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# On the Differences Between Practical and Cognitive Presumptions

Petar Bodlović<sup>1</sup>

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## Abstract

The study of presumptions has intensified in argumentation theory over the last years. Although scholars put forward different accounts, they mostly agree that presumptions can be studied in deliberative and epistemic contexts, have distinct contextual functions (guiding decisions vs. acquiring information), and promote different kinds of goals (non-epistemic vs. epistemic). Accordingly, there are “practical” and “cognitive” presumptions. In this paper, I show that the differences between practical and cognitive presumptions go far beyond contextual considerations. The central aim is to explore Nicholas Rescher’s contention that both types of presumptions have a closely analogous pragmatic function, i.e., that practical and cognitive presumptions are made to avoid greater harm in circumstances of epistemic uncertainty. By comparing schemes of practical and cognitive reasoning, I show that Rescher’s contention requires qualifications. Moreover, not only do practical and cognitive presumptions have distinct pragmatic functions, but they also perform different dialogical functions (enabling progress vs. preventing regress) and, in some circumstances, cannot be defeated by the same kinds of evidence. Hence, I conclude that the two classes of presumptions merit distinct treatment in argumentation theory.

**Keywords** Avoiding harm · Cognitive presumption · Dialectical regress · Nicholas Rescher · Practical presumption · Presumptive reasoning · Scepticism · Uncertainty · Undercutting defeater

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## 1 Introduction<sup>1</sup>

Suppose Anne and Jim are meeting a friend on a cloudy winter day. Just before leaving the apartment, they start deliberating whether to take an umbrella. They are aware that their decision should partly depend on whether it will rain—if rain is significantly more likely, they should take an umbrella; if rain is significantly less likely, they clearly should do the opposite. Anne quickly looks through the window and estimates that the chance of rain is, roughly, a half. She then checks a (fairly reliable) weather forecast website only to learn that the likelihood of rain is indeed 50%. Although Anne remains in a state of evidential uncertainty, the pressure of making a decision is forced upon her. She and Jim need to decide whether to take an umbrella, and they need to do it immediately (or risk being late).

Next, suppose that Andy is an epistemically responsible agent who wants to know where his cat is. After looking through the window and seeing that a cat (which looks exactly like *his* cat) is in the tree, he expresses his belief that “Andy’s cat is in the tree” thereby committing himself to its acceptability. However, Andy’s wife Jane is a radical sceptic. She challenges Andy’s commitment and, in good Cartesian fashion, remarks that Andy can never rule out the possibility of perceptual deception: from her sceptical viewpoint, the general uncertainty of perception renders the proposition “Andy’s cat is in the tree” evidentially inconclusive. This sceptical remark puts cognitive pressure on Andy. Not only must he reconsider whether his commitment is justified and whether it can be used to draw tentative conclusions (e.g., “Andy’s cat is not in the bedroom”), but he must also reconsider whether to trust his senses. Since perception is a fundamental source of information, an epistemically motivated agent can hardly postpone the decision whether to trust her senses for very long.

The Umbrella case and the Cat case differ in some respects, but they seem to share two general characteristics. First, they begin with a similar problem: Anne and Andy must act in the context of uncertainty and pressure.<sup>2</sup> Second, both cases can be reasonably resolved by following the pragmatic policy of *avoiding greater harm*: Anne can bring an umbrella to avoid (the greater harm of) getting soaked and becoming sick, and Andy can decide to trust his senses to avoid (the greater harm of) suspending judgment on (all) perception-based propositions. As a result, not only do the Umbrella case and the Cat case tackle a similar problem, but they might also include the same pragmatic policy to resolve it.<sup>3</sup>

<sup>1</sup> Paragraphs and sections of this paper, which present typical features of practical and cognitive presumptions, are partly based on Bodlović (2019a, 2020a). In this paper, I develop a more detailed account of these features by elaborating the differences between practical and cognitive presumptions.

<sup>2</sup> On the one hand, Anne must decide whether to take an umbrella although “It will rain” is an uncertain proposition. On the other hand, Andy must decide whether to trust his perception and accept that “Andy’s cat is in the tree,” although neither perception nor the proposition is epistemically certain.

<sup>3</sup> One may object that the analogy does not hold entirely, since, ultimately, the Cat case is about believing rather than deciding. Unlike Anne, Andy is an epistemic agent whose *ultimate* goal is to adopt justified beliefs, and belief-formation is hardly an instance of decision-making. Although I agree with this view, it must be stressed that, within the framework of epistemic pragmatism, the language of decision-making might still make sense in the context of epistemic inquiry. Of course, Andy is not supposed to

In order to avoid greater harm, Anne and Andy are acting on *presumptions*. On a standard view, presumptions are propositions (or statuses of propositions) that agents proceed on in circumstances of uncertainty and pressure (Ullmann-Margalit 1983; Rescher 2006; Walton 2014; Godden 2017, 2019).<sup>4</sup> In the Umbrella case, “It will rain” represents a practical presumption: although “It will rain” is uncertain, Anne acts on it by deciding to take an umbrella. In the Cat case, “Andy’s cat is in the tree” represents a cognitive presumption: although “Andy’s cat is in the tree” is uncertain from a sceptical viewpoint, Andy acts on it by relying on his senses and by using it as a tentative premise in reasoning. For the most part, agents accept presumptions “to get on smoothly with business of all sorts, to cut through impasses, to facilitate and expedite action” (Ullmann-Margalit 1983, p. 147), but scholars agree that presumptions ultimately rest on normative foundations:

[A]n important similarity of all of the accounts surveyed is that the foundations of presumptions are normative. Whether these foundations are explained in terms of institution-specific rules, general epistemic principles, the illocutionary consequences of making utterances of a certain kind, or the social obligations that envelop our day-to-day activities, presumptions require a grounding in norms. (Godden and Walton 2007, p. 337)

The normative foundations seem compatible with pragmatic justifications of presumptions since, usually, pragmatic policies promote values. Anne, for instance, might decide to avoid greater harm, but what constitutes greater harm in her case depends on (her) preferences. She might choose to bring an umbrella because she values health more than convenience. There are also epistemic goals and preferences. For instance, after a sceptical remark, Andy might proceed as if his senses are reliable and as if “Andy’s cat is in the tree” is a justified proposition. This is because he would rather adopt (some) beliefs as true/justified at the expense of risking to accept some falsities, than avoid adopting (any) false/unjustified (perceptual) beliefs at the expense of failing to believe any truths. So, as far as kinds of goals, values, or preferences are concerned, there are practical and cognitive presumptions. If an agent proceeds on *p* to promote a non-epistemic goal and, typically, to avoid greater harm in circumstances of uncertainty and pressure, then *p* is a *practical presumption*. By contrast, if an agent proceeds on *p* to promote an epistemic goal and, typically, to avoid greater harm in circumstances of uncertainty and pressure, then *p* is

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Footnote 3 (continued)

decide whether he *believes* “Andy’s cat is in the tree,” but he might be able to decide whether it is *reasonable to proceed* on this belief and to derive tentative conclusions from it. Similarly, Andy is not supposed to decide whether he believes that his senses are reliable in general. Still, he might decide that it is epistemically reasonable to proceed on this belief, i.e., to adopt trusting perception as a default epistemic policy. So, in some sense, both the Umbrella case and the Cat case involve decision-making. I thank a reviewer of *Argumentation* for pressing this clarification.

<sup>4</sup> On standard accounts, they are also closely related to the asymmetrical allocation of the burden of proof (see Whatley 1963; Rescher 1977, 2006; Pinto 2001; Freeman 2005; Godden and Walton 2007; Walton 2014). However, the relationship between presumptions and burdens of proof is the topic of another paper (see Bodlović 2020b).

a *cognitive presumption*. I adopt this terminology from Nicholas Rescher (2006, p. 27).

Practical and cognitive presumptions are different. Typically, they belong to different contexts (deliberation vs. inquiry) and have distinct ultimate contextual functions (arriving at decisions vs. acquiring true beliefs). Also, they promote different kinds of goals (non-epistemic vs. epistemic) and, consequently, have “foundations of qualitatively different types” (Godden and Walton 2007, p. 337). This is not a matter of dispute. But what about the similarities between the Umbrella case and the Cat case? Do practical and cognitive presumptions avoid greater harm in circumstances of uncertainty and pressure? Do they operate in sufficiently similar ways so that “uncertainty,” “pressure,” and “avoiding greater harm” have comparable meanings? Are practical and cognitive presumptions the same tool used for similar pragmatic purposes in different contexts, or are they different tools, the similarities of which become less relevant once their particular applications are concerned? In short, once we set the contextual and qualitative considerations aside, do cognitive presumptions follow “their own logic” or are they, as Rescher suggests, “the epistemic analogue[s] of ‘innocent until proven guilty’” (2006, p. 23)?

In this paper, I will explore how practical and cognitive presumptions operate in dialogical contexts. I will argue that they are, in fact, different dialogical statuses for (at least) three reasons: typically, (1) they perform different dialogical functions, (2) they have structurally different pragmatic foundations, and (3) they cannot always be defeated by the same kinds of evidence. Thus, in the context of reasonable dialogue, practical and cognitive presumptions are differently analysed and evaluated, and thereby merit distinct treatment in argumentation theory. Although, at a high level of theoretical abstraction, they may share enough features to form the class of operators called “presumptions,” the paper focuses on dialogical differences rather than on conceptual similarities. Also, note that this article starts from standard understandings of the notions of practical and cognitive presumption (and, for the most part, does not seek to justify their adequacy) when comparing how these two kinds of presumptions fare within reasonable dialogues. The special attention is given to Rescher’s account and his view that practical and cognitive presumptions have very similar pragmatic foundations, i.e., that they both promote avoiding greater harm in circumstances of uncertainty.

I first outline a standard dialogical approach to practical presumption (Sect. 2). After presenting its standard features, I focus on the notion of cognitive presumption (Sect. 3) and discuss how the two kinds differ (Sects. 3.2–3.4). In Sect. 4, I provide a summary of the most relevant conclusions, qualify these conclusions, and propose some guidelines for further research.

## 2 Practical Presumptions: The Standard View

Philosophical scholarship offers many incompatible accounts of the nature, function, justification, and overall importance of presumptions. Nevertheless, the so-called practical characterization of presumptions, influenced mainly by legal scholarship,

is well established within this fragmented picture.<sup>5</sup> Let's begin with two legal examples.

The most famous example is the *presumption of innocence*. It is grounded in the rule in criminal law requiring that the accused should be considered innocent until or unless she is proven guilty. This presumption serves to resolve what Ullmann-Margalit (1983, p. 152) and Godden (2017, p. 505) call a “deliberation problem:” when it is (a) uncertain on grounds of (adequate) evidence whether the accused is innocent or guilty and (b) a legal decision needs to be made, we should “try to minimize the conviction of innocent persons, even at the cost of letting guilty persons go free [because] the former is judged the greater injustice” (Walton 1988, p. 244). As Dare and Kingsbury (2008, p. 507) put it, “better a hundred (in truth) guilty people go free than one (in truth) innocent person is jailed.” Another well-known example is the *presumption of death*, where the person who has been absent (without any explanation) for more than  $x$  years is presumed dead until proven otherwise. Although this presumption has some epistemic support (unlike the presumption of innocence), it is primarily a means to achieve a non-epistemic end: typically, it enables the distribution of the missing person's estate when there is insufficient evidence indicating whether the person is dead or alive (Ullmann-Margalit 1983, p. 146; Rescher 2006, p. 27).

Paradigmatic examples are useful for illustrating how practical presumptions typically operate. But what exactly are presumptions? What are their central features? The standard approaches define presumptions as appropriately qualified claims: proposition  $p$  counts as a presumption if and only if  $p$  is introduced (explicitly or implicitly) with the modal operator (status, qualifier) “presumably” (see Ullmann-Margalit 1983; Hansen 2003; Rescher 2006; Godden and Walton 2007; Walton 2014; Godden 2017, 2019; cf. Bermejo-Luque 2016). Still, what does “presumably” stand for?

The standard answer to the latter question places presumptions in a dialectical setting where parties exchange arguments in order to resolve a difference of opinion. Within this setting, the operator “presumably” has unique deontic implications. On the one hand, the status of  $p$  as a presumption entitles the proponent to use  $p$  in an argument without providing reasons for it: when  $p$  gets challenged, she is not (immediately) obliged to argue in favour of  $p$ . On the other hand, if the opponent is unwilling to accept  $p$  as a shared commitment, she is obliged to justify her rejection of  $p$  by providing reasons (see, e.g., Pinto 2001; Rescher 2006; Walton 2014; Godden 2017). Accordingly, the key feature of presumption is both dialectical and deontic: in a dialogue, “presumably” indicates that some tentative commitment entails an asymmetrical allocation of the burden of proof. We may call this the *deontic function* of presumption.

The practical presumption of innocence nicely illustrates this asymmetrical allocation: the defence is *not* obliged to prove the defendant's innocence, whereas the

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<sup>5</sup> For an overview of various approaches to presumption in law, see Gama (2017). For a similar overview within argumentation theory, see Godden and Walton (2007) and Lewiński (2017).

prosecutor *is* ultimately obliged to prove the defendant's guilt. This asymmetry is supposed to apply to cognitive presumptions, as well (Rescher 2006).

## 2.1 The Dialogical Function of the Practical Presumption

With this characterization in place, what is the *dialogical function* of practical presumptions? By asymmetrically allocating the burden of proof, “[w]hat do presumptions do *for* the dialogue” (Bodlović 2017, p. 518)? How do they contribute to its constructive development and what dialogical goals are they supposed to achieve? What dialogical issues are they supposed to resolve?

The paradigmatic dialogical function of practical presumptions is to enable dialogical progress in circumstances of pressure and uncertainty (see Ullmann-Margalit 1983; Walton 1988, 2008, 2014; Godden 2017, 2019). Suppose that agents engage in an argumentative dialogue in order to resolve an urgent issue. Suppose that the deadline is approaching, that there is pressure to resolve the issue, and that the resolution depends on whether  $p$  is true. Suppose, however, that  $p$  is uncertain, i.e., that there is insufficient evidence to believe  $p$ .<sup>6</sup> In these circumstances, we are facing the so-called deliberation problem and the obligation to provide sufficient reason for  $p$  will cause a dialogical deadlock to ensue. Since we cannot afford this due to urgency, we need an effective means to break the deadlock. The presumptive status of  $p$  is exactly that—it places the burden of proof on the opponent and allows us to proceed tentatively as if  $p$  were true. It enables the dialogue to progress, to continue on a provisional basis towards the resolution of an urgent issue.

## 2.2 Practical Presumptions and Presumptive Reasoning

By asymmetrically allocating the burden of proof, practical presumptions enable the progress of deliberation. But what conditions warrant the acceptance of practical presumptions? Why exactly should we proceed as if  $p$  is true instead of presuming  $\sim p$  and arriving at a different decision? What do the *foundations* of practical presumptions look like? In this section, I propose an answer by analysing the structure of presumptive practical reasoning.

Inspired by legal scholarship, argumentation scholars typically reconstruct practical presumptions as conclusions of reasoning. This reconstruction reveals the *logical function* of presumptions: usually, practical presumptions (“presumed facts”) are interpreted as conclusions of presumptive reasoning consisting of a “basic fact” and a “presumptive rule” (Ullmann-Margalit 1983; Hansen 2003; Rescher 2006; Godden and Walton 2007; Walton 2014; Godden 2017). The basic fact is an elementary or complex statement that gives rise to the presumption by instantiating the antecedent of the presumptive rule. The presumptive rule is a conditional that stands for a policy that prescribes the course of action (Ullmann-Margalit 1983; Rescher 2006).

<sup>6</sup> Legal dialogues provide good examples. After all, they cannot last forever: at some point, when all the available (often inconclusive) evidence is taken into account, a decision must be made.

Defeasibility is a necessary feature of a presumptive rule.<sup>7</sup> Although there are different ways to express defeasibility, I will simply use the “all else being equal” phrase: a presumption follows from the basic fact, in accordance with the presumptive rule, if *all else is equal*, i.e., absent defeaters.<sup>8</sup>

Although this explains why practical presumptions are not assumptions, presumptions still remain somewhat arbitrary. It is unclear why we should follow one presumptive rule rather than another. For instance, we can reconstruct the reasoning in the Umbrella case, as follows:

1. If rain is uncertain (basic fact), then, all else being equal, the deliberative agent should act on “It *will* rain.” [Presumptive rule]
2. The weather forecast website estimates that there is 50% chance of rain. [Basic fact]
3. Therefore, all else being equal, Anne should act on “It will rain” (i.e., “Presumably, it will rain”) [Presumed fact/presumption].

But is there a reason why she should follow *this* presumptive rule? Why shouldn't she start from the same basic fact and, due to insufficient evidence that it *will* rain, draw the contrary conclusion? After all, the basic fact “The weather forecast website estimates that there is 50% chance of rain,” together with the absence of defeaters, equally supports “It will rain” and “It will not rain.”

We can answer this question by expanding the core structure of presumptive reasoning. In the complete formulation, presumptive reasoning involves various considerations that (directly or indirectly) support the presumptive rule. Although basic facts (typically) and the absence of defeaters represent “the epistemic conditions under which [presumptive rules] come into effect” (Godden 2017, p. 506), presumptive rules are primarily supported by normative considerations. Thus, one can select the rule on grounds of safety, by appealing to the “principle of tutorism” (Walton

<sup>7</sup> Although some scholars, inspired by legal scholarship, acknowledge the existence of indefeasible, irrefutable, or conclusive presumptions (see Walton 2014, p. 107; Godden 2017, pp. 507–508), this paper does not deal with such kinds. However, it is possible that “indefeasible ‘presumptions’ are presumptions in name only” (Rescher 2006, p. 5), since it is controversial whether they can place the burden of proof on the opponent (Kauffeld 2003, p. 134). Also, it is important to keep in mind that defeasibility is not a sufficient condition to render some piece of reasoning presumptive. For instance, a statistical syllogism is surely a defeasible inductive argument, but it is (at least) debatable whether it represents a presumptive argument in the strict sense of the word.

<sup>8</sup> Importantly, “all else being equal” is not an *element* of a presumptive rule, but merely the indicator of its defeasibility. Some scholars express defeasibility in a different way, e.g., by adding the so-called “no-defeater clause” as the second conjunct of a complex antecedent of some presumptive rule. What I call the “no-defeater clause” has been labelled in various ways in the literature, such as, “rebuttal clause” (Ullmann-Margalit 1983, p. 149) and “default proviso” (Rescher 2006, p. 33). Although this indicates that one may make the presumption only in the absence of sufficient defeaters, treating the absence of defeaters as a premise in the antecedent, in fact, conceals the defeasible nature of presumptive reasoning. (It could not be the case that the premises are true, and that the presumption does not follow.) For this reason, I stick with the “all else being equal” interpretation. I thank prof. James Freeman for explaining the advantage of avoiding reconstructions of presumptive reasoning in terms of the “no-defeater clause” (see Freeman 2020).



1988, p. 247) or the “principle of precaution” (2014, p. 214). Of course, safety is one among many non-epistemic goals and values that can provide normative support for a presumptive rule. According to Bermejo-Luque (2016, p. 12), presumptive rules can also promote honesty and politeness, protect the value of human life, or increase the efficiency of some process/procedure. Crucially, when the ultimate normative goal is in place, one selects the presumptive rule in line with the policy of avoiding greater harm. This policy reveals the paradigmatic *pragmatic (instrumental) function* of presumptions: if there is an “expected utility imbalance with respect to  $p$ ” (Ajijaz et al. 2013, p. 270), i.e., if proceeding (erroneously) on  $p$  is less costly than proceeding (erroneously) on  $\sim p$ , then one shall act upon  $p$ , or, in other words, presume that  $p$ . Accordingly, Anne should follow the presumptive rule that safeguards her actions in the special circumstances of risk and uncertainty.

Let us spell out Anne’s reasoning in the Umbrella case more systematically. First, Anne realizes that two errors are possible: either she takes an umbrella and it does not rain, or she does not take an umbrella and it rains. Anne then estimates and compares potential costs. The first error will cause only a slight inconvenience: Anne will have to carry around an umbrella without any need. The second error, however, might cause greater harm: Anne will probably get soaked and, in the worst-case scenario, she may become sick. Thus, Anne presumes “It *will* rain” and proceeds by taking an umbrella. Given that Jim shares Anne’s values and has a similar take on the risks involved, he should either adhere to Anne’s presumption or provide (additional) evidence that it will not rain.

Let us now present the complete scheme of presumptive practical reasoning.<sup>9</sup> Here,  $A$  stands for the deliberating agent (Anne);  $q$  stands for the basic fact (“The weather forecast website estimates that there is 50% chance of rain”);  $p$  (“It will rain”) and  $\sim p$  (“It will not rain”) stand for propositions that can be acted upon;  $C1$  (inconvenience of carrying an umbrella) and  $C2$  (agent gets soaked and runs the risk of becoming sick) stand for the potential consequences of acting erroneously on either  $p$  or  $\sim p$ ; and  $G1$  (health) and  $G2$  (convenience) stand for basic goals (values) that underlie Anne’s deliberation.

1. Condition  $q$  obtains. (BASIC FACT)
2.  $A$  is faced with a decision whether to act on  $p$  or  $\sim p$ . (DELIBERATION DILEMMA)
3.  $A$  cannot postpone the decision. (DELIBERATION PRESSURE)
4.  $A$  is not aware of sufficient evidence for either  $p$  or  $\sim p$ . (GENUINE EVIDENTIAL UNCERTAINTY)
5. If any deliberating agent is faced with a decision whether to act on some proposition, cannot postpone the decision, and is not aware of sufficient evidence for a proposition, then she is facing a deliberation problem. (DELIBERATION PROBLEM)
6. If any deliberating agent is facing a deliberation problem, then she should seek to avoid a costlier error. (TUTORISM, PRECAUTION)

<sup>9</sup> The following scheme is an expanded version of the “negative practical reasoning scheme,” proposed by Walton, Reed and Macagno (2008, p. 100). Authors characterize the scheme as a “subspecies of the *ad ignorantiam* scheme” (p. 99).

7. If any deliberating agent acts on  $p$  and  $p$  turns out to be false, then  $C1$  follows. (ERROR-COST ENTAILMENT 1)
8. If any deliberating agent acts on  $\sim p$  and  $\sim p$  turns out to be false, then  $C2$  follows. (ERROR-COST ENTAILMENT 2)
9. If (a)  $G1$  is more important than  $G2$  to some deliberating agent; (b)  $C2$  undermines  $G1$ , and (c)  $C1$  undermines  $G2$ ; then  $C2$  is costlier than  $C1$ . (GOAL-COST ENTAILMENT)
10.  $G1$  is more important than  $G2$  to  $A$ . (NORMATIVE INEQUALITY)
11.  $C1$  undermines  $G2$ .
12.  $C2$  undermines  $G1$ .
13.  $C2$  is costlier than  $C1$ . (COST COMPARISON) [9, 10, 11, 12]
14.  $A$  is facing a deliberation problem. [2, 3, 4, 5]
15.  $A$  should seek to avoid a costlier error. (POLICY OF AVOIDING COSTLY ERRORS) [6, 14]
16. All else being equal, following a presumptive rule that prescribes acting on  $p$  is a good means to avoid a costlier error. (EXPECTED UTILITY IMBALANCE) [7, 8, 13]
17. If some condition (such as  $q$ ) obtains, then, all else being equal, the deliberating agent (such as  $A$ ) should act on  $p$ . (PRESUMPTIVE RULE) [15, 16]
18. Therefore, all else being equal,  $A$  should act on  $p$  (Presumably,  $p$ ). (PRACTICAL PRESUMPTION) [1, 17]

Admittedly, this scheme renders justifications of practical presumptions more complicated than they intuitively seem. However, it is necessary to explain in some detail both the circumstances in which practical presumptions arise, as well as their pragmatic and normative foundations.

But is the concept of presumption necessary to explain or justify Anne's decision to take the umbrella? It may seem that we can reconstruct her reasoning by taking into account only the probability of rain and the strength of her preferences to stay dry and travel light. If the expected utility of bringing an umbrella is greater than the utility of leaving it at home, then we can understand Anne's decision without referring to the concept of presumption. Introducing presumptions into practical reasoning, then, might be an unnecessary complication that leads to undesirable consequences: for instance, Anne becomes (needlessly) forced to include an epistemically unwarranted proposition, namely the presumption "It will rain," into her commitment set. Since this is an important objection, let me offer three clarifications.<sup>10</sup>

First, in my opinion, this objection might rest on the assumption that presumptions represent new propositions that we introduce next to other components of practical reasoning (such as preferences and policies). But this is hardly true. Even if we can explain and justify decisions without appealing to presumptions, this is not because we needlessly introduce presumptions *in addition* to other components of reasoning (such as preferences and policies), but because we introduce them *by* introducing other elements of reasoning. "Presumably,  $p$ " means that (1) proposition

<sup>10</sup> I thank a reviewer of *Argumentation* for raising this objection.

$p$  (as well as  $\sim p$ ) is epistemically uncertain; that (2) proceeding on  $p$  avoids greater harm (3) given the agent's goals; and that, for these reasons, (4) an agent takes on a tentative, practical commitment to proceed on  $p$ . So, technically, presumptions represent statuses of propositions, and these statuses seem inherent to practical reasoning. Even if presumptions are redundant, this is not because we introduce new propositions into reasoning and commitment sets "out of nowhere," but because we can reduce presumptive status to more fundamental conditions of practical reasoning.<sup>11</sup>

More importantly, even if presumptive status only designates a particular type of practical reasoning, mostly summarizes Anne's reasoning or, perhaps, expresses Anne's decision in different terms,<sup>12</sup> it is still explanatory relevant. Remember that the Umbrella case begins with Anne's attempt to make an epistemically informed decision. Since the likelihood of rain motivates Anne's reasoning in the first place, presumptive status is indeed relevant. That is, "Presumably, it will rain" explains the tentative and procedural nature of Anne's commitment towards "It will rain." Since other qualifiers (such as "plausibly," "probably," or "supposedly") do not quite fit this kind of commitment, "presumably" is necessary to explain Anne's relation to an important condition of her reasoning. Moreover, since we often analyse situations like the Umbrella case in terms of "presumptions," it is licit to make the role of presumptions visible in such reasoning (rather than covering it up).

Finally, the procedural nature of "presumably" explains why introducing "It will rain" into Anne's commitment set is not problematic. Anne's acceptance of "Presumably, it will rain" is reasonable even though the proposition "It will rain" is epistemically unwarranted. So, the concern that adding "Presumably, it will rain" into a commitment set is problematic *because* "It will rain" is epistemically unwarranted does not seem plausible. In a practical case, "presumably" is, by definition, a non-epistemic modality (Ullmann-Margalit 1983; Godden 2017, 2019).

### 2.3 What Can Defeat Practical Presumptions, and When?

We have just seen how practical presumptions come to life. But how are they put to rest? Godden (2017) identifies four general defeating strategies:

1. The opponent may criticize the *tenability* of any component that gives rise to presumptive status (such as the basic fact or the presumptive rule)<sup>13</sup>;

<sup>11</sup> For the argument that presumptions have an epiphenomenal character, i.e., that they are based on more fundamental considerations, see Lewiński (2017).

<sup>12</sup> Somebody may claim that "Presumably,  $p$ " *only* means "We should act on  $p$ ." If this were true, then, technically, a decision would not be *based* on presumption, but it would be semantically *equivalent* to it. I disagree with this interpretation since, sometimes, we should act on  $p$  even when  $p$  is evidentially certain, i.e., when  $p$  is not a presumption.

<sup>13</sup> Here, Godden talks about the rebuttal of "the inferential conditions giving rise to the presumption" (2017, p. 506). Although this is correct, I find it useful to make a terminological distinction between showing that the premise is false and showing that the "presumed fact" is false. Hence, following van Laar and Krabbe (2013), I shall use "premise tenability criticism" for the former and, following Pollock (1987), "rebuttal" for the latter.

2. The opponent may *undermine* presumptive reasoning (by showing that the presumptive rule is not correctly applied on a given occasion or by introducing an *undercutting defeater*);
3. The opponent may *override* presumptive reasoning (by questioning the proponent's goal and, usually, proposing an alternative course of action based on different normative grounds);
4. Finally, the opponent can *rebut* the conclusion "Presumably,  $p$ " by showing that  $p$  is (or could more likely be) false (see Godden 2017, pp. 506–507).

This list answers the question: What kinds of considerations, in principle, defeat practical presumptions? However, a related question has mostly escaped the attention of scholars, namely: When do these considerations exactly defeat practical presumptions? Once introduced into the dialogue, do they necessarily defeat presumptions (under the assumption that defeaters themselves remain undefeated)?<sup>14</sup> Suppose, for instance, that the opponent challenges a presumption by introducing an undercutting defeater, and that the proponent is committed to accept this defeater. Does the undercutting defeater *necessarily* cancel presumptive status? I will argue that, sometimes, given the particular background conditions, the undercutting defeaters are entirely useless for challenging practical presumptions, insofar as we assume the standard meaning of the notion of "undercutting defeater" (see, e.g., Pollock 1987; Prakken and Sartor 2009; Krabbe and van Laar 2011). I will investigate this issue in some detail because I hypothesize that undercutting defeaters have different implications when they concern practical presumptions as opposed to cognitive presumptions.

According to Pollock's (1987, p. 485) classic account, the undercutting defeater  $u$  is a piece of evidence that challenges the reliability of the connection between some premise  $q$  and some conclusion  $p$ . Although  $u$  renders the belief that  $p$  evidentially uncertain (unjustified),  $u$  is consistent with the premise  $q$  and the conclusion  $p$ . Suppose, following Pollock's well-known example, that an object  $X$  appears red to you. Normally, the premise "X looks red to me" ( $q$ ) epistemically justifies the conclusion "X is red" ( $p$ ) but if, at some point, you learn that  $X$  is illuminated by red lights, then "X looks red to me" ceases to be a reliable indication that  $X$  is red. Although this new information is consistent with both "X looks red to me" and "X is red,"<sup>15</sup> it forces an epistemic agent to suspend the belief (conclusion) that  $X$  is red. Hence, "X is illuminated by red lights" ( $u$ ) is an undercutting defeater: by rendering the

<sup>14</sup> Also, a third question arises: How do relevant considerations and strategies exactly defeat practical presumptions? Namely, presumptions can be defeated, or put to rest, in two distinct senses. First, the opponent can *cancel* a presumption. This means that as soon as she puts forward a defeater, the proposition loses its presumptive status: what was a presumption *prima facie*, is not a presumption *ultima facie*. This sense of "defeated," I believe, nicely coheres with the premise tenability criticism, undercutting, and rebutting. Second, the opponent can render a presumption *inoperative*, i.e., make it a *pro tanto* presumption. This means that the presumptive status might still have some weight, but it is set aside due to more important considerations. This sense of "defeated," I believe, nicely coheres with the overriding and, perhaps, undermining strategies. In this paper, I focus on the cancellation of presumptions by means of an undercutting defeater. I thank a reviewer of *Argumentation* for pressing this clarification.

<sup>15</sup> It is possible that  $X$  is, in fact, red and *also* illuminated by red lights.

evidential connection between  $q$  and  $p$  unreliable, it makes the belief  $p$  epistemically unwarranted.

To show that, sometimes, undercutting defeaters cannot defeat practical presumptions, let us go back to the Umbrella case. Although Anne presumes “It will rain” ( $p$ ) due to “The weather forecast website estimates that there is 50% chance of rain” ( $q$ ), we should not test the effectiveness of an undercutting defeater by applying it to the connection between  $q$  and  $p$ . Instead, we should focus on the connection between  $q$  and the *belief* that underlies the presumption, i.e., Anne’s belief that there is 50% chance of rain.<sup>16</sup> Hence, our question is the following: Given that the undercutting defeater  $u$  defeats the evidential connection between “The weather forecast website estimates that there is 50% chance of rain” ( $q$ ) and the belief “There is 50% chance of rain” ( $r$ ), does  $u$  always defeat “Presumably, it will rain” ( $p$ )? I believe that it does not.

Suppose Jim discovers that, on April 1st, the weather forecast website is playing an April Fool’s joke: it estimates 50% chance of rain everywhere in the world. This information is an undercutting defeater: “The weather forecast website is playing an April Fool’s joke” ( $u$ ) undercuts the reliability of the connection between  $q$  and  $r$  even though it is consistent with both  $q$  and  $r$ . When Jim puts forward an undercutter, Anne is no longer justified in believing that “There is 50% chance of rain” *on the grounds that the weather forecast says so*. But does Jim’s discovery defeat Anne’s practical presumption “It will rain,” and should Anne, given the joke, leave the umbrella at home? We can answer these questions only by taking into account particular background conditions related to the dialogue at hand, such as the prior likelihood attributed to “It will rain.”

In the original version of the Umbrella case, Anne and Jim attribute equal likelihoods to “It will rain” and “It will not rain.”<sup>17</sup> Under these circumstances, the information about an April Fool’s joke changes the nature of Anne’s epistemic position and, possibly, deepens her uncertainty: in some sense, Anne goes from being justified in believing that rain is uncertain to being *less justified* in believing so.<sup>18</sup> But this change affects neither Anne’s decision to bring an umbrella nor the presumptive status of “It will rain.” Since the weather forecast is unreliable, and the prior likelihood of rain is 50%, nothing relevant has changed. Anne should still suspend

<sup>16</sup> The reason lies in the tension between the procedural, non-doxastic nature of the operator “presumably” and the natural target of an undercutting defeater. On the one hand, “Presumably,  $p$ ” does not denote a belief that  $p$ , but a procedural attitude towards  $p$  (i.e., proceeding as if  $p$  is true). On the other hand, the target of an undercutting defeater is the *evidential* connection between some premise  $q$  and a doxastic attitude towards  $p$ , e.g., a *belief* that  $p$ . Therefore, testing the effectiveness of an undercutting defeater  $u$  by using it to bring into question the connection between a basic fact  $q$  and a practical presumption  $p$  probably leads to a categorical confusion.

<sup>17</sup> That they attribute equal prior likelihoods to “It will rain” and “It will not rain” means that, in their opinion, prior to checking the weather forecast, the chance of rain in that geographical area is roughly 50% on a regular day of the season. For the sake of the example, we can assume that Anne’s and Jim’s estimations of likelihoods are correct.

<sup>18</sup> Typically, the belief “There is 50% chance of rain” is more epistemically justified when it is based on a reliable weather forecast than when it is based *only* on prior likelihood of rain (even if the estimation of prior likelihood is correct).

judgment on “It will rain,” opt for a less costly mistake, presume that it will rain, and bring an umbrella. The undercutting defeater does what it is supposed to do, but the presumptive status remains in place.<sup>19</sup>

Under different circumstances, the undercutting defeaters can indeed cancel practical presumptions. Suppose that the prior likelihood of “It will rain” was sufficiently higher than the prior likelihood of “It will not rain.” When an April Fool’s joke shows the weather forecast to be unreliable, the prior likelihood of rain becomes Anne’s only undefeated evidence. Thus, “It will rain” becomes Anne’s epistemic expectation and thereby loses its presumptive status, since practical presumptions are not epistemic expectations. In this case, the undercutting defeater  $u$  cancels  $p$ ’s presumptive status by strengthening  $p$ ’s epistemic status. Note, however, that Anne’s original decision should remain unchanged: since she expects rain, she should bring an umbrella.

Finally, suppose that the prior likelihood of “It will rain” is sufficiently lower than the prior likelihood of “It will not rain.” When an April Fool’s joke shows the weather forecast to be unreliable, “It will *not* rain” becomes Anne’s epistemic expectation, and, based on this, she should decide not to bring an umbrella. Thus, “It will rain” loses its presumptive status. In this case, an undercutting defeater  $u$  eliminates  $p$ ’s presumptive status by, ultimately, creating favourable conditions for an agent to *rebut*  $p$ , proceed on  $\sim p$ , and make a different decision. The association between prior likelihoods and the effects of an undercutting defeater shows a different pattern than in the case of cognitive presumptions, as I will explain in Sect. 3.4.

In summary, Godden is right that “[practical] presumptions are defeasible in many of the usual ways” including “the discovery of undercutting defeaters” (2017, p. 506). But this does not mean that usual defeaters, introduced by opponents, *necessarily* defeat practical presumptions (assuming that the defeaters themselves remain undefeated). I argued that an undercutting defeater  $u$  cannot cancel a practical presumption  $p$  when the prior likelihood of  $p$  is the same as the prior likelihood of  $\sim p$  (or when likelihoods are unknown). In this particular case,  $u$  creates conditions that, typically, bring practical presumptions to life rather than put them to rest.<sup>20</sup> As we shall see, this is important for exploring the differences between practical and cognitive presumptions. Let us now examine the latter class of presumptions.

<sup>19</sup> To be sure,  $u$  renders  $p$  evidentially uncertain, but we acknowledge the uncertainty of  $p$  by presuming  $p$  in the first place. Practical presumptions are, by definition, tools for *overcoming* evidential uncertainty. Since we presume  $p$  due to its uncertainty,  $p$  can hardly lose its presumptive status due to its uncertainty.

<sup>20</sup> This is made transparent in our complete scheme of practical presumptive reasoning: evidential uncertainty (premise 4) is one of the key conditions of presumptive reasoning and represents a constitutive element of the deliberation problem (premise 5).

### 3 Cognitive Presumptions, and How They Differ from Practical Presumptions

Although presumptions were originally analysed in the context of practical deliberation, we can also find them in epistemic contexts. Rescher and Freeman have been leading the way in the epistemic study of presumptions. Both scholars agree that typical cognitive presumptions arise from epistemic sources and establish tentative starting points in the dialogue. However, unlike Freeman, Rescher repeatedly stresses that presumptions are ultimately based on pragmatic policies of an epistemic nature (2006, p. xii; p. 38; p. 46; p. 48) that are, in turn, evaluated on “economic” grounds—in terms of their epistemic costs and epistemic benefits (p. 54). This renders Rescher’s account of cognitive presumption much closer to the concept of practical presumption and, thereby, makes it a more suitable starting point for our inquiry in this section.

#### 3.1 Rescher’s Account of Cognitive Presumptions

Rescher views cognitive and practical presumptions as sharing some essential features, even though their *ultimate contextual functions* are different. While practical presumptions guide “our decisions regarding actions,” cognitive presumptions are “made for the sake of answering our questions and filling gaps in our information” (p. 27). Thus, the two classes of presumptions belong to different contexts and serve different goals. Starting from this explanation, one may come to believe that cognitive and practical presumptions are materially rather than formally different. Contextual differences, by themselves, hardly indicate any difference in the formal conditions of presumptions, their justification or defeasibility, or the structure of their deontic properties. I will argue against this last proposal: there are significant structural differences between the two classes. For the most part, cognitive presumptions are tools that operate differently and come with a different instruction manual.

What do cognitive presumptions look like? What cognitive policies do we have at our disposal? Here are two paradigmatic examples. First, we should trust our senses and memory. In the Cat case, Andy should proceed with his cognitive matters by taking “Andy’s cat is in the tree” as true until its presumptive status gets cancelled by a sufficiently strong defeater.<sup>21</sup> Second, our prospects for acquiring information are better if we trust others. In the absence of definite proof, trusting people is simply a better cognitive policy than always doubting their competence, reliability, and honesty. Thus, if somebody asserts  $p$ , we should presume  $p$  and proceed with our cognitive matters unless we have good reasons to think that  $p$  is either false or unjustified. Trusting our senses and other people’s statements are, in the long run, economically rational policies: their cognitive benefits outweigh their cognitive costs (Rescher 2006, pp. 48–52).

<sup>21</sup> By “proceeding with cognitive matters,” I mean that Andy should feel free to derive (tentative epistemic) conclusions based on his presumption. For instance, he should freely derive “Andy’s cat is not in the bedroom at the moment.”



But what are cognitive presumptions? Rescher defines them as “truth-candidates, data that are no more certified *truths* than candidate-presidents are certified presidents” (2006, p. 37). However, the presumptions are not only truth-candidates but the most plausible truth-candidates:

Presumption favors the most *plausible* of rival alternatives—when indeed there is one. This alternative will always stand until set aside (by the entry of another, yet more plausible, presumption). (Rescher 2006, p. 39)

Two things are especially important here. First, according to Rescher, presumption is a “singular” status (Freeman 2005, p. 26). This means that different cognitive rules may operate simultaneously and generate incompatible truth-candidates but, at each particular point, only the most plausible proposition becomes a presumption. Second, cognitive presumptions are defined in terms of “plausibility.” This is a complex philosophical notion but, for my/our present purposes, it suffices to say that the degree of plausibility depends on the reliability of the source that vouches for a proposition (Rescher 1976, pp. 10–11).

On the one hand, Rescher explains “reliability” in terms of “probative solidity,” “trustworthiness” and “authoritativeness” of the source (1976, pp. 6–7; 2006, p. 39). It is a broad construct that cannot be reduced to statistical considerations of a previous track record. On the other hand, he explains the concept of “source” by two different types of considerations: “evidentiation” and “principles” (2006, p. 40). To say that a proposition is evidentiated is to claim that it is *prima facie* supported by a standard epistemic source (in a narrow sense), such as sense-perception, memory, testimony, expert-testimony, or common knowledge. By contrast, principles render propositions plausible on grounds of simplicity, uniformity, or normality, and they come to the fore when presumptive status cannot be assigned on evidential grounds. Nevertheless, the usual and paradigmatic cognitive presumptions are based upon evidentiation. In the next sections, I will focus exclusively on the paradigmatic evidential presumptions and call them *typical cognitive presumptions*.

Before proceeding any further, we must note that cognitive presumptions are not the only means of promoting epistemic ends. Consider the case of two palaeontologists who arrive at different conclusions about the fate of Neanderthals (Elgin 2010, p. 54). Although the evidence is equivocal and the palaeontologists face a peer disagreement, suspending judgment would be very costly for scientific research. Thus, to facilitate inquiry about the fate of Neanderthals, both palaeontologists should proceed *as if* their conclusions were accurate, and further develop their positions (Elgin 2010, pp. 65–68). Although this case resembles cognitive presumptions in several ways,<sup>22</sup> we should not portray *p* as a cognitive presumption for three different, but interrelated reasons.

The first reason is conceptual: since *p* and  $\sim p$  are equally plausible (evidentiated, simple, or normal), *p* cannot be the most plausible truth candidate. Second, since palaeontologists are encouraged to find and present reasons for their positions,

<sup>22</sup> The palaeontologist will (1) proceed on *p* (2) in circumstances of uncertainty, and (3) will avoid suspending judgment on *p* in order to (4) avoid higher costs (5) in the context of epistemic inquiry.



the allocation of the burden of proof seems symmetrical. Finally,  $p$  and  $\sim p$  are not dialectically privileged propositions: despite the fact that the evidence is equivocal (uncertain), the proponent of  $\sim p$  ( $p$ ) is not obliged to proceed as if  $p$  ( $\sim p$ ) is true. Thus, Elgin's example reveals an important conceptual point. It shows that (1) proceeding on  $p$  (2) on defeasible grounds (3) to avoid greater harm (4) when  $p$  is uncertain (5) in the context of epistemic inquiry, is *necessary, but not sufficient* to render  $p$  a cognitive presumption (in Rescher's sense of the term). In addition,  $p$  must be the most plausible truth candidate, and a dialectically privileged proposition that asymmetrically allocates the burden of proof.<sup>23</sup>

### 3.2 What is the Dialogical Function of Cognitive Presumptions?

How do cognitive presumptions distribute dialectical obligations? Do they asymmetrically allocate the burden of proof and, thus, have the same *deontic function* as practical presumptions? Rescher seems to think so. In his view, "burden of proof and presumption represent correlative conceptions inevitably coordinate with one another throughout the context of rational dialectic" (2006, p. 25). They are "opposite sides of the same coin" (p. 14).

So why does Andy's contention place the burden of proof on his opponent? This is because we are naturally inclined to trust visual perception, as well as other people's testimony (when circumstances are ordinary and the epistemic situation is simple). In everyday argumentation, we rarely doubt the reliability of standard epistemic sources. Thus, by refusing to concede "Andy's cat is in the tree" on purely sceptical grounds, Jane is making an unusual move (both epistemically and dialogically): she is refusing to concede a highly plausible proposition for no case-specific reason. There is a strong intuition that, in ordinary circumstances, her move requires (additional) justification. By contrast, one may claim that Andy's contention has presumptive status and that he should not be dialogically obliged to provide arguments (until Jane provides additional reasons for her case). In short, there is a presumption in favour of "what you may take for granted about a particular issue" (Cohen 1992, p. 13), or "how things 'as a rule' are taken as standing" (Rescher 1977, p. 30).<sup>24</sup>

<sup>23</sup> I thank a reviewer of *Argumentation* for pressing this clarification.

<sup>24</sup> There are some objections to this view. Suppose that, indeed, cognitive presumptions represent a conservative force and serve to "dialectically protect" the *status quo*. Next, suppose that the presumptive rule "We should trust experts" is in line with the *status quo* because, from the God's eye view, people usually trust experts. Even in these circumstances, it is controversial whether presumptions are applicable in particular dialogical situations. First, "in actual practice people often tend to disagree as to what exactly is to be considered as the 'status quo'" (van Eemeren and Houtlosser 2002, p. 19). An opponent might not accept "We should trust experts" as an adequate presumptive rule and might insist that the burden of proof rests with the proponent. Second, parties may agree about the *status quo* but disagree about its normative significance. For instance, an opponent may believe that we should not derive normative conclusions from the fact that people usually trust experts ("is" does not imply "ought"). Also, an opponent may ascribe some normative significance to the *status quo*, but maintain that more significant considerations place the burden of proof on the proponent. Suppose that the opponent believes that trusting experts is not *as important as* being epistemically independent and autonomous. Admittedly, these are all open questions, and they are motivated by serious and pressing issues. However, the complex analysis of the

But how does putting dialogical pressure on the opponent contribute to the constructive development of the dialogue? What dialogical goals are cognitive presumptions supposed to achieve and what problems are they supposed to resolve? The *dialogical function* of cognitive presumptions is closely linked to the place they occupy in the structure of the reasonable dialogue. That is, scholars usually interpret cognitive presumptions as dialogical starting points: a set of shared premises tentatively accepted by (reasonable) interlocutors. This interpretation is proposed by Rescher (1977, 2006), pragma-dialecticians (van Eemeren and Houtlosser 2002), Freeman (2005), van Laar and Krabbe (2013), and, occasionally, Walton (2014). All these scholars believe that presumptions are available to interlocutors from the very start of the argumentative exchange.

Practical presumptions are different in these respects. In Godden's view, they are not "the inferential resources already at hand" but rather "additional inferential capital" or the "new intellectual resources" used in order to "proceed with our undertakings" (2017, p. 487). This picture is fully compatible with the view that (many) practical presumptions are not dialogical starting points and, thereby, should not be part of the opening stage of deliberation. They may (also) come in handy during the later stages of dialogue (perhaps at the argumentation stage) when the evidential resources cease to provide guidance for reasonable decision-making. Since the two classes of presumption can belong to different dialogical stages, we can expect that they can also serve different dialogical functions.

Rescher occasionally claims that cognitive presumptions enable dialogical progress; one may come to believe, then, that the two classes of presumptions have a comparable dialogical function. To see why this is not likely the case, let us examine the following quote:

There must clearly be some class of claims that are allowed to be at least provisionally accepted within the framework of argumentation, because if everything were contested, the process of inquiry could not progress at all. (Rescher 2006, p. 24)

What Rescher means by "enabling dialogical progress" is preventing the well-known problem of dialectical regress. Dialectical regress, which has intrigued philosophers ever since Pyrrhonian scepticism, results from the proponent's inability to defend her standpoint against the "persistent interlocutor."<sup>25</sup> The persistent interlocutor is the opponent who automatically challenges every reason offered by the proponent (without offering anything in return). Suppose that the dialectical rule concerning the burden of proof is universal, namely, that every proposition introduced can be challenged and, if challenged, needs to be defended by the proponent. This allows the persistent interlocutor to sabotage the proponent's aim of rationally persuading

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Footnote 24 (continued)

applicability of presumptions (and the various kinds of meta-discussions concerning the allocation of the burden of proof) falls outside of the present paper's scope.

<sup>25</sup> The term originally belongs to Adam Leite. I borrow it from Rescorla (2009, p. 47).

her by challenging the proponent's claims ad infinitum. In principle, this situation can happen with both parties playing by the dialectical rules.

An apparent solution is to change the rules. In well-known fashion of dialogical foundationalism, Rescher contends that “[w]e cannot argue everything discursively ‘all the way down’” (2006, p. 50). The burden of proof rule makes sense only if it allows for exceptions, i.e., if some propositions do not require defence once they are contradicted (see Rescher 1977, p. 33; 2006, p. 30). Since “[t]hey furnish a starting point” (2006, p. 50), this is where cognitive presumptions can help. By placing the burden of proof on the opponent, they make the proponent immune to the opponent's unusual challenge and prevent the dialogue from collapsing into an endless chain of reasons and challenges.

This contribution to dialogue is in many respects different from that of practical presumptions. Cognitive presumptions are often portrayed as dialogical tools for fighting scepticism (see Freeman 2005; Rescher 2006; Rescorla 2009) and they seek to resolve a problem that, in a literal reading, does not arise in practice. Namely, as finite beings, we will hardly ever meet an interlocutor that challenges our reasons ad infinitum. A more charitable interpretation, however, sees dialectical regress as related to a type of dialogue where the interlocutor automatically requests justification for every new reason put forward by the proponent, without offering anything in return. Thus, although the interlocutor does not challenge the proponent's claims ad infinitum, she is still too persistent for the circumstances at hand.

Cognitive presumptions can prevent persistent interlocutors from winning the argument by using this annoying strategy. That is, once the proponent introduces a cognitive presumption, the opponent cannot request an argument without offering reasons in return. Thus, cognitive presumptions boost our immunity against a persistent interlocutor. In addition to being an “active dialogical cure,” I believe that cognitive presumptions are *also* a normative “means of prevention:” by limiting the potential of the persistent interlocutor's strategy, cognitive presumptions may discourage many interlocutors from becoming persistent in the first place, thereby preventing the dialectical regress from ever occurring. By contrast, practical presumptions resolve problems only when they, in fact, arise. They do not spare us the trouble of making decisions under uncertainty but rather provide default solutions when we find ourselves in this kind of trouble. To stick with the metaphor, practical presumptions are a cure for typical deliberation problems.<sup>26</sup>

Of course, cognitive presumptions have a more mundane dialogical function. As (supposedly) mutually acceptable premises, they surely enable dialogical progress. But note that their role must still be different from that of practical presumptions. Practical presumptions move dialogues forward *precisely when* available (evidential) premises, including typical cognitive presumptions, cannot move them forward: they enable dialogical progress precisely when cognitive presumptions do not (see Bodlović 2017, p. 522). Accordingly, the two types of presumptions still face

<sup>26</sup> In many cases, cognitive presumptions stop the regress when the challenge is already under way, and the opponent is already too persistent. Therefore, they can function as a cure, as well as a means of prevention. By contrast, paradigmatic practical presumptions seem to function only as a dialogical cure.

different dialogical issues, enable different kinds of progress, and have distinct dialogical potentials.<sup>27</sup>

In summary, although both classes of presumptions enable constructive development of the dialogue, they are standardly concerned with different dialogical problems (progress vs. regress) and, thus, usually do not have the same dialogical function. Also, they seem to represent different kinds of dialectical remedy: while practical presumptions are an active dialectical cure, cognitive presumptions are *also* a means of dialectical prevention. As far as the structure of dialogue is concerned, the two types of presumptions seem to be looking in different directions: typical cognitive presumptions provide an initial common ground for the dialogue (and provide materials for it to commence and develop) whereas practical presumptions allow the dialogue to proceed towards its conclusion. Additionally, these differences might indicate that, typically, practical and cognitive presumptions do not belong to the same stages of critical discussion.

### 3.3 Cognitive Presumption and Presumptive Reasoning

As far as *logical function* is concerned, cognitive presumptions (just like practical ones) are tentative conclusions derived from basic facts and defeasible presumptive rules (Rescher 2006, p. 33). Rescher emphasizes that the presumptive rule is precisely that—a rule, an imperative, an instruction on how to proceed with our cognitive matters. Once we establish a basic fact, the presumptive rule prescribes a particular action (acting, in the cognitive domain, as if a particular claim is true) based on “an epistemic policy [that] is closely analogous to the *prudential* principle of action—that of opting for the available alternative from which the least possible harm can result” (Rescher 2006, p. 39). Since, according to Rescher, cognitive and practical presumptive rules share a very similar pragmatic rationale (avoiding serious harm), we might expect that the two types of presumption share a closely similar *pragmatic function*.

Rescher’s pragmatic interpretation is theoretically promising,<sup>28</sup> but to see how the pragmatic rationale works in cognitive contexts, we should test it in a concrete case. Does the Cat case confirm that the presumptive rule (of trusting one’s senses) is pragmatically justified, and is this justification analogous to the policy of “avoiding costly errors” in the practical Umbrella case? In the remainder of this section, I will treat the complete scheme of presumptive practical reasoning as a template for

<sup>27</sup> Of course, this conclusion applies only to paradigmatic practical presumptions and *typical cognitive presumptions*. Cognitive presumptions based on *principles* (such as simplicity, uniformity, etc.) can move dialogues forward when progress cannot be achieved on evidential grounds: for instance, we can decide to proceed on a simpler or more elegant proposition. Practical presumptions and cognitive presumptions based on principles are similar in this respect. This paper, however, primarily focuses on typical cognitive presumptions. I thank a reviewer of *Argumentation* for pressing this clarification.

<sup>28</sup> For instance, if both types of presumptions share a closely similar pragmatic rationale, then the notion of “presumption” preserves conceptual cohesion. Also, the pragmatic justification of cognitive presumptions might provide a distinct methodological solution of the infinite dialectical regress (see Rescher 2006, pp. 57–59).

reconstructing the complete scheme of cognitive reasoning. Despite efforts to save the analogy by preserving as many elements of the practical scheme as possible, the presumptive cognitive scheme appears different in several respects.

So, what does pragmatic reasoning in the Cat case look like? First, Andy takes Jane's sceptical remark seriously and deliberates on whether to accept "Andy's cat is in the tree." He identifies two potential errors: either he will falsely accept "Andy's cat is in the tree" or he will adopt a sceptical stance towards a true (justified) proposition. Andy realizes that the second error will lead to more serious consequences. Adopting a sceptical stance towards this proposition for no case-related reason would mean that he no longer trusts his senses and, consequently, must suspend judgment on other empirical propositions. For a responsible epistemic agent, this is way too costly: suspending judgment on all empirical propositions, many of which are true (justified), is surely costlier than adopting some false (unjustified) beliefs. Thus, Andy decides to err on the side of a lesser evil, presumes that his cat is (in fact) in the tree and, as a matter of cognitive policy, continues to trust his senses.

Let us now construct the complete scheme of presumptive cognitive reasoning. In the scheme below, *A* stands for the cognitive agent (Andy); *p* ("Andy's cat is in the tree") and *Sp* (suspending judgment on "Andy's cat is in the tree") stand for attitudes that can be acted upon; *q* stands for the basic fact ("Andy sees that a cat, which looks exactly like his cat, is in the tree"); *C1* (adopting *some* false or unjustified propositions) and *C2* (suspending judgment on *all* true or justified empirical propositions) stand for potential consequences of acting erroneously on either *p* or *Sp*; and, finally, *G1* (acquiring true or justified beliefs) and *G2* (avoiding false or unjustified beliefs) stand for basic epistemic goals that underlie Andy's deliberation.

1. Condition *q* obtains. (BASIC FACT)
2. *A* is faced with a decision whether to act on *p* or *Sp*. (COGNITIVE DILEMMA)
3. *A* cannot postpone the decision. (COGNITIVE PRESSURE)
4. *A* is not aware of sufficient (*conclusive*) evidence for either *p* or  $\sim p$ . (ACADEMIC UNCERTAINTY)
5. If any cognitive agent is faced with a decision whether to act on some proposition, cannot postpone the decision, and is not aware of sufficient evidence for a proposition, then she is facing a deliberation problem. (DELIBERATION PROBLEM)
6. If any cognitive agent is facing a deliberation problem, then she should seek to avoid a costlier error. (TUTORISM, PRECAUTION)
7. If any cognitive agent acts on *p* and *p* turns out to be false, then *C1* follows. (ERROR-COST ENTAILMENT 1)
8. If any cognitive agent acts on *Sp* (either adequately or erroneously), then *C2* follows. (ERROR-COST ENTAILMENT 2)
9. If (a) *G1* and *G2* are equally important to some cognitive agent, (b) *C2* completely undermines *G1*, and (c) *C1* undermines *G2* to a *limited extent*; then *C2* is costlier than *C1*. (GOAL-COST ENTAILMENT)
10. *G1* and *G2* are equally important to *A*. (NORMATIVE EQUALITY)
11. *C1* undermines *G2* to a limited extent.
12. *C2* completely undermines *G1*.
13. *C2* is costlier than *C1*. (COST COMPARISON) [9, 10, 11, 12]

14. *A* is facing a deliberation problem. [2, 3, 4, 5]
15. *A* should seek to avoid a costlier error. (POLICY OF AVOIDING COSTLY ERRORS) [6, 14]
16. All else being equal, following a presumptive rule that prescribes acting on *p* is a good means to avoid a costlier error. (EXPECTED UTILITY IMBALANCE) [7, 8, 13]
17. If some condition (such as *q*) obtains, then, all else being equal, the cognitive agent (such as *A*) should act on *p*. (PRESUMPTIVE RULE) [15, 16]
18. Therefore, all else being equal, *A* should act on *p* (Presumably, *p*.) (COGNITIVE PRESUMPTION) [1, 17]

The scheme reveals that presumptive cognitive reasoning remains different from presumptive practical reasoning even when we reconstruct it with the error-management policy in view. In the following sections, I identify three (potential) differences: differences concerning the nature of the deliberation problem (Sect. 3.3.1), the difference concerning error-cost dependence (Sect. 3.3.2), and the difference concerning goal-cost entailment (Sect. 3.3.3). Although these differences still allow for some similarity between the foundations of practical and cognitive presumptions, they pose questions about strength and limits of similarity, and explain why Rescher's position should be qualified.

### 3.3.1 Is There a (Comparable) Deliberation Problem?

The deliberation problem is the driving force behind practical presumptions, and it consists of three components: an agent faces (1) a deliberation dilemma, (2) (deliberation) pressure, and (3) (genuine) evidential uncertainty. But are practical and cognitive agents faced with closely similar deliberation problems? Does presumptive cognitive reasoning operate in an identical set of conditions as presumptive practical reasoning?

Let us begin by discussing two minor differences. First, the foundations of practical and cognitive presumptions can include different deliberation dilemmas. In the practical case, Anne must decide whether to act on *p* ("It will rain") or its negation  $\sim p$ , and since she cannot act upon suspended judgment, the dilemma is perfectly reasonable.<sup>29</sup> In the cognitive case, however, Andy can proceed on suspended judgment (despite the costs) and this sceptical response, rather than proceeding on  $\sim p$ , constitutes the second horn of his dilemma. Thus, the two types of presumptive reasoning may involve a distinct set of assumptions and, thus, can rest on different deliberation problems.

Second, cognitive and practical presumptive reasoning rest on distinct types of "pressure." *Deliberation pressure* is generated by the approaching deadline, while the urgency of making a timely decision is neither necessary nor typical for

<sup>29</sup> What exactly would it mean to *act on* suspended judgment in the Umbrella case? That Anne takes only one half of an umbrella?

cognitive presumptions.<sup>30</sup> *Cognitive pressure*, at least in the Cat case, is generated by the fact that the perception is a fundamental, unavoidable, and presumably irreplaceable source of empirical knowledge. So, cognitive pressure is created by our internal cognitive constraints, rather than external time constraints. Also, deliberation and cognitive pressures, for the most part, push agents towards different types of decisions. What is essentially at stake in a practical case is whether to proceed on a particular proposition at a particular time: whether Anne should proceed on “It will rain” when she is about to leave the apartment. What is essentially at stake in a cognitive case is whether to proceed on the *source* of the proposition, as a matter of default policy: whether Andy should *always* proceed by trusting his perception in the absence of defeaters. These differences require further examination, but they already cast doubt on whether the two types of presumptive reasoning include analogous deliberation problems.

The following, third difference is especially important in view of the nature of deliberation problem: usually, cognitive presumptions are not triggered by genuine evidential uncertainty. Although Rescher (2006) suggests that they are “low-grade data” (p. xii) that arise in “situations of incomplete information” (p. 37) and operate “in the region of uncertainty” (p. 166), he only means that cognitive presumptions lack conclusive support.<sup>31</sup> By presupposing this conclusive standard of evaluation, Rescher renders cognitive presumptions uncertain, but this *academic uncertainty* is quite different from *genuine evidential uncertainty* (often associated with practical presumptions). This calls for the first, weaker conclusion: practical and cognitive presumptions are different because their foundations (often) include different kinds of evidential uncertainty and, thus, different kinds of the deliberation problem.<sup>32</sup>

However, we may also propose a stronger conclusion. Recall that Rescher defines cognitive presumptions as the most plausible truth candidates. Since this renders cognitive presumptions inconclusive by definition, suggesting that they are, in some sense, epistemically deficient for not meeting the conclusive (academic) standard of

<sup>30</sup> Sometimes, the cognitive agent might find herself in similar circumstances. If the neighbour knocks on the door (just as Andy is contemplating about Jane’s sceptical remark) and asks about the cat’s whereabouts, this will surely put some external pressure on Andy to make a quick decision on how to proceed. This situation, however, is neither necessary nor typical.

<sup>31</sup> They are not “outright” (Rescher 2006, p. 32) or “certified truths” (p. 28) that come with “categorical guarantees” (p. 31) or hold “with categorical assurance” (p. xi). They are not “absolutely certain or totally self-evidencing theses” (p. 20), and do not belong to Cartesian-style epistemology of certain knowledge (p. xiii).

<sup>32</sup> Another way of showing that practical and cognitive presumptions are not uncertain in the same sense is to examine their basic facts closely. Basic facts in the cognitive scheme usually provide plausible epistemic grounds: it is epistemically plausible to presume “Andy’s cat is in the tree” on the grounds that “I see that a cat, which looks like Andy’s cat, is in the tree.” In the practical scheme, by contrast, basic facts do not typically provide reliable epistemic support: the practical presumption “It will rain” (or “John is innocent”) hardly follows from the basic fact “The weather forecast estimates that there is 50% chance of rain” (or “John is accused”). We may express this difference in structural terms by saying that, usually in practical presumptive reasoning, basic facts are covert ignorance premises (e.g., “It is not proven that it will *not* rain,” “It is not proven that John *is* guilty”). Practical presumptions, unlike typical cognitive ones, are typically based on arguments from ignorance. For a closer examination of the relationship between presumptions and arguments from ignorance, see Bodlović (2019b).



certainty comes close to committing a categorical mistake. Cognitive presumptions should be evaluated by standards of plausibility, and once this is done, they often cease to be evidentially uncertain. In fact, typical cognitive presumptions, as the most evidenced truth candidates (see Rescher 2006, p. 37) might call for the opposite epistemic evaluation: given that they belong to the non-deductive region of cognition, “the factual area where defeasibility is virtually inescapable” (p. 64), typical cognitive presumptions are often *as certain as they can possibly be*.<sup>33</sup> The stronger conclusion, therefore, is the following: practical and cognitive presumptions are different because, typically, cognitive presumptions are not evidentially uncertain to begin with. This implies that typical cognitive reasoning, unlike the paradigmatic practical one, does not involve a deliberation problem.

The stronger conclusion raises pertinent questions. Why should we even consider the policy of avoiding costly errors? Without evidential uncertainty and a deliberation problem, the motivation for accepting this policy is unclear, and we should try justifying its acceptance on alternative grounds. But is it reasonable to search for alternative grounds? If typical cognitive presumptions usually have solid evidential support, and this support renders errors unlikely, it seems unreasonable to reconstruct their foundations in terms of *errors*.<sup>34</sup> Moreover, perhaps appealing to any policy is needless to begin with. Why shouldn't accepting the presumptive rule “If  $p$  is the best evidenced belief, then take  $p$  as true” rest on the simple fact that the best evidenced belief is *probably true* or that “justified belief has an intimate link to true belief” (Goldman 2003, p. 62)? What does the reconstruction in terms of policy add to the latter interpretation, and what stops this reconstruction from ultimately becoming “just a piece of practical advice in accordance with some canons of inductive reasoning” (Ullmann-Margalit 1983, p. 158), which, then, “requires [no] special theory of presumptive inference” (Godden 2017, p. 498)? As we can

<sup>33</sup> This interpretation, I believe, explains the fact that scholars describe cognitive presumptions as dialogical (epistemic) starting points more successfully than the alternative, “academic” interpretation.

<sup>34</sup> Admittedly, Rescher can insist that the justification of presumptive rules is not about track records and probabilities and that, accordingly, the low probability of error is irrelevant when discussing the foundations of cognitive presumptions:

The justification of these presumptions is not the factual one of the substantive generalization. “In proceeding in this way, you will come at correct information and will not fall into error.” Rather, it is methodological justification. In proceeding in this way, you will efficiently foster the interests of the cognitive enterprise; the gains and benefits will, on the whole, outweigh the risks, losses, and costs. (Rescher 2006, pp. 49–50)

But this only raises further questions. First, this kind of response would seem to depend on a sharp distinction between factual and methodological justification, which is rather controversial. Namely, how can following a presumptive rule “efficiently foster the interests of the cognitive enterprise” (pp. 49–50) if this rule is *not* effective for finding out truths and avoiding errors? In other words, how can cognitive benefits “on the whole, outweigh the risks, losses, and costs” (p. 50) if a cognitive rule makes errors probable and truths improbable? It seems that Rescher’s methodological justification might ultimately depend on factual (probabilistic) justification, and he seems to admit this. In the so-called cyclic revalidation of presumptions, “the appropriateness of implementing the principle in this or that case will depend critically on the *overall track record* of our experience of its use in comparable cases” (2006, pp. 58–59). So, our initial question remains reasonable: if the probability of error is low, why should the concept of error play a central role in the reconstruction of cognitive reasoning?



see, the stronger conclusion has far-reaching consequences for the proposed account of presumptive cognitive reasoning.

In sum, the two schemes of presumptive reasoning differ from one another either because they involve different versions of the deliberation problem (due to different kinds of dilemmas, pressures and uncertainties) (*weaker conclusion*), or because the cognitive scheme does not involve any deliberation problem to begin with (*stronger conclusion*). The stronger conclusion could reveal further differences: the policy of avoiding costly errors is either inapplicable to cognitive presumptive reasoning, or its justification (and motivation) must differ from the paradigmatic practical case.

### 3.3.2 Does the Cost of Action Depend on Proceeding on an Error?

There might be another reason to doubt that the policy of avoiding costly errors is applicable to presumptive cognitive reasoning. Suppose that, in some cognitive cases, acting on a particular attitude, when this attitude is wrong, entails *the same cost* as acting on it, when it is right. If such cases exist, then, sometimes, cognitive costs do not genuinely depend on errors and, once again, we face the question: What justifies accepting the policy of avoiding *costly errors* in presumptive cognitive reasoning? Let me briefly explain what is meant by this error-cost independence.

Consider two variations of the Cat case. In both variations, Andy sees that a cat is in the tree, Jane remarks that perception is generally fallible, and Andy suspends judgment based on her remark. Unfortunately, in the first scenario, it is both true and justified to believe that Andy's cat *is* in the tree. Thus, Andy *erroneously* proceeds on suspended judgment and faces an enormous cost: due to the consistency requirement, he becomes obliged to suspend judgment on all perception-based propositions. In the second scenario, however, Andy is in luck. Since it is now both false and unjustified to believe that his cat is in the tree, suspension of judgment is (mostly) an *adequate* response. Crucially, despite his epistemic luck, the final cost remains the same: due to the consistency requirement Andy again becomes obliged to suspend judgment on all perception-based propositions. The cost does not seem to depend on making an error.

Naturally, one might object that we are focusing on the wrong error. Suspending judgment solely on the grounds of perception's fallibility is what makes Andy's response problematic, and he pays the same price simply because he makes the same error in both scenarios: his mistake does not concern "one-time choice" of a particular proposition but his general choice of cognitive policy. Although this is true, the previous point still contributes to exploring the differences between cognitive and practical presumptive reasoning. Namely, when suspending judgment on "Andy's cat is in the tree" is adequate and Andy suspends judgment, he still bears the cost of not acquiring new perception-based propositions.<sup>35</sup> By contrast, when "It will not

<sup>35</sup> We might think of various reasons why Andy mistakenly sees his cat, from taking hallucinogenic drugs and showing signs of mental illness, to confusing *his* cat with the neighbour's cat. The crucial point, however, is that Andy does not suspend his judgment due to any case-specific reason, but due to Jane's sceptical remark about the general fallibility of perception. Thus, by suspending judgment on "Andy's cat is in the tree" *due to a sceptical remark*, Andy incurs a commitment to treat the fallibility of perception as a sufficient reason to suspend judgment on perception-based propositions. Due to the consistency requirement, Andy is now obliged to suspend judgment on every perception-based proposition.

rain” is true and Anne accepts this proposition, she does *not* bear the cost of getting soaked and running the risk of becoming sick. As a result, in some cases of presumptive cognitive reasoning, contrary to cases of practical reasoning, the cost of action does not depend on whether the agent’s action is erroneous or not.

That cognitive and practical reasoning are different in this respect is made transparent in reasoning schemes. In a practical scheme, *C2* follows if the agent erroneously acts upon  $\sim p$  (“error-cost entailment 2”). By contrast, in a cognitive scheme, *C2* sometimes follows regardless of whether the agent’s action on *Sp* is erroneous or not (“error-cost entailment 2”). As a result, the two schemes of presumptive reasoning involve distinct assumptions. In the following subsection, I shortly discuss another potential difference between practical and cognitive schemes: the estimation and comparison of costs might depend on different normative conditions.

### 3.3.3 Does the Cost Depend on the Goals of Distinct Normative Importance?

What renders the consequence of one action less costly than the consequence of another action? On what grounds is *C1* judged less costly than *C2* in practical and cognitive presumptive reasoning? These questions surface yet another potential difference: practical and cognitive reasoning may involve different (normative) considerations when it comes to estimating, as well as comparing the costs of possible actions. Let me illustrate this in examples.

In the Umbrella case, Anne estimates and compares the costs of two potential consequences—carrying an umbrella (when it does not rain) and getting soaked/becoming sick—while fostering two practical goals of unequal importance (health trumps convenience). Since carrying an umbrella (when it does not rain) undermines a less important goal (convenience) but not a more important goal (health), Anne concludes that it is the less costly consequence of the two. Therefore, in paradigmatic practical cases, costs seem to depend on the *normative inequality* of underlying goals and values.

In the Cat case, Andy estimates and compares the cost of two potential consequences and, similarly to Anne, fosters two underlying goals: acquiring true/justified beliefs and avoiding false/unjustified beliefs. The potential difference, however, is that these goals might be of equal epistemic importance (*normative equality*). Unlike health and convenience, acquiring truths and avoiding falsities might be two sides of the same coin: since we cannot promote knowledge without acquiring truths *or* by adopting falsities, acquiring truths and avoiding falsities are equally important epistemic goals.<sup>36</sup> However, without the normative asymmetry between goals, undermining the first goal will entail, all else being equal, the same cost as undermining the second: accepting the false negative (rejecting *p* when *p* is true/justified) will have the same epistemic cost as accepting the false positive (accepting *p* when *p* is false/unjustified) (see, e.g., Pigliucci and Boudry 2014). Accordingly, the

<sup>36</sup> It is even possible to combine them into one unique goal which generates epistemic norms. For instance, Goldman claims that “rules of good argumentation have the *primary goal of promoting true belief and error avoidance*” (1994, p. 29, emphasis added).

estimation of cognitive costs is likely to be different from the estimation of practical costs. Presumptive practical reasoning operates in the context of goals of unequal normative importance, where higher cost is derived from promoting a less important goal. Presumptive cognitive reasoning operates in the context of equally (or at least comparably) important goals, where higher cost is derived from *giving unfair treatment to equally important goals*.

A failure to treat epistemic goals fairly is precisely what renders the policy of suspending judgment epistemically inadequate. This policy avoids the risk of acquiring false/unjustified beliefs but, insofar as acquiring true/justified beliefs is concerned, it has catastrophic consequences. Of course, Rescher recognizes this:

[I]t is always in our interest to proceed in ways that are efficient and effective in meeting our informational requirements. If playing safe were all that mattered, we would, of course, suspend judgment indefinitely. But it is simply not in our interest to do so, since safety is not all. A policy that would deprive us of any and all communicative benefit is inherently counterproductive. In rational inquiry we seek not only to avert error but also to achieve knowledge. (Rescher 2006, p. 122)

Trusting perception represents normatively balanced policy. Although it promotes the goal of acquiring true/justified beliefs, it also instructs us to accept perceptual beliefs *prima facie*, i.e., only in the absence of sufficient defeaters. By recognizing the role of epistemic defeaters, the policy of trusting perception becomes consistent with the goal of avoiding false/unjustified beliefs. With this in mind, the costs of suspending judgment and trusting perception cannot be even: while the first policy leads to complete distrust, the second policy does not lead to gullibility. The policy of trusting perception treats goals of comparable epistemic importance more suitably and, thus, represents a less costly epistemic policy.<sup>37</sup> Hence, while we do not wish to assign equal relevance to goals of unequal importance when estimating practical cost, we also do not wish to assign unequal relevance to goals of equal importance when estimating cognitive cost.<sup>38</sup> The schemes of practical and cognitive presumptive reasoning make this transparent because they include different normative

<sup>37</sup> An alternative explanation of the difference might be that epistemic goals, unlike practical ones, are *mutually dependent*. While health is at least not necessarily linked to convenience, acquiring truths is both conceptually and epistemically linked to avoiding falsities. Conceptually, the notion/value of truth seems to underlie both epistemic values and, epistemically, undermining the avoidance of falsities will systematically undermine the acquiring of truths (e.g., false beliefs will act as misleading defeaters for otherwise plausible inferences from true premises to true conclusions). This interpretation retains the possibility that the goals of acquiring truths and avoiding falsities, in some situations, have different weights. For instance, acquiring truths might be more important than avoiding falsities due to some non-epistemic, practical reasons: if you passionately care about whether *p* is true, and this knowledge comes at the cost of acquiring many false beliefs (for example, because you must be exposed to a source that is very unreliable for acquiring other beliefs), you may find it reasonable to meet this cost. But I am not sure if this can be reasonable from a purely epistemic perspective. Also, it is crucial to note that, although it rests on different premises, this alternative explanation still supports the conclusion that the cognitive policy should properly balance two epistemic goals.

<sup>38</sup> For further and more subtle discussion of the distinct features of goals and values in practical and epistemic reasoning, see, e.g., Raz (2009).

assumptions (normative inequality vs. normative equality) and different “goal-cost entailment” premises.

Nevertheless, the proposal above is only provisional. It raises at least three important concerns. First, in some cases,  $p$  can be a practical presumption even when proceeding on  $\sim p$  promotes the same goal and, thereby, the goal of equal normative importance (see Koplin and Selgelid 2015, pp. 601–602). Second, whether acquiring false propositions has the same cognitive cost as rejecting true propositions may depend on whether we take into account the logical consequences of a proposition. Imagine, for instance, that  $p$  has high inferential potential and leads to accurate predictions (even if  $p$  is false). Under this condition, the epistemic costs do not seem equal: acquiring false proposition  $p$ , all things considered, seems less costly than rejecting true proposition  $p$ . Third, it must be noted that some epistemological approaches allow goals of unequal normative importance. For instance, in virtue epistemology (see Turri et al. 2019), one may prefer intellectual humility over intellectual autonomy and, based on the virtues of unequal importance, estimate the cost of actions and proceed on a less costly proposition. These concerns are both important and plausible, but they deserve a separate treatment. Their purpose in this paper is to explain the nature of the claim that the estimation of costs might be different in practical and cognitive cases. At this point, the claim is merely a *hypothesis*, but one worth considering and surely requiring further examination.

To some scholars, the difference between foundations of practical and cognitive presumptions might seem an obvious consequence that follows from the fundamental difference between the non-epistemic and epistemic contexts. The present analysis, however, assumed that the analogy between practical and epistemic contexts is worth exploring. Starting from this assumption, I sought to establish whether the pragmatic principles that, supposedly, underlie Rescher’s typical cognitive presumptions have a closely analogous rationale as the principles underlying paradigmatic practical presumptions. My conclusion is that the similarity with the pragmatic rationale is only nominal: even if avoiding greater harm underlies both practical and cognitive presumptions, the pragmatic policy comes down to *avoiding costly errors* only in the case of a paradigmatic practical presumption. As a result, practical and cognitive presumptions, strictly speaking, do not share the same *pragmatic function*.

The differences are even greater. Not only do practical and cognitive presumptions have different dialogical (Sect. 3.2) and pragmatic functions (Sect. 3.3) but, sometimes, they cannot be defeated by the same types of evidence. Sometimes, as far as “all else being equal” is concerned, practical and cognitive presumptions are *not* equal. In Sect. 3.4, I illustrate this difference.

### 3.4 What Can Defeat Cognitive Presumptions, and When?

To provide a fully-fledged account of the defeating conditions, a theorist must answer at least two questions: “What kinds of considerations, in principle, defeat presumptions?” and “When do these considerations, exactly, defeat presumptions?” As far as the first question is concerned, cognitive and practical presumptions are similar: they can be defeated by the tenability criticism, as well as by undermining,

undercutting, overriding, and rebutting defeaters (see Sect. 2.3).<sup>39</sup> With regard to the second question, however, cognitive and practical presumptions are different: sometimes, under the same background conditions, they cannot be defeated by the same types of evidence. For illustration, let us focus on the Cat case and the role of an undercutting defeater.

Imagine that, after a general sceptical remark, Jane says: “Andy, the neighbour has a cat that looks exactly like yours” ( $u$ ). Although consistent with both “Andy sees that the cat, which looks exactly like his cat, is in the tree” ( $q$ ) and “Andy’s cat is in the tree” ( $p$ ), this information reduces the reliability of the connection between  $q$  and  $p$  and seems to cancel Andy’s cognitive presumption. Nevertheless, I believe that cancelling  $p$ ’s presumptive status depends on  $p$ ’s prior likelihood and that, sometimes,  $u$  defeats a cognitive presumption  $p$  under different conditions than a practical presumption  $p$ .

Suppose that before Jane puts forward an undercutting defeater, Andy and Jane attribute equal likelihoods to “Andy’s cat is *in the tree*” and “Andy’s cat is *not in the tree*.” Under this condition, both visual perception and prior likelihoods suggest that Andy should suspend judgment. On the one hand, visual impression is not a reliable indication that *Andy’s* cat is in the tree (since the neighbour’s cat looks exactly the same). On the other hand, prior likelihood is not a reliable indication that *Andy’s* cat is *in the tree* (since there is an equal chance that Andy’s cat is *somewhere else*). Consequently, “Andy’s cat is in the tree” and “Andy’s cat is not in the tree” seem like equally plausible propositions, and the original presumptive status must be cancelled.<sup>40</sup> So, if prior likelihoods of  $p$  and  $\sim p$  are equal (or unknown), and  $p$  is a cognitive presumption, then the undercutting defeater  $u$  cancels  $p$ ’s presumptive status. Recall that, if  $p$  were a practical presumption, and conditions were the same,  $u$  would *not* cancel  $p$ ’s presumptive status (see Sect. 2.3).

Next, suppose that the prior likelihood of “Andy’s cat is in the tree” is sufficiently higher than the prior likelihood of “Andy’s cat is not in the tree” because, on a normal day, Andy’s cat spends most of the time in that tree. As far as his visual impression alone is concerned, Andy, of course, should suspend his judgment; but as far as prior likelihoods are concerned, he should proceed as if his cat is, indeed, in the tree. Thus, when all available evidence is taken into account, “Andy’s cat is in the tree” is the most plausible proposition and its presumptive status remains in place. Hence, if the prior likelihood of  $p$  is sufficiently higher than the prior likelihood of  $\sim p$ , and  $p$  is a cognitive presumption, then the undercutting defeater  $u$  does not cancel  $p$ ’s presumptive status. Recall that, if  $p$  were a practical presumption, and conditions were the same,  $u$  would indeed cancel  $p$ ’s presumptive status (see Sect. 2.3).

Finally, suppose that the prior likelihood of “Andy’s cat is in the tree” is sufficiently lower than the prior likelihood of “Andy’s cat is not in the tree” because, on a

<sup>39</sup> With the proviso that overriding in the cognitive case might be difficult to achieve under the assumption of the normative equality of epistemic goals (acquiring truths vs. avoiding falsities).

<sup>40</sup> The additional assumption in all the variations of the Cat case is that Andy and Jane cannot estimate the likelihood of “The neighbour’s cat is in the tree.” While they know that the neighbour’s cat looks very similar to Andy’s cat, they do not know anything about the cat’s behavioural patterns.

normal day, Andy's cat spends only a couple of minutes in that tree. In these circumstances, the information that the neighbour's cat looks exactly the same weakens the evidential strength of Andy's visual impression, and forces him, first, to suspend judgment on "Andy's cat is in the tree." The prior likelihood, then, makes the suspension of belief implausible and instructs Andy to take a further step—to *rebut* "Andy's cat is in the tree" and proceed on "Andy's cat is *not* in the tree." This leads us to the following conclusion: if the prior likelihood of  $p$  is sufficiently lower than the prior likelihood of  $\sim p$ , and  $p$  is a cognitive presumption, then the undercutting defeater  $u$  cancels  $p$ 's presumptive status. Only under these conditions do undercutting defeaters operate analogously in the cognitive and practical cases.

To sum up, practical and cognitive presumptions merit distinct treatment in argumentation theory. Not only do they require different accounts of dialogical and pragmatic functions, but of defeating conditions as well. Although, they can, in principle, be defeated by the same kinds of considerations, sometimes, under the same background (dialogical, epistemic) conditions, they cannot be defeated by the same types of evidence. To support this point, I investigated the effectiveness of the undercutting defeater. This type of evidence will readily defeat a practical presumption  $p$ , but will *not* defeat a cognitive presumption  $p$  if the prior likelihood of  $p$  is sufficiently higher than the prior likelihood of  $\sim p$ . Moreover, the undercutting defeater will not defeat a practical presumption  $p$ , but *will* readily defeat a cognitive presumption  $p$  if the prior likelihoods of  $p$  and  $\sim p$  are equal (or unknown).

The potential theoretical consequences of this difference are considerable and weighty. For instance, by showing that different background conditions can produce structural differences in the opponent's burden of proof, our analysis can have relevant deontic implications. Although presumptions, due to their *deontic function*, impose the obligation to present reasons on the opponent, whether the opponent should be obliged, for example, to undercut a presumption, could depend on whether she *can* indeed do so. Accordingly, our analysis might contribute to the investigation of how presumptions relate to burdens of proof. It might show that, if the opponent  $O$  bears the burden of proof,  $O$  might be expected to undercut a presumption  $p$  only if (1)  $p$  is a practical/cognitive presumption, and (2) the prior likelihood of  $p$  is (sufficiently) higher/equal/lower than the prior likelihood of  $\sim p$ . Since the burden of proof is considered to be a central, defining notion in standard theories of presumption, this contribution should be worthy of attention.

## 4 Conclusion

For the most part, this paper sought to achieve a *typological objective*. It explored various grounds for distinguishing practical and cognitive presumptions.

In the literature, scholars typically distinguish the two types of presumptions by referring to what I call *ultimate contextual functions*: while practical presumptions facilitate the process of decision-making, cognitive presumptions facilitate the process of epistemic inquiry (see Ullmann-Margalit 1983, p. 143; Rescher 2006, p. 27). Also, scholars recognize that practical and cognitive presumptions have qualitatively different foundations (Godden and Walton 2007, p. 315, 338), or what I call distinct

*normative functions*: while practical presumptions promote non-epistemic goals in deliberation, cognitive presumptions promote epistemic goals by introducing information to the inquiry. But what about other features and functions?<sup>41</sup> Are practical and cognitive presumptions both conclusions of presumptive reasoning (*logical function*)? Do they asymmetrically allocate the burden of proof (*deontic function*)? Are they meant to overcome a dialogical impasse, and, if they are, are they dealing with a similar kind of impasse (*dialogical function*)? Are practical and cognitive presumptions both concerned with avoiding greater harm and, if they are, does this necessarily imply avoiding costly errors (*pragmatic function*)? Finally, given their equivalent, or closely similar background conditions, can they be defeated by the same kinds of evidence (*defeating conditions*)? The goal of this paper was to explore the relationship between practical and cognitive presumptions in terms of dialogical functions, pragmatic functions, and defeating conditions. To achieve this typological objective, it was necessary to develop dialogical accounts of practical and cognitive presumptions, which constituted the *dialectical objective*.

The starting point of my dialectical and typological research was Nicholas Rescher's view that practical and cognitive presumptions are closely analogous. What justifies this starting point is surely the general relevance of Rescher's extensive and influential work, but also a distinct theoretical potential of the strong analogy. Namely, if the strong analogy is plausible, then, first, the term "presumption" preserves conceptual cohesion, and, second, the study of cognitive presumptions can directly benefit from the study of practical presumptions (and vice versa). However, I showed that practical and cognitive presumptions differ in several important respects. The main dialectical and typological results are summarized as follows.

Result 1. Typically, the two types of presumptions have different *dialogical functions*. On the one hand, in order to stop the (infinite) dialectical regress, cognitive presumptions are meant to *block* a particular type of dialogue. Also, their function is to enable the dialogue to *get off the ground*. On the other hand, in order to overcome evidential uncertainty in deliberation, practical presumptions *unblock* the dialogue. Their function is to allow the dialogue to proceed towards a desirable *conclusion*.

Result 2. Typically, the two types of presumptions involve structurally different foundations. Unlike the scheme for presumptive practical reasoning, the complete scheme of presumptive cognitive reasoning does not seem to include premises related to making decisions under genuine uncertainty. This entails that cognitive presumptions do not arise in response to the (comparable) deliberation problem, do not serve to avoid costly errors, and, thus, have a different *pragmatic function*.

<sup>41</sup> The following questions might seem relevant to the issue concerning differences between legally inspired (practical) presumptions and ordinary, non-legal presumptions (see Kauffeld 2003). However, it is debatable whether Rescher's cognitive presumptions really belong to the class of ordinary, everyday presumptions. Rescher's cognitive presumptions might be applicable to everyday contexts to some extent, but they belong, first and foremost, to ideal dialectical settings and are concerned neither with social conventions nor with the rhetorical management of probative obligations incurred by the performance of speech acts (for details, see Kauffeld 1998, 2005).



Result 3. Sometimes, under the same background conditions, the two types of presumptions cannot be defeated by the same types of defeaters. For example, sometimes, given a particular attribution of prior likelihoods, an undercutting defeater will cancel a practical presumption but will *not* cancel a cognitive presumption (and vice versa). As a result, the two classes of presumptions sometimes burden opponents with structurally different dialectical obligations.

The proposed conclusions are qualified on purpose. I do not wish to argue that all practical presumptions are different from all cognitive presumptions in every respect specified above.<sup>42</sup> Rather, my overall, modest conclusion is the following: *typical* cognitive presumptions are *usually* different from *paradigmatic* practical presumptions in *many* relevant respects. Also, the proposed conclusions are only preliminary. In order to decisively separate cognitive from practical presumptions, additional theoretical effort is required, and a more sophisticated account of practical and cognitive presumptions is needed. This is primarily true, I believe, for the account of presumptive reasoning. For instance, our presentation of the foundations of presumptions discusses neither the relevance (or necessity) of the *normative consensus* between the dialogical parties<sup>43</sup> nor the nature of the relation between (prudential) goals.<sup>44</sup> However, I believe that the proposed conclusions, although preliminary, are at least strong enough to direct research towards less explored territories. At least, they are strong enough to show that practical and cognitive presumptions merit distinct dialectical treatment *until proven otherwise*.

The latter typological and dialogical results open a straightforward conceptual question: what, in the end, holds practical and cognitive presumptions together? They indeed give rise to different types of status, but can they still be seen as different types of *presumptions*? In part, the answer depends on the preferred level of conceptual generality. On the one hand, one may contend that, despite the differences, both types of presumptions share a similar dialogical function—to enable the “constructive development of the dialogue” (either by enabling progress or preventing regress). Or, one may contend that both types of presumptions share the same pragmatic function of “avoiding greater harm,” even though this policy is not always selected on the grounds of avoiding probable error. On the other hand, even if one prefers a lesser degree of conceptual abstraction (as I personally do), the two types of presumptions may still share the same *deontic function*. To see whether this is indeed true, one would need to develop a clear conception of the burden of proof

<sup>42</sup> On the one hand, Rescher’s (non-typical) cognitive presumption based on the principle of simplicity might well include a premise concerning genuine evidential uncertainty. On the other hand, legal scholarship acknowledges (practical) presumptions that are not genuinely uncertain as far as *prior likelihoods* and *base rates* are concerned: for instance, there is a presumption that a properly posted letter is successfully delivered to the recipient (see Gama 2017, p. 563; Petroski 2008, p. 390).

<sup>43</sup> For the argument that normative consensus is *necessary* for the correct application of (practical) presumptions in social controversies, see Rääkkä (1997, pp. 468–469). For a similar argument applied in the context of contemporary bioethics, see Koplin and Selgelid (2015, p. 601).

<sup>44</sup> What justifies the contention that two ultimate goals are of equal or unequal importance? Are we talking about an “objective” relation, or an interpersonally valid relation (agreed by parties in that particular dialogue), or, perhaps, a relation that is personally preferred by an individual agent?



and explore whether this conception equally applies to practical and cognitive presumptions. I deal with this complicated task in Bodlović (2020b).

To conclude, one may still find it conceptually plausible to separate practical and cognitive presumptions from many other phenomena, such as presuppositions, suppositions, assumptions, stipulations, assertions, claims, or hypotheses (see Godden 2017). Although this paper discusses the ambiguities of some fundamental concepts (e.g., dialogical progress, pressure, uncertainty, avoiding harm, etc.) and thereby contributes to the underlying *conceptual objective*, it is primarily concerned with the dialogical application of presumptions. To use a metaphor, the proponent who would use the “Practical Presumption Instruction Manual” on a cognitive presumption might get into all sorts of trouble, regardless of what she believes about the conceptual connection between the two. Due to *Result 1*, the proponent might forget what she was trying to achieve in the first place; due to *Result 2*, the proponent might misjudge her reasoning options and, due to *Result 3*, get the wrong picture about when her presumption becomes defeated. This paper aims to get this imaginary proponent out of trouble—to provide some preliminary instructions on how to deal with practical and cognitive presumptions in ordinary dialogues.

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