly that it is empty.

The *ad ignorantiam* nature of this type of presumptive reasoning is quite clear. If you do not know the weapon is unloaded, then you infer that it is loaded, or at least you act on this presumption.

The same kind of example shows also, however, how tied to the specifics of a context or situation this kind of reasoning is. Suppose you are a soldier in wartime getting ready to defend your position against an imminent enemy assault. Here, reasoning again on practical grounds of safety or self-preservation, you act on the presumption that your weapon may be empty, by checking to see that it is not empty. It is the same kind of *ad ignorantiam* inference as the one in the firing range case, but turned around in this new situation.

Presumptive reasoning is a lot more common in everyday life than you might think until you begin to reflect on it. It has many uses, and many practical justifications. One of the common uses is to facilitate action in situations where a commitment must be acted upon or implemented, even in the absence of hard evidence sufficient to resolve an issue in time to be of use. Practical reasoning, in such cases, often rests on general presumptions based on routine or customary ways of doing something. Such practices are often justified because they have been found to be successful in the past by practitioners skilled in this type of task.

Much more remains to be learned about presumptive reasoning, but what we have learned in this paper about its leading characteristics has fundamental implications for the project of the normative evaluation of argumentation generally. In the past, presumptive reasoning has been too often and severely condemned as inherently untrustworthy, erroneous, or even fallacious. Consequently, it has often been cast aside as being of little or no importance as a subject to be taught as part of logic.

Presumptive reasoning should be understood as inherently nonmonotonic, in the sense that it is always subject to revision or correction on the basis of new information that may come in at some future point. This means that nonmonotonic reasoning is often circular, in the sense that the new information introduced by the particular circumstances of a given case at issue often provides feedback,

subjecting a conclusion based on presumptive inference to correction or enrichment. This circularity of reasoning is not necessarily a fallacious circularity, however. In fact, it is characteristic of the self-correcting aspect of presumptive reasoning generally. Here, we have to overcome the prejudice against circular reasoning as being inherently fallacious (see Walton 1991).

In some cases of default reasoning, a list of kinds of exceptions can be well-defined. For example, in case 1, we may have a list of the non-flying birds, including penguins, ostriches, and so forth. But in other cases, new information could come in that could not have been anticipated on any list of standard exceptions. Tweetie may be a canary, normally a flying type of bird, but in fact, it could be that it has an injured wing. Thus, the presumptive conditional must generally be regarded as an open-ended generalization that is subject to unanticipated objections in a given case.

Hence the job of evaluating presumptive reasoning is inherently pragmatic, in that it depends on the particular circumstances of a given case, as far as these are known, to a given point. This context-sensitivity and openness to revision is also characteristic of practical reasoning generally — a kind of reasoning that takes as its object an inherently variable situation unfolding in time.

As we have seen, there are many different kinds of basis for making presumptions, and it is also true that the evidence for judging a presumptive inference as successful (correct, justified, acceptable) or not are inherently pragmatic, fitting a context of dialogue. First, it depends on the type of dialogue involved, e.g., a critical discussion. Second, it depends of the speech act. Presumption is a type of speech act, but presumptions are also put forward in questions and other kinds of speech acts. Third, it depends on the stage of the dialogue the speech act occurs in — here we have been concentrating on the argumentation stage primarily. Fourth, it depends on the burden of proof, on the conditions for the speech act of presumption in the given context of dialogue, and generally on the obligations of the proponent and respondent of the presumption. Fifth, it depends on the information given in the text of discourse of a dialogue explicitly, or on information that can be inferred by conventions of politeness and implicature from the given discourse. Thus, judging presumptive reasoning often depends on expectations that are not explicitly stated in discourse.

Generally, presumptive reasoning can be seen as a forward-moving sequence in a dialogue — figure 2 outlines the sequence. At the choice point, the inference goes forward or not, subject to default. And then, even when the inference succeeds and the conclusion is drawn, that conclusion remains subject to possible future defeat by new circumstances that may arise.

As portrayed here, presumptive reasoning is neither deductive nor inductive in nature, but represents a third distinct type of reasoning of the kind classified by

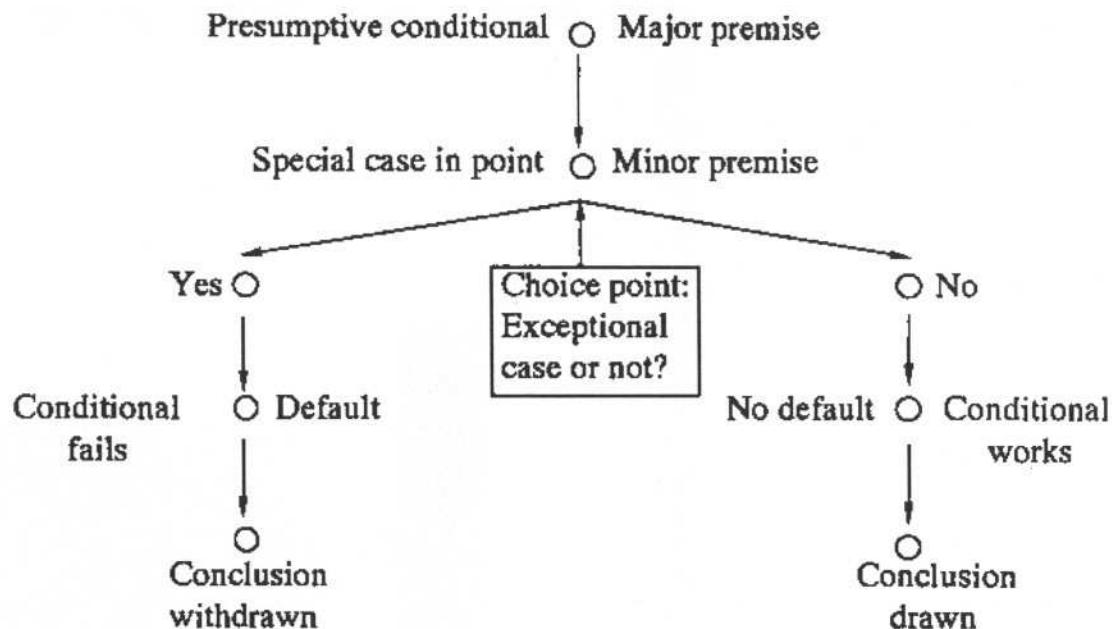


Figure 2. Movement (going forward) of presumptive reasoning.

Rescher (1976) as plausible reasoning — an inherently tentative kind of reasoning subject to defeat by the special circumstances (not defined inductively or statistically) of a particular case. Rescher also sees this kind of reasoning as inherently dialectical in nature, meaning that it needs to be judged in a context of dialogue. The recognition of this third type of reasoning has important and fundamental implications for the analysis of informal fallacies.

Case 2 shows how the *argumentum ad ignorantiam* can be a reasonable argument based on presumptive reasoning from data that is not known explicitly or given explicitly, in positive form, as part of a given knowledge base. The fact that a particular proposition is not in a knowledge base can sometimes licence a presumptive inference to a negative conclusion. We can presume that a particular proposition is false, on the grounds that it is not known to be true. As an instance of presumptive, nonmonotonic reasoning, such an inference can be reasonable. Hence, we can't take it for granted that the *argumentum ad ignorantiam* is a fallacy.

The fallacy of many questions is another case in point. It turns on the order in which a sequence of questions should reasonably be asked and answered in a dialogue. It has to do with the order in which a logically connected sequence of commitments should be taken on or rebutted by a respondent. The problem type of case, like "Have you stopped cheating on your income tax?", concerns a complex question that combines several commitments in the one question. The problem arises when a question is posed aggressively, in a manner that incorpo-

rates a tactic of pre-empting an affirmative response to taking on a commitment that the respondent should have an opportunity to reject. The problem revealed here is that presumptions need to be put forward in an open-ended way that allows for defeasibility in the future sequence of dialogue. Closed ways of putting them forward can go against their nonmonotonic nature, which demands certain requirements on how they should be used correctly and reasonably in a context of dialogue. As case 3 showed, these requirements are tied to communicative conventions of dialogue which licence presumptive inferences.

Finally, the *secundum quid* fallacy is clearly the major fallacy which directly highlights the need to see presumptive reasoning as a distinctive type of reasoning in its own right, with its own distinctively pragmatic standards and requirements.<sup>5</sup> The kind of exceptive argumentation or defeasible reasoning involved in the *secundum quid*, modelled using the default conditional as a major premise, it seems, can be reasonable in some cases, fallacious in others. Making sense of the fallacy of *secundum quid* clearly requires coming to grips with case-based reasoning which is dependent on argumentation that weighs the similarity of one case to another (argument from analogy), and which takes into account shifts in the weight of presumption derived from the special features of a particular case.

Proper evaluation of presumptive reasoning requires a flexible tolerance, a readiness to acknowledge and correct errors and biases, and finally, an appreciation of the finer shades of meaning and shifts of presumption in argumentation. The positivist point of view is more absolutistic and "black and white", tending to see presumptive reasoning as inherently sloppy, vague, or subjective, and trying to eliminate such hedging whenever possible. Unfortunately, too heavy a leaning towards the positivistic view in affairs of everyday life tends towards the kind of rigidity, prejudice, and dogmatism that does not deal very well with the exceptions and irregularities commonly encountered in practical reasoning in the real world of changing circumstances. But this rigidity is typically the very sort of dogmatic attitude in dialogue that is associated with committing the fallacies of the kind we have examined. It is hard to live with presumptive reasoning, but harder still to live without it.

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## Notes

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2. See Hamblin (1970: 263-265).
3. Note Leibniz's use of presumption and defeasibility in argumentation, as shown in Dascal (1987: chapter 6).
4. The account of commitment outlined in section eight derives from a joint research project undertaken at NIAS with Erik Krabbe. A monograph, *Commitment in Dialogue*, is forthcoming.
5. According to Hamblin (1970: 28), the fallacy of *secundum quid*, meaning "in a certain respect" (Greek *para to pe*), "consists of using a proposition, which has a qualified meaning, as though it applied in all circumstances and without restriction". A popular example is this argument: "Everyone has the right to his own property. Therefore, even though Jones has been declared insane, you had no right to take away his weapon". The fallacy in such a case evidently lies in the failure of the argument to take into account that there are legitimate kinds of exceptions to the generalization about the right to property, and that the case in point is one of these exceptional cases.

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