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ORIGINAL ARTICLE

Meta-regresses and the limits of persuasive argumentation

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Abstract

This paper provides a thorough analysis of two often informally stated claims. First, successful argumentation in the sense of persuasive argumentation requires agreement between the interlocutors about the rationality of arguments. Second, a general agreement about rationality of arguments cannot itself be established via argumentation, since such an attempt leads to an infinite meta-regress. Hence, agreement about the rationality of arguments is a precondition for successful argumentation. As the paper argues, these plausible claims hold under the assumption that interlocutors are subjectively rational and follow their own standards of rationality when engaging in argumentation.

KEYWORDS

argumentation, meta-argumentation, meta-regresses, regress arguments

1 | STAGE SETTING: PERSUASION VIA ARGUMENTATION AND RATIONAL ARGUMENTS

In this paper, I argue that two interlocutors fail to reach agreement if they hold different views about the rationality of arguments, even if they act according to the best of their knowledge about rational arguments. As I argue, persuasive argumentation requires agreement about the rationality of arguments, which itself cannot be reached via argumentation. In this sense, I emphasize the importance of common ground for persuasive argumentation, which has already been stressed in the literature. There is no theory on the market, however, that carefully

¹See van Eemeren and Grootendorst 2004, 60–61, and van Eemeren, Garssen, and Meuffels 2009, 112. The importance of common beliefs and common ground between speaker and hearer is also emphasized by pragmatic theories of presupposition, like Stalnaker 2002, which extend a general strategy set out in Grice 1989. For an overview of theories of presupposition, see Beaver, Geurts, and Denlinger 2021. These theories, however, use the concept of common ground in a slightly different context.

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investigates for which interlocutors, namely, subjectively rational interlocutors, this requirement holds and why it holds for them. Similarly, the meta-regress of argumentation resulting from fundamental disagreement about the rationality of arguments is often informally introduced but not systematically developed in the literature. This paper aims to fill exactly these lacunae.²

In section 1, I set the stage by defining persuasion via argumentation and rational argumentation and by explaining these definitions in more detail. For the purposes of the paper, it is crucial to specify in detail the relevant attitudes, virtues, and vices of speakers and hearers on an objective and on a subjective level. This is the topic of section 2 and its subsections. In section 3, I demonstrate why interlocutors with certain subjective epistemic attitudes cannot reach agreement if they do not agree about the rationality of the arguments used. In section 4, I extend the argumentation, showing that this agreement about the rationality of arguments cannot be reached via argumentation, on pain of infinite meta-regresses.

In this first section, I first provide some terminological clarifications concerning argumentation. I understand argumentation as an interaction between a speaker, whom I refer to as A, who presents an argument to a hearer, whom I refer to as B. Usually, arguments are presented with the aim to persuade someone about the truth of a proposition p, that is, to make someone believe that p. I define persuasion via argumentation as follows:

Definition: Persuasion via argumentation

A persuades B via argument R that p iff A presents R to B and B believes that p because of R.

The phrase "believing that p because of argument R" is ambiguous. In some sense, this criterion is also fulfilled if B believes that p merely because of R's melodiousness, that is, without even understanding the content of R. I want to exclude such cases from being instances of persuasion via argumentation. Accordingly, the provided definition of persuasion via argumentation must be understood as requiring that B understands the content of R and believes that p on the basis of the understood content. Further conditions might be necessary for a fully adequate definition of persuasion via argumentation, for example, that B understands A's intention of presenting an argument for p. For the purposes of this paper, however, providing such a complete definition is not necessary.

Argumentation is not the only way to persuade someone that *p*. For example, A can persuade B by *showing* or *demonstrating* that *p*. Moreover, a speaker can make a hearer believe that *p* simply by uttering that *p*. Since persuasion via mere utterance involves some kind of trust in the speaker, at least on a non-reflective level, I call it *persuasion via trust*.³

Resolving disagreement means that two parties who initially have different doxastic attitudes toward a proposition p end up having the same doxastic attitudes toward p. I define persuasion as a process of making someone believe that p. Hence, if A believes the proposition for which she argues, then persuasion is a way of resolving disagreement. Resolutions of disagreement can, however, also take forms other than persuasion, for example, when A initially believes that p and B rejects that p and A and B end up suspending judgment about the truth of p after engaging in a more complex form of argumentation that involves

²This paper is located in the field of epistemic approaches to argumentation, i.e., it is committed to the broad view that the goal of argumentation is epistemic and objective and aims at truth, knowledge, and/or justification. For epistemological reflections on argumentation, see Feldman 1994 and 1999 and Goldman 1994, 1997, 1999, and 2003. For epistemological argumentation theories, see Biro and Siegel 1992 and 2006 and Siegel and Biro 1997 and 2008. For an overview, see Lumer 2005.

³For work on disagreement, see Christensen and Lackey 2013 and Frances and Matheson 2019.

various argumentative steps back and forth. In this paper, I reflect neither on such more complex forms of argumentations nor on resolutions of disagreement that are not instances of persuasion. Moreover, I also exclude views that analyze doxastic attitudes in terms of credences from this investigation. I do think, however, that for such accounts similar results can be obtained.

Arguments can have different epistemic features, and speakers and hearers can have different epistemic attitudes toward arguments. Let me first reflect on features of arguments. The epistemic features of arguments can be evaluated along two dimensions, first, concerning the truth of the premises and, second, concerning the supporting relation between the premises and the conclusion. For the purposes of this paper, the supporting relation is particularly relevant.

We can distinguish epistemically good arguments where the truth of the premises appropriately supports the truth of the conclusion from bad arguments where this supporting relation does not hold. Accordingly, I will define *rational arguments* as follows:

Definition: Rational argument

An argument is rational iff the truth of its premises supports the truth of its conclusion in an appropriate way.⁴

This notion of rational arguments might strike many readers as unorthodox. Often, such arguments are labeled as cogent. The notion of cogent arguments is ambiguous, however, shifting between arguments with proper supporting relations between premises and conclusion and arguments with proper supporting relations and true premises. The definition of rational arguments concerns only the aspect of supporting relations. For the sake of clarity, I use the purely technical terminology of rational arguments. For the purposes of this paper, I need only to conceptually distinguish between rational argument from nonrational arguments. I remain neutral about which arguments actually are rational. Accordingly, I can also leave open what it exactly means for premises to support a conclusion "in an appropriate way."

As for deductive arguments, there is a clear terminological distinction between valid arguments (the truth of the premises necessitates the truth of the conclusion) and sound arguments (valid arguments with true premises and, therefore, a true conclusion). The rationality of an argument depends on the supporting relation between the premises and the conclusion, not on their actual truth. Accordingly, valid arguments are paradigmatically rational. I assume that inductive arguments and abductive arguments can also be rational. I do not, however, extend the terminology of validity (and soundness) to nondeductive arguments and I talk hereinafter about rational arguments. The concept of rational arguments, which covers deductive and nondeductive arguments, extends the concept of *valid* (rather than *sound*) arguments, which covers only deductive arguments.

2 | EPISTEMIC ATTITUDES OF SPEAKERS AND HEARERS

This paper investigates preconditions and limits of persuasion and reaching agreement, which are two psychological phenomena. Agreement can trivially be reached if one party

⁴I assume here for the sake of simplicity that arguments consist of one or more premises but of only one conclusion.

⁵One might also call the supporting relation between the premises and the conclusion of an argument its strength. In this paper, I prefer the technical notion of rationality of arguments, since it is unclear whether "strength" refers only to the supporting relation between premises and conclusion or also implies the truth of the premises and the conclusion.

believes any conclusion of any argument. Different psychological mechanisms might be in play in these cases. Moreover, two persons can fail to reach agreement or to persuade each other for various reasons, for example, because one person is stubborn and cannot be persuaded by any argument that p is true, regardless of whether the person thinks that the argument presented is rational. Such cases of persuasion failure stemming from ignoring any standards of rationality, even one's own subjective standards, might be of psychological interest, but they are philosophically less interesting, since the failure of reaching agreement is merely determined by the person's stubborn attitude toward p instead of his attitudes toward argumentation. More interestingly, two parties can fail to reach agreement even if they fulfill certain standards of rationality on a subjective level. These instances of agreement failure are the subject of this paper. In order to establish this point, epistemic characters, speaker-wise and hearer-wise, with certain dispositions to behave rationally in a specific way must be characterized.

The point that common ground about argumentation between speaker and hearer is crucial for persuasive argumentation is often stressed in the literature on argumentation. This claim is plausible, however, only if it is assumed that the interlocutors share certain attitudes on a subjective level. If they lack these attitudes, then any arbitrary and unsystematic form of agreement and disagreement is possible. Thus, in order to identify the interesting cases of necessary common ground, a precise characterization of subjectively rational interlocutors is required, which, to the best of my knowledge, has not been provided in the extant literature. Providing this characterization is the subject of the ensuing subsections.

2.1 | Subjectively and objectively rational speakers

Let me first reflect on epistemic attitudes of speakers who present arguments. For the purposes of this paper, it is important to draw a sharp distinction between *objective* epistemic features that speakers and hearers can possess concerning the premises and the rationality of arguments and *subjective* features. Objective features are determined by the truth of the premises and the actual rationality of the arguments involved. Subjective features, in contrast, are merely determined by the *beliefs* that speakers and hearers hold about the truth of the premises and about the rationality of arguments. By drawing a conceptual distinction between objectively positive features of arguments, such as rationality, and subjective features that are believed to be positive, I commit myself to what Biro and Siegel (2006) call an "objective epistemic theory" of arguments.

We can distinguish epistemic attitudes toward the premises of an argument and attitudes toward its rationality. In this paper, I argue that persuasive argumentation usually requires agreement about the rationality of arguments that cannot itself be acquired via argumentation. Hence, attitudes toward the rationality of arguments are crucial for the purposes of the paper. Let me first define speakers who present only actually rational arguments:

Definition: Objectively rational speaker

S is an objectively rational speaker iff: For every argument R, if S presents argument R for p, then R is a rational argument for p.

⁶Moreover, agreement about premises is also necessary for persuasive argumentation. I take up these issues in the ensuing sections.

⁷This definition allows for the possibility that an objectively rational speaker withholds information in that she knows propositions that can function as premises and knows that there would be a rational argument for *p* based on these premises but still does not present this argument. Trivially, anybody who does not present any argument at all also counts as an objectively rational speaker. This peculiarity, however, is not a problem for the purposes of this paper.

Speakers can be rational in various ways. For example, a speaker is pragmatically rational concerning the goal of persuading a hearer if she presents an argument which she believes will persuade the hearer, regardless of whether the speaker thinks it is rational. If we understand rationality with respect to this goal, then the beliefs that speakers hold about rational argumentation do not play any role for determining the rationality of their argumentative actions. Moreover, in this case, we cannot determine any common ground between speaker and hearer in terms of shared beliefs about rational arguments that is necessary for persuasive argumentation. Hence, for the purposes of this paper, a different form of rationality is crucial. I am concerned with speakers who are objectively rational concerning the way they argue and/or subjectively rational concerning the way they think they should rationally argue.

We can also define the corresponding *subjective* attitude of speakers who present only arguments that they *believe* to be rational:

Definition: Subjectively rational speaker

S is a subjectively rational speaker iff: For every argument R, if S presents argument R for p, then S believes that R is a rational argument for p.

Subjectively rational speakers are honest in that they refrain from presenting arguments that they believe are not rational (or about whose rationality they suspend judgment). When I say that S believes that an argument is rational, I do not mean that S holds an explicit belief with exactly this proposition as content. Rather, I understand believing that an argument is rational in a looser sense requiring only that S explicitly or implicitly believes that the argument has a positive epistemic status and that the truth of the premises supports the truth of the conclusion. Being a subjectively rational speaker thus requires the capacity to grasp the concept of rational arguments and to conceptually distinguish good arguments from bad arguments. I understand these requirements as rather modest, however.

In this paper, I want to reveal how different views about rationality determine the behavior of speakers and hearers in argumentation situations. Accordingly, I focus on reflective subjects who hold (at least implicit) beliefs about the rationality of arguments, as in the provided definitions of objectively and subjectively rational speakers. One might object that subjects can also present arguments and form beliefs based on arguments without holding any beliefs about the rationality of arguments. Taking unreflective speakers and hearers into account, we can modify the definition of a subjectively rational speaker as follows: For every argument R, if S presents argument R for p, then S does not believe that R is not a rational argument for p. The following subjective features of hearers and speakers can be reformulated analogously. According to these reformulations, holding a positive belief about the rationality of arguments is not necessary for being a subjectively rational speaker or a subjectively rational hearer, but holding a negative belief is necessary for not being one. For the purposes of this paper, however, I focus on reflective speakers and hearers who do hold beliefs about the rationality of arguments.

It is important to distinguish rationality failure on the objective level from failure on the subjective level. Speakers who are not objectively rational fail on an objective level, viz.: they fail according to objective epistemic standards. Speakers who are not subjectively rational or who are dishonest fail on a subjective level, viz.: they fail according to *their own* standards of rationality. Of course, one's own standards can be in line with the objective standards, but they might also diverge from them. S can be subjectively rational without

⁸On the distinction between objective and subjective concepts of rationality, see Fogal and Worsnip 2021.

being objectively rational, since S can hold false beliefs about the rationality of the arguments presented. Moreover, S can be objectively rational without being subjectively rational, for example, if S presents an argument of which S falsely believes that it is not rational with the intention of deceiving the hearer. Hence, not all objectively rational speakers are necessarily subjectively rational. Ideal epistemic subjects fulfill the standards for rationality on the subjective and the objective level. For the purposes of this paper, subjective standards play a crucial role. I assume that most speakers fulfill the objective and subjective standards of rationality most of the time (I hope this view is not unduly optimistic). Nevertheless, in everyday life there are some exceptions, with which we all have been confronted and we all have failed to fulfill each of these criteria more than once. I make some clarificatory remarks about this claim below.

2.2 | Subjectively and objectively rational hearers

Let me now come to epistemic features of *hearers*. There are two major epistemic goals that complement each other, believing the truth and avoiding error. We follow evidence, in the broadest sense, in order to achieve these goals. Accordingly, we can define two corresponding types of epistemic vice, not believing a proposition despite evidence in favor of it and believing a proposition without sufficient evidence in favor of it (or despite evidence against it.) In the first case, I will say that S fails to be *open-minded*. In the second case, I will say that S is *prejudiced*. In this paper, I do not aim at capturing the full meaning of being open-minded and unprejudiced. Rather, I am concerned only with specific versions of these phenomena. Being open-minded and being unprejudiced constitute two epistemic virtues that complement each other with regard to the two epistemic goals of believing the truth and avoiding error. Thus, with respect to these widely acknowledged epistemic goals, being open-minded and being unprejudiced are the crucial features of rational hearers. This does not, however, rule out that there are other crucial features of hearers with respect to other epistemic or non-epistemic goals.

The epistemic virtues of being open-minded and unprejudiced can also be specified for hearers who are confronted with argumentative evidence. Again, we can define epistemic virtues for hearers on a subjective level and on an objective level. Let me first define them on a subjective level.

Definition: Subjectively open-minded hearer

B is a subjectively open-minded hearer iff: For every argument R, if B is confronted with argument R for p and B believes the premises of R and believes that R is a rational argument, then B believes that p because of R.

A hearer fails to be subjectively open-minded if she is subjectively stubborn in that she does not believe that p even if she is presented with an argument that she regards as rational and whose premises she believes. Such a person is stubborn according to her own standards of rationality. For example, this is the case if p is very unfavorable information for B and B fails to believe that p for psychological reasons even though B regards the evidence for p as strong.

Subjective open-mindedness rules out the epistemic vice of not believing that p despite subjectively good evidence. The alternative epistemic vice of believing p without subjectively sufficient evidence or despite subjectively negative evidence is ruled out by the following attitude:

Definition: Subjectively unprejudiced hearer

B is a subjectively unprejudiced hearer iff: For every argument R, if B is confronted with argument R, then B does not believe that p because of R if there are some premises of R that B does not believe or B does not believe that R is a rational argument.

A hearer can fail to be subjectively unprejudiced, for example, if he falls prey to wishful thinking and believes the conclusion of an argument even though he does not regard it as rational.

The two epistemic attitudes of open-mindedness and unprejudicedness complement each other with regard to the two epistemic goals of believing the truth and avoiding error on a subjective level. We can now define the hearer attitude of *subjective rationality* as the conjunction of subjective open-mindedness and subjective unprejudicedness:

Definition: Subjectively rational hearer

B is a subjectively rational hearer iff B is subjectively open-minded and subjectively unprejudiced.

A subjectively rational hearer believes propositions because of presented arguments iff they believe the premises of the argument and believe that the argument presented is rational. Accordingly, there are two main reasons for a subjectively rational hearer not to believe the conclusion of an argument, that they do not believe its premises and that they do not believe that the argument is rational. In everyday life, the first case is presumably more prevalent than the second.⁹

So far, these features are defined as general attitudes of hearers toward any argument. Interlocutors often lack these features, however, with respect to some arguments or with respect to some propositions. Hence, it might be useful in some contexts to weaken these definitions for attitudes toward *most* arguments and/or most propositions. Moreover, one can also define these attitudes with respect to a particular argument R or with respect to a particular type of argument. For the sake of simplicity, I will stick to the idealized definitions provided here unless modification is required.

Subjective attitudes of a hearer B are specified only by B's *beliefs* of the premises and her *beliefs* about the rationality of the argument. We can distinguish these subjective attitudes from objective ones that are determined by B's *knowledge* of the premises and her *knowledge* about the rationality of the argument, or at least by her justified beliefs of these propositions. For the purposes of this paper, I need not distinguish more specifically between a *knowing* hearer and a *justified* hearer. Hence, I use for the following definition the more general terminology of positive epistemic stati, which include knowledge and doxastic justification.

Definition: Objectively rational hearer

B is an objectively rational hearer iff: For every argument R, if B is confronted with argument R for p, then B believes that p because of R iff B has a positive

⁹I assume here that it is rational for a hearer to believe the conclusion of an argument if she believes its premises and believes that the argument is rational. This claim is oversimplified, since the hearer might possess a defeater that makes it rational to reject the conclusion of the argument or to suspend judgment about it. Taking defeaters into account would complicate the main line of this paper, but the basic results would remain the same. Hence, for the sake of simplicity, I hereinafter ignore defeaters.

epistemic status concerning the premises of R and concerning R being a rational argument.

Objective open-mindedness and objective unprejudicedness can be defined analogously. Subjectively rational hearers believe the conclusion of an argument iff they believe the premises and believe that the argument is rational, whereas objectively rational hearers believe the conclusion iff they know the premises and know that the argument is rational (or at least believe so justifiedly).

To sum up: In the last two subsections, I defined different attitudes that speakers and hearers can possess toward arguments. There are attitudes on the objective level, which are determined by knowledge or justified beliefs of speakers and hearers about premises and arguments, and attitudes on the subjective level, which are determined only by their beliefs about it.

2.3 | Further reflections on subjective and objective rationality

Let me make some further remarks on the subjective and objective attitudes of speakers and hearers. We can follow beliefs about rational arguments explicitly and intentionally and reflectively act according to these beliefs in accepting or rejecting conclusions of arguments. In most cases, however, we follow them rather implicitly: that is, we hold implicit beliefs about the rationality of arguments and automatically form beliefs according to them, often as a form of habit, which is guided only by our beliefs in rationality principles.¹⁰

Subjectively rational speakers and hearers fulfill certain criteria for rationality in that they act according to their own standards of rational argumentation. In this respect, their beliefs and actions are coherent, and they are, thus, in terms of coherence rational agents. In this paper, I provide a philosophical argument, based on conceptual analysis, that subjectively rational interlocutors fail to reach agreement if they disagree about the rationality of arguments. This result can be obtained regardless of whether subjects actually are subjectively rational or not. Investigating to what extent speakers and hearers are usually subjectively rational is an empirical task beyond the scope of this paper. The point made here, however, is more relevant if subjective rationality is a common feature of interlocutors. I assume that most people fulfill rationality standards on a subjective level at least to a certain extent. Most speakers are subjectively rational and honest in that they mainly present arguments that they regard as rational and whose premises they believe. Admittedly, there are numerous exceptions: for example, speakers who aim at deceiving hearers by presenting arguments whose premises they do not believe or which they do not regard as rational, but I think that these cases are in the minority. Moreover, I assume that most hearers are subjectively rational, with numerous exceptions, for example hearers who fail to be subjectively unprejudiced due to wishful thinking, or those who are stubborn rather than subjectively open-minded and do not follow what is argumentative evidence according to their own standards. These are empirical hypotheses. The conceptual analysis provided here, however, also holds if these underlying empirical hypotheses are falsified.

Let me briefly reflect on whether beliefs about the rationality of arguments are innate or learned, and the relevance of this question for my account. Plausibly, some of our beliefs about

¹⁰In this paper, I consider beliefs of speakers and hearers, since the psychological state of belief is the fundamental concept in philosophy for characterizing disagreement. One might object that, for argumentation, the crucial attitudes of interlocutors are not internal mental states but external attitudes, for example, dialectical commitments or discursive acceptances. In this paper, I focus on beliefs, but the main claims of the paper still hold if one accepts this externalizing premise.

the rationality of arguments are innate, but many are acquired through learning during our socialization and education. Reflective subjects usually hold beliefs about when arguments are rational. If many of our beliefs about the rationality of arguments are learned, then people can disagree about which arguments count as rational if they belong to different social groups where different views about rationality predominate. For example, members of a strongly religious group might regard religious sources as reliable, whereas persons who do not belong to this group do not. Moreover, members of an astrological community plausibly argue about cosmic domains differently from the way members of the orthodox scientific community do. Again, these reflections on the innateness of beliefs about rational argumentation involve some empirical speculation and are meant to illustrate potential consequences of the philosophical analysis provided in this paper. Unfortunately, an empirical verification of these hypotheses is beyond the scope of the paper.

Let me briefly comment on meeting criteria of rationality on an *objective* level. It is an empirical question whether most people are objectively rational speakers and hearers. Personally, I think that our mainstream scientific picture of the world is broadly correct and that most of the arguments of ordinary people and of members of the orthodox scientific community, including philosophers, are broadly rational. Moreover, I assume that views that are incompatible with ours are, therefore, basically false. Hence, I reject relativism. In this paper, I aim to show that persuasive argumentation requires agreement about the rationality of arguments. This agreement is located on a *subjective* level. Therefore, the claim that persuasive argumentation requires agreement about the rationality of arguments holds independently of which arguments actually are rational. Consequently, for the purposes of this paper, I can officially remain neutral about whether our scientific world picture and our practice of arguing are broadly correct and about whether relativism is false.

Let me also point out that there is a crucial difference between disagreement about rationality of arguments discussed here and peer disagreement. Disagreement about the rationality of arguments does not imply that the parties are epistemic peers or believe themselves to be peers. In contrast, in many cases one of the parties is objectively rational but the other is not. In some cases, a speaker and a hearer might disagree about the rationality of arguments and both be objectively irrational. In this respect, they can be regarded as peers, albeit on a low level. These are not, however, paradigmatic cases of peer disagreement, which are discussed in the literature, for example, in Frances and Matheson 2019 and Matheson 2015.

2.4 | Infinite regresses

I argue that fundamental disagreements between subjectively rational speakers and hearers about the rationality of arguments lead to an infinite meta-regress that cannot be resolved. So let me say a few clarificatory words about infinite regresses. Two forms of disagreement, namely, disagreement about the truth of premises and disagreement about the rationality of arguments, can lead to infinite regresses. The first type of infinite regress, a horizontal one, is the standard infinite regress. In this case, a subject enters a potentially infinite regress of arguing for the truth of the premises. In this paper, I deal with an argumentation-relevant version of the second regress type, a meta-regress. In this case, a subject enters a potentially infinite regress of arguing for the rationality of arguments.

¹¹For discussion and rejection of relativism, see Boghossian 2006.

¹²When talking about attitudes of persons, I distinguish subjectively rational persons, who follow their own beliefs about rationality, from objectively rational persons, who follow the actual standards of rationality. In contrast, when talking about rational arguments, I always refer to the objective supporting relation between premises and conclusion. I do not, however, commit myself to any particular view about the nature of this supporting relation.

This first type of regress is connected with the skeptical problem of Agrippa's trilemma.¹³ According to this trilemma, there are exactly three alternatives for acquiring justification—infinite reasoning, circular reasoning, and stopping the reasoning process. None of these alternatives can yield justification. Therefore, there is no justification or knowledge. Or so the skeptic argues. In epistemology, there is wide agreement that Agrippa's trilemma is an unsound skeptical argument because we can justify via infinite reasoning, via circular reasoning, or by stopping the reasoning process. The last option, foundationalism, is by far the most popular one. Moreover, we can acknowledge the dialectical ineffectiveness of arbitrarily stopping a reasoning process in argumentation and nevertheless acknowledge that justification can have a foundationalist structure.¹⁴

In his famous essay "What the Tortoise said to Achilles," Carroll (1895) shows that the distinction between disagreement about the premises of an argument and disagreement about its rationality is not sharp, since the claim that an argument is rational can be added as a further premise. Take the example of an argument consisting of premises p_1 and p_2 and conclusion c. Suppose that A and B disagree about whether this is a rational argument. Suppose now that A adds the claim that the argument from p_1 and p_2 to c is rational as a further premise. Now A and B disagree about a premise and not about the rationality of an argument, although the disagreement is substantially the same. Furthermore, we will see in section 4 that in cases of disagreement about higher-level arguments, disagreement about the rationality of arguments can be disagreement about the premises of arguments.

Despite these technicalities, there is an intuitive difference between disagreement about the truth of premises and disagreement about the rationality of arguments. In this respect, Carroll's reconstruction of an infinite-regress argument is superficial. Moreover, I focus in this paper on the required agreement about rationality of arguments, but my overall take on persuasive argumentation is that it requires certain agreement about premises *and* about the rationality of arguments that cannot itself be established via argumentation. This overall outcome is not affected by problems of classifying disagreement as being of the one type or the other type.

Let me make some final clarificatory remarks about agreement concerning premises of arguments. To believe the conclusion of an argument, it is usually crucial for hearers to believe its premises. Hearers can believe premises of arguments for different reasons. First, they can believe them prior to being confronted with the argument. If a hearer believes a conclusion because of an argument whose premises he already believes, then he previously might have failed to see the connection between premises and conclusion. Second, hearers can believe premises of arguments because they trust the speakers concerning the premises. We can distinguish simple trust from reflective trust. In the case of simple trust, a hearer believes the content of someone's utterances simply because of this utterance. In the case of reflective trust, a hearer also (justifiedly) believes or even knows that the speaker is a reliable informant in the relevant domain. For example, we usually believe conclusions of an expert's argument whose premises we do not already know because we (justifiedly) believe that the expert is reliable in the relevant domain. In this paper, I focus on beliefs and disagreement about the rationality of arguments and not on disagreement about premises. For this purpose, I hereinafter assume that speaker and hearer agree about the truth of the

¹³For a presentation, see Klein 2008. For a discussion of various regress arguments and their structures, see Wieland 2014.
¹⁴For a detailed analysis of this difference, see Melchior 2023a. Agrippa's trilemma is also discussed in argumentation theory, albeit often from a different point of view. Van Eemeren and Grootendorst (1984) build on Popper's (1959) critical rationalism and accept the conclusion from Agrippa's trilemma that there cannot be epistemic justification. They then use this approach for defending their own concept of dialectical reasonableness. However, accepting radical skepticism on the basis of Agrippa's trilemma is, at least in the context of contemporary epistemology, a highly controversial view, which is criticized, for example, by Siegel and Biro 2008.

premises of first-level arguments, either because the hearer already believes the premises of the argument or because she trusts the speaker.

3 | THE PRECONDITIONS OF PERSUASIVE ARGUMENTATION (FIRST LEVEL)

Using the clarifications provided so far, I can now explicate in this section and the following one preconditions of persuasive argumentation. We will see that a certain agreement between speaker and hearer about the rationality of arguments is required, if they are both subjectively rational and act in argumentation situations according to their own standards of rationality. Let me first focus on the subjective attitudes of *hearers*. If B is subjectively rational (or at least subjectively unprejudiced) and A presents argument R for p, then, by definition, B will not believe that p because of R if B does not believe that R is rational. Suppose B is subjectively rational and A is a subjectively rational speaker, that is, A does not present arguments that A does not believe are rational. In this case, B will believe p because of R only if A and B both believe that R is rational. Hence, we can say:

If A and B are subjectively rational and disagree about the rationality of R, then A will not persuade B that p via R.

When I speak of disagreement about the rationality of arguments, I just mean that speaker and hearer have different beliefs about the rationality of arguments. I do not mean they necessarily engage in an argumentative exchange that leads to different explicit judgments about the rationality of arguments that are mutually recognized.

I have already discussed the assumption that speakers and hearers are usually, though not always, subjectively rational. This is an empirical hypothesis. I do not, however, think that it is very controversial, since it claims only that subjects usually have at least vague ideas about what good and bad arguments are and act according to these beliefs when engaging in argumentation. For example, believing that an argument is bad and still believing the conclusion because of the argument seems unusual behavior. I do not make the stronger claim that people usually are *objectively* rational. Given the empirical assumption that speakers and hearers are usually, though not always, subjectively rational we can say:

Usually, if A and B disagree about the rationality of R, then A will not persuade B that p via R.

Hence, successful argumentation in the sense of persuasive argumentation, of making a hearer believe the conclusion of an argument because of the argument, usually requires agreement between speaker and hearer about the rationality of the arguments involved. If they lack this kind of agreement, then usually argumentation is, in terms of persuasiveness, doomed to fail. In this paper, I focus on the preconditions and limits of reaching agreement in simple cases where a speaker presents an argument to a hearer. The results obtained can, however, also be applied to more complex forms of argumentation that involve various argumentative steps back and forth between the two parties.

The results obtained have some interesting aspects. It is obviously the case that subjects can fail to reach agreement via argumentation if they disagree about the premises of the argument. Moreover, they can obviously fail to reach agreement if the hearer is stubborn and does not believe a proposition regardless of which argument is presented in favor of it. These, however, are rather trivial cases of agreement failure. More interestingly, agreement can also be missed if speaker and hearer fulfill certain standards of rationality, namely, of acting in argumentation

situations in compliance with their own standards of rationality. Moreover, if speaker and hearer have different beliefs about rationality of arguments, then they are in the paradoxical situation of failing to reach agreement precisely *because* they fulfill these rationality standards on a subjective level.

The agreement required for persuasive argumentation is exclusively determined on the subjective level by the beliefs that speaker and hearer hold about the rationality of the arguments involved. It does not matter whether these beliefs are true. Hence, argumentation can be persuasive if speaker and hearer share *true* beliefs about rationality but also if they share *false* beliefs. Accordingly, we can now distinguish various cases of persuasion failure between two subjectively rational interlocutors. Suppose that A and B are subjectively rational. Taking objective attitudes into account, argumentation will fail to be persuasive in the following cases. First, A will not persuade B via argumentation if A presents an irrational argument which A falsely believes is rational and B *correctly* believes is not rational (or if B suspends judgment about its rationality). In this case, A is only subjectively rational, not objectively rational. Moreover, if B not only correctly believes that the argument is rational but also knows or justifiedly believes that it is, then B is objectively rational or at least objectively unprejudiced.

Second, A will also fail to persuade B via argumentation if A presents an argument of which A *correctly* believes that it is rational and B falsely believes that it is not rational (or if B suspends judgment about its rationality). In this case, A might be objectively rational if A knows or justifiedly believes that the argument is rational. B, in contrast, is only subjectively rational. Hence, A might fail to persuade B that p via R even if A is in a perfect epistemic position concerning R: that is, if A knows all the premises of R and knows that R is a rational argument. Moreover, A can fail to persuade B if A and B are subjectively rational and have different, albeit false, beliefs about rational arguments.

So far, I have defined disagreement about the rationality of arguments without taking into account potential reasons for this disagreement. Let us have a closer look at different reasons for disagreement about the rationality of arguments. A and B can simply disagree about whether R is rational without having any systematic reason for their diverging beliefs. These cases of disagreement are less interesting and presumably more unusual than disagreement in a more systematic way. Let me present two more systematic reasons for disagreement about the rationality of a particular argument. Take, first, the following case:

(D1) A and B agree that R is an argument of type T, but they disagree about whether arguments of type T are rational.

In this case, the two interlocutors agree that an argument is of particular type, but they disagree about whether the argument is rational because they disagree that arguments of this type in general are rational. Let me provide an example. A and B agree that R is an inductive/abductive argument, but they disagree about whether inductive/abductive arguments are rational. Here is a more concrete example: A argues, "Peter was always late the past few days. Hence, he will be late today too." A and B agree that this is an inductive argument, but while A believes that inductive arguments are rational, B rejects this view. Here is a second type of more systematic disagreement about the rationality of arguments.

(D2) A and B agree that arguments of type T are rational but disagree about whether R is of type T.

Example: A and B agree that inferences to the best explanation are rational arguments, but they disagree about whether R actually is an inference to the best explanation. A and B might disagree about whether R has the formal structure of an abductive argument, though more usually A and

B will agree about R's formal structure but disagree about whether R is an inference to the *best* explanation. Let me provide an example for this case: A argues, "The street is wet. It has been raining." B does not believe that rain is the best explanation for the street being wet. In this example, A and B agree that inferences to the best explanation are rational arguments, and they might even agree that the argument has the structure of an abductive argument, but they disagree about whether the argument is really an inference to the *best* explanation. These are just two examples for systematic disagreement about the rationality of an argument. While further reasons for this kind of disagreement can be classified, providing such a taxonomy is beyond the scope of this paper.

4 | META-ARGUMENTS AND META-REGRESSES

In the previous section, we saw that agreement about the rationality of arguments between subjectively rational interlocutors is usually required for persuasive argumentation. In this section, we will see that this agreement about the rationality of arguments cannot itself be established via argumentation, since it faces an infinite regress problem.

Disagreement about the rationality of an argument is not necessarily the final step of an argumentative process. If A presents an argument R for p and B fails to believe that p because B does not believe that R is rational, then A has the option to eventually persuade B that p via R by persuading B that R is rational. Various possibilities are available to achieve this goal. First, A might simply utter that R is a rational argument, and B believes A due to trust. Another option, the significant one for the purposes of this paper, is to present a meta-argument for the claim that R is rational. Such meta-arguments can involve several premises, as in the following case:

MR1: Meta-arguments for the rationality of R

P1 R is an argument of type T.

P2 Arguments of type T are (typically/usually) rational.

C Therefore, R is a rational argument.

Meta-arguments of type MR1 are deductive if P2 makes a claim that all arguments of type T are rational and inductive if it makes a claim that they are typically or usually rational. MR1 is not the only type of meta-argument that can be used for arguing that R is rational. A might also appeal to authority, for example, by arguing that L, who is a distinguished logician, always uses arguments like R and conclude that R is a rational argument. I assume, however, that these types of meta-argument are rather rare.

Although meta-arguments, meta-argumentation, and meta-dialogue play a central role in argumentation theory, there are not many systematic theories about meta-argumentation on the market. One exception is Finocchiaro. He provides a rather broad definition of meta-arguments when he suggests that a "meta-argument is an argument about one or more arguments or about argumentation in general" (Finocchiaro 2013, 1). He distinguishes three types of meta-argument: first, the type that occurs in evaluations of arguments in everyday contexts; second, the type that plays a central role in the history of philosophy and science for interpreting historically influential arguments; and, third, argumentation theory itself is a systematic branch of meta-argumentation. While Finocchiaro (2013, 41) regards the first type of meta-argumentation as prototypical, he focuses in his own work on meta-argumentation of the third type: that is, on systematic arguments in the field of

argumentation theory. For example, he reconstructs Fogelin's (1985) argument for deep disagreement as a meta-argument. In this paper, I am concerned only with the potential role that meta-arguments can play in resolving disagreement and the limits thereof. For our purposes, I focus on meta-arguments in the first sense of arguments about the quality of a particular argument.¹⁵

Let us now investigate which attitudes, objectively but especially subjectively, speaker and hearer must possess such that A can persuade B via meta-argumentation about the rationality of R. A and B can have the same attitudes toward a meta-argument MR as toward any other argument. These attitudes toward MR determine in the same way whether A can persuade B that R is rational, as in the case of any other proposition. In particular, A will not persuade B via MR that R is rational if B is subjectively rational and does not believe that MR is rational. Moreover, if A and B are subjectively rational and do not agree about the rationality of MR, then A will not persuade B via MR. I assume that speakers and hearers are usually (though not necessarily) subjectively rational and that this also holds for meta-arguments. Hence, if A and B do not agree about the rationality of MR, then usually A will not persuade B via MR that R is rational.

This paper aims at elucidating the kind of agreement between speaker and hearer about the rationality of arguments that is necessary for persuasive argumentation. So far, I have ignored agreement about premises of arguments since first-level premises do not concern the rationality of arguments. The situation is different, however, when it comes to meta-arguments. Premises P1 and P2 of MR1 are about the rationality of arguments. Therefore, potential agreement and disagreement concerning these premises also has to be considered. In the case of MR1, A and B can disagree about P1 or about P2. Given that usually (and rationally) B does not believe a proposition because of an argument if B does not believe its premises, A might need a supplementary argument for P1 or for P2 in order to persuade B that R is rational. Let me provide an example. Suppose A presents an abductive argument R for p and B does not believe that p because of R, since B does not believe that R is rational. If B believes that abductive arguments are rational but doubts that R is an inference to the best explanation, then A has to argue for P1. If B does not believe that abductive arguments are rational, then A must provide an argument for this claim in order to persuade B that p. This is a supporting argument for P2.

We have seen that if A fails to persuade B that p via R for the reason that B does not believe that R is rational, then A can present a meta-argument MR for the claim that R is rational. If B is subjectively rational or at least subjectively open-minded, then B will eventually believe that p because of R if B is persuaded via MR that R is rational. Obviously, A can repeat this procedure for MR. If B does not believe that MR is rational then A can present a further meta-argument MR' for the claim that MR is rational, and so on. In this way, a chain of meta-arguments, a meta-chain, can be created, leading to a "vertical" regress of meta-arguments that is potentially infinite. Admittedly, presentations of meta-arguments on a higher level are rather hypothetical possibilities in our everyday life. Nevertheless, such potential meta-chains elucidate the following general point concerning the preconditions of persuasive argumentation.

If B is subjectively rational and fails to believe that p because of R because B does not believe that R is a rational argument and there is no meta-argument MR* in any chain of meta-arguments for R such that B believes that MR* is a rational argument prior to being confronted with it by A, then A cannot persuade B that p via argumentation.

¹⁵For a theory of meta-dialogues, see Krabbe 2003.

It is widely acknowledged that, due to our finite capacities, we cannot undergo an infinite metaregress of argumentation. These finite capacities are usually assumed to be the reason infinite regress arguments must fail. Our finite nature does not, however, bring about the limitations for persuasive argumentation. Even if A were able to undergo an infinite regress of argumentation, A would not persuade B unless the preconditions for persuasive argumentation were fulfilled. The problem is that for persuasive argumentation a common starting point between A and B concerning rational arguments is required, but undergoing an infinite meta-regress does not guarantee that this requirement is fulfilled. Undergoing an infinite meta-regress would be a symptom of a missing shared starting point rather than the therapy that brings this shared starting point about.

Suppose that B is subjectively rational (or at least subjectively rational concerning every argument for p and every potential meta-argument in any potential meta-chain of arguments for p). We have seen that, in this case, A can persuade B that p only if there is an argument or a meta-argument such that A presents it to B, B believes that this argument or meta-argument is rational, and this belief does not result from persuasion through A. Since hearers are usually, though not necessarily, subjectively rational, these preconditions usually have to be fulfilled for persuasive argumentation. For sure, B can form a belief that p or a belief in the conclusion of a meta-argument for other reasons. For example, B might trust A concerning a meta-argument and believe its conclusion merely because of A's utterance. Furthermore, B might believe at some point a meta-argument due to exhaustion. These cases, however, are not instances of persuasion via argumentation. In this paper, I am investigating the preconditions and limits of reaching agreement about the rationality of arguments via argumentation. For these purposes, I am focusing on persuasion that is based on acknowledging the rationality of arguments, at least on a subjective level, and intending to form beliefs based on rational arguments.

One might suggest that we can avoid an infinite regress of meta-arguments by at some point presenting a self-referential argument MRⁿ that is also an argument for its own rationality. Such self-referential arguments are possible, but they do not have any persuasive force for subjectively rational hearers. If B is subjectively rational and does not believe that MRⁿ is a rational argument, then B will not be persuaded via presentation of MRⁿ that it is rational. Hence, self-referential arguments cannot persuade subjectively rational hearers about their own rationality. Nevertheless, such self-referential arguments can have explicatory value, as Lehrer (1999) notes.

So far, we have focused on meta-regresses for the subjective attitudes of *hearers*. We have seen that persuasive argumentation between subjectively rational interlocutors requires agreement about the rationality of the argument used. This holds as well for meta-arguments and chains of meta-arguments. By also taking the attitudes of *speakers* into account, we can say:

If A and B are both subjectively rational and do not agree about the rationality of a single meta-argument MR^* in any potential chain of meta-arguments for R prior to engaging in argumentation, then A cannot persuade B that p via argumentation.

Since speakers and hearers are usually subjectively rational, usually A cannot persuade B that p via argumentation, if A and B lack the required agreement about meta-arguments. Put simply, persuasive argumentation usually requires agreement between speaker and hearer about the rationality of arguments, and this agreement cannot itself be established via argumentation. Agreement about the rationality of arguments is usually a precondition for persuasive

¹⁶For a similar point against infinitism as a potential solution to Agrippa's Trilemma, see Ginet (2005), who argues that, even if we were able to undergo an infinite process of justification, justification could not be created by such a process but only be transferred.

argumentation. Accordingly, if A and B generally disagree about the rationality of arguments, then A cannot persuade B about any proposition via argumentation.

Given that subjectively rational persons cannot resolve fundamental disagreement about the rationality of arguments via argumentation, there is, in a certain sense, not more that a reflective person can do than follow her own standards of rationality. Thus, subjectively rational persons are, in a certain sense, not blameworthy for failing to reach agreement in situations where they hold different views about rational argumentation. At this point, further questions come up about the responsibility to be rational, on a subjective level and on an objective level, and about blameworthiness for not being rational. Addressing these issues, however, is beyond the scope of this paper.

Two parties can disagree about the rationality of arguments for different reasons. There might be individual reasons for the two holding different beliefs or there might be no relevant reason at all. Their disagreement will take a more systematic form, however, if the reason for their disagreement is that they are representatives of different *epistemic groups* where different views on rationality predominate. If there are two epistemic groups where incompatible views on rationality are predominant (in a certain domain), then usually typical members of these groups cannot persuade each other via argumentation (about a proposition in that domain). I do not make here any empirical claims about whether there are such groups. Hence, I formulate this claim as a conditional. Personally, I think that such differing groups exist at least in certain domains.

These results have an impact on discussions about the two epistemic phenomena of skepticism and deep disagreement. Skeptical meta-regress arguments are plausibly flawed arguments about the extent of our knowledge, but properly interpreted they elucidate a fact about the impossibility of persuading a certain type of skeptic who is generally agnostic about the rationality of arguments. Moreover, we see that disagreement about the rationality of arguments is a form of deep disagreement (among other forms) and why this form of deep disagreement is irresolvable via argumentation.¹⁷

5 | CONCLUSION

Persuasion via argumentation is doomed to fail not only if a hearer is notoriously stubborn or if speaker and hearer fundamentally disagree about the premises. It can also fail if they disagree about the rationality of the arguments involved. Notably, this is the case if speaker and hearer adhere to certain criteria of rationality on a subjective level. Moreover, the required agreement about rational arguments cannot itself be established via argumentation, on pain of infinite meta-regresses.

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¹⁷For a more detailed analysis, see Melchior 2023a and 2023b.

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