Communicative Agency and *ad hominem* Arguments in Social Epistemology

A Commentary on Pierre Jacob

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A central point in Jacob's paper focuses on the incompatibility of Grice and Millikan's account of communicative agency. First, the Gricean mindreading thesis is incompatible with Millikan's direct perception account. Second, the account of cooperative devices, defended by Millikan, contradicts the Gricean separability thesis in a broad sense. While I agree with Jacob that these positions are indeed incompatible, I will shift focus and concentrate on issues concerning social epistemology with regard to communicative agency. A main issue in social epistemology concerns the accessibility of the speaker's reliability. How could the hearer remain epistemically vigilant without using fallacious reasoning? (i) I argue that the hearer, in order to be epistemically vigilant, could commit a local *ad hominem* attack, a process of inductive Bayesian reasoning which is an epistemic tool for assessing the speaker's reliability. (ii) Compared to this, a global *ad hominem* attack is a fallacious kind of reasoning, because it undermines knowledge transmission and it cannot be calculated in *Bayes' Theorem*. (iii) The account of a local *ad hominem* attack fits with Grice's mindreading thesis, which is incompatible with Millikan's account of direct perception. (iv) The Gricean separability thesis could better explain occurrences of *ad hominem* attacks than Millikan's assumption that speaker and hearer are cooperative devices.

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1 Introduction: Grice's individualistic account of meaning and epistemic trustworthiness

One of the main findings of Jacob's paper is a detailed elaboration of the differences between Millikan's (1984, 2004, 2005) communicative agency and the Gricean (Grice 1957, 1969, Sperber & Wilson 1986) account of speaker's meaning and intention. Jacob argues that the Gricean mindreading thesis, the separability thesis, and the ostensive nature of communication are not supported by Millikan's account of the direct perception of speaker's intention, which supports a non-inferential model of the understanding of intentional signs. Furthermore, the Gricean account is incompatible with Millikan's claim that speaker and hearer are co-

operative devices; the claim that the prediction of another's behavior could be explained through reliance on socially established conformities and conventions and that modern developmental psychology could get along without any theory of mind.

A very influential account of naturalizing the content of intentional mental representations is Millikan's teleosemantic framework (Jacob 2010). According to this view, the content of intentional mental representations can best be naturalized by relying on the history of the biologically-selected functions of these representations, namely the *direct proper functions* (cf. Millikan 1984, 1989). Interestingly, Jacob focuses on Millikan's concept of communicative agency, which is strongly connected to the teleosemantic framework, and argues that there are several aspects of the Gricean individualistic account of meaning that are more plausible than Millikan's when it comes to explaining social communicative agency. The most illuminating finding of Jacob's paper is the modern and precise presentation of the actuality of the Gricean separability thesis and the mindreading account, because it is explanatorily fruitful not only for philosophy of language, but also for social cognition, social epistemology, informal logics, and the relation between these different studies.

I generally agree with Jacob's main findings, nevertheless I will address some further issues of Millikan and Grice's account with regard to philosophical problems in social epistemology. Before I respond to these in detail, I first focus on the Gricean account and its implications for social epistemology.

The well-known Gricean (Grice 1957) account of the meaning of an utterance focuses on analysis of the speaker's meaning in a conversation. A speaker S means something *unnatural* if she intends something by the utterance of a sentence.[1] Let us suppose that the speaker is a politician with a specific agenda and with a propensity for aggressive propaganda. She utters the following:

(1) Speaker: "Our party will ensure that taxes go down".

The speaker S *means* (1) iff S utters (1) with the intention that a hearer H will gain the belief that S' party will make sure that taxes go down, if (i) the hearer H recognizes the speaker's intention (1) and (ii) because of that she gains the belief that S' party will make sure that taxes go down, (iii) since she recognizes that the speaker's intention is exactly that (cf. Grice 1957, 1969).

Since Gricean meaning is individualistic and subjective it is important to note which underlying cognitive states constitute this meaning. As Jacob puts it—relying on Sperber & Wilson's (1986) interpretation of the Gricean account[2]—there are three main assumptions upon which the psychological theory of meaning is based, namely the separability thesis, the mindreading thesis, and the asymmetry between an informative and communicative intention. Together with Jacob I shall focus on Sperber and Wilson's account, which argues that the Gricean theory can be summarized as a reciprocal process of intentions. The *informative intention* is an intention of a speaker who wants to inform a hearer about some state of affairs. In order to be successful, the speaker has also the intention that the hearer recognize the informative intention (Grice 1957). This means that at first the hearer has to understand the informative intention. If she understands it, the *communicative intention* of the speaker has been fulfilled. But the informative intention will only be fulfilled, if the speaker is trustworthy: a necessary condition for accepting a speaker's utterance. In effect, the hearer gains a new belief. The assessment of her trustworthiness depends on the hearer of that intention (Sperber & Wilson 1986). She must admit that the speaker has to be reliable in order to be trustworthy, or, to put it in Jacob's (this collection, p. 4) words, "the addressee must further accept the speaker's epistemic or practical authority". But a question arises: on which kind of epistemic practices does the hearer have to rely in order to accept the

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1 Grice (1957) distinguishes between a *natural* and an *unnatural meaning*. Unnatural meaning is always characterized by the speaker's intention. The natural meaning of a sign characterizes meaning that is independent of a speaker.

2 I follow Jacob in relying partly on Sperber & Wilson (1986) when I talk about the Gricean account.

speaker as an epistemic authority? I will address this question in the following commentary.

> In order to answer it, I will argue that (i) a hearer could commit a *local ad hominem attack*, a process of inductive *Bayesian reasoning* that secures epistemic vigilance. Roughly, an *ad hominem* attack is an argument that considers rather personal properties of an utterer than the argument itself. (ii) A fallacious kind of the personal attack is the *global ad hominem attack*, which undermines every testimony of a speaker because of its personal traits. (iii) The Gricean account of mindreading could better account for an inductive inference model than Millikan's direct-perception-account. (iv) Practices of *ad hominem* attacks, I will argue, support the Gricean separability thesis, while Millikan's co-operative devices account is less plausible.

The structure of this commentary will be as follows: first, I focus on Grice and Millikan's framework and its implications for social epistemology, namely the problem of epistemic reliability (cf. section 2). In section 3 I shall present Lackey's account of a social epistemological dualism, a hybrid theory in which Lackey tries to connect the most plausible findings of social epistemological reductionism and anti-reductionism. Then I argue that the Gricean account of informative intentions and Lackey's *positive reason component* could lead to the *personal attack* or *ad hominem argument* (cf. section 4). In section 5 I argue that there are two possible commitments of *ad hominem* arguments, to be specific, the *global* and the *local ad hominem attack* (cf. section 5.1, section 5.2). In the Gricean account of the *mindreading thesis* is compatible with the drawn picture of our social epistemological practices, because it supports the inductive inference model, while Millikan's account of *direct perception* could not account for this. The Gricean *separability thesis* fits nicely with the positive reasons component and the reliance on *ad hominem* arguments, while

Millikan's account of speaker and hearer as *cooperative devices* is less plausible (cf. section 6).

2 Epistemic intentions and epistemic reliability

The utterance of a speaker depends on two directions of fit. The first can be characterized as a *mind-to-world-relation*. Here, the speaker has the intention of conveying some states of affairs about the actual world. This direction of fit implies that the speaker wants to share some epistemic notions. If she is successful in doing so, the hearer will gain a true belief. This class of utterances is descriptive.

The second is a *world-to-mind direction* of fit of the speaker's utterance. Here the speaker wants to convey some of her desires to the hearer, who acts in a particular way in order to fulfill the speaker's desire. The intention is fulfilled if the hearer gains a new desire to act in order to fulfill the speaker's desire (Sperber & Wilson 1986). This kind of direction of fit is unimportant for the following account. Here I shall focus on descriptive utterances.

Before I address some implications of epistemic intentions, I shall focus on the *separability thesis*. This thesis addresses the problem of an asymmetry of interests between hearer and speaker. Since the interests are not identical, the speaker could deceive the hearer. And the other way around: the hearer could distrust the speaker even though she utters a true sentence. Sperber et al. (2010) claim that some amount of distrust is a stabilizator in the evolution of human communication, which they call *epistemic vigilance*. Imagine that humans believed almost everything they were told. Since not every speaker has the propensity to speak the truth, hearers would have a lower amount of knowledge because they would have no tool for distinguishing a reliable testimony from a non-reliable one. Communication would be very imprecise, because knowledge agency would be less successful. Hence, epistemic vigilance is a precondition for cooperative communication, because both speaker and hearer check the reliability of knowledge transition. I agree with Sperber et al. (2010) that epistemic vigilance is a

feature of a *source* and the *content* of information.[3]

Let me go back to the mind-to-world-relation of fit. If the twofold account given by Sperber & Wilson (1986) is correct, the hearer has gained a true belief (about some state of affairs). To count as knowledge, we have to ask whether the true belief is justified.[4] What could count as a justification? Some social epistemologists would say that the testimony of the speaker is sufficient to count as a justification. This is the thesis of an *anti-reductionism* in social epistemology which contains the claim that the speaker must not rely on other sources of knowledge such as perception, inference or memory to justify her belief (Coady 1992). A *reductionist* would say that the testimony cannot count as knowledge without relying in addition upon other sources of knowledge (Fricker 1995).

In Millikan's (2005) account of an intentional conventional sign (which is the content of an intentional mental representation), she assumes that speaker and hearer are cooperative devices that have co-evolved. The relationship between sender and receiver can be characterized as beneficial in the long term. Millikan proposes a framework, in which the descriptive representations describe a mind-world-direction, whereas the *directive* representation describes the world-to mind relation. The long term beneficial communicative agency between sender and receiver characterizes a function of reproduction of conventional signs. The *direct proper function* in this particular case is that the hearer gains a new belief. Millikan (1984) is well known for this teleosemantic account that can deal with misrepresentations. In such a case, the proper function remains unfulfilled. It is unfulfilled if the speaker fails to cause a new belief in the hearer (Millikan 1984, 2005). But the hearer could also be responsible for the unfulfilled proper function if she mistakenly judges the speaker to be untrustworthy. The hearer is also

a constitutive part of the cooperative devices that establish the direct proper function (Millikan 1984, 2005).

3 Social epistemology: Lackey's dualism

Before I present a more detailed account of *ad hominem arguments*, I will say a few words about social epistemology and the position that is presupposed in this commentary. Jennifer Lackey's (2006) account of social epistemology relies upon a kind of dualism, in which she combines anti-reductionism and reductionism. According to her, social epistemology has made the mistake of addressing the debate between reductionism and non-reductionism unilaterally. *Reductionism* takes epistemic responsibility and the rationality of the hearer far too seriously, because the hearer has to rely upon other sources of knowledge like perception, memory, deductive inferences, etc. The claim here is that testimony is not a source of knowledge in the first place, because a hearer could never know the intentions of a speaker who held accidently or intentionally false beliefs. In contrast, *anti-reductionism* always focuses on the speaker's perspective and her propensity for credible testimonials. Proponents of anti-reductionism claim that a large amount of our knowledge depends on testimonials. We would know almost nothing if we were as restrictive as the reductionist claims (Coady 1992). Lackey wants to combine these two accounts in a kind of dualism. Her dualism contains the presupposition of the reliability of the speaker along with *positive reasons* to accept the speaker's testimony, evaluated from the hearer's perspective. If the speaker utters a true sentence and the hearer has positive reasons to trust the speaker, then knowledge from testimony is possible. Lackey argues for the following conditional, which contains three necessary conditions:[5]

> For every speaker A and hearer B, B justifiedly believes that p on the basis of A's testimony that *p* only if: (1) B believes that *p* on the basis of the content of A's

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3 I will address this topic with respect to the *ad hominem* argument in section 5.

4 I will not address Gettier cases with regard to social epistemology. For the sake of this commentary, I will use the term *knowledge* as meaning justified true belief. Issues concerning the *ad hominem* fallacy will concern the justification-condition.

5 Lackey claims that dualism accounts only for necessary conditions for a source of knowledge.

testimony that p, (2) A's testimony that p is reliable or otherwise truth conducive, and (3) B has appropriate positive reasons for accepting A's testimony that p. (2006, p. 170)

For the present account it is important that a testimony, given by A, qualifies as a source of knowledge that depends on the hearer having positive reasons to think that A's testimony is reliable. Recall the informative intention and the mind-to-world-direction of fit, which is fulfilled if the speaker causes a new belief in the hearer. The direct proper function of the co-operation between speaker and hearer in Millikan's (1984, 2005) account would be fulfilled. But according to Lackey's condition (3), the achievement of a new belief is only justified if there are various *positive reasons* that account for the reliability of the speaker's testimony. Consider the account of Sperber et al. (2010, p. 379) that "the filtering role that epistemic vigilance [...] in the flow of information in face-to-face interaction" is an important feature of communicative agency. But which kind of filtering do they mean? In other words, what are positive reasons, exactly? Could they be past experiences about the reliability of the speaker or even a group to which the speaker belongs?

4   *Ad hominem* arguments and epistemic injustice

I claim that the Gricean account of communication supports our social practices of committing *ad hominem* arguments. The committing of *ad hominem* attacks in communicative agency becomes patent when you look at *positive reasons* in more detail. During past events of communicative agency, a hearer has tested the trustworthiness of several speakers on the basis of her personal properties and the context to which these properties have been related (Lackey 2006; Fricker 2007). The ability of being epistemically vigilant emerges very early in human development. At the age of three years, infants already prefer testimony from a reliable source (cf. Clément 2010). From that age on, infants develop a "cognitive filter that enables children

to take advantage of testimony without the risk being completely misled" (Clément 2010, p. 545).[6]

Now back to the example: suppose that the hearer in question has been confronted with the testimony of politicians in the past. She then hears the following sentence from speaker S:

(1) "Our party will make sure that taxes will go down".

Would you, as a hearer, believe her? Consider past cases of political propaganda and ask yourself how reliable the politician, the speaker, really is. At first, let us assume you do not. You are a very skeptical person, especially when it comes to political issues. Is it rational to be skeptical, so are you guilty of prejudice? Let us assume that the speaker is surprisingly reliable. She speaks the truth. The party wins and reduces taxes. Have you treated the politician in an epistemic inequitably way or was it the only way to remain epistemic vigilant? These questions will be addressed in the following sections.

The hearer who does not believe S' utterance (1) has committed an *ad hominem* argument, a personal attack against the speaker. According to Walton (2008, p. 170) "*[t]he argumentum ad hominem*, meaning 'argument directed to the man', is the kind of argument that criticizes another argument by criticizing the arguer rather than his argument." A hearer takes some personal properties, such as being a politician, and infers that the expressed sentence is false. It is *prima facie* irrelevant to consider personal traits as indicators of a false testimony t (Yarp 2013; Walton 1998).[7] Keeping Walton in mind, we are able to generalize *ad hominem* attacks as follows:

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6   There is further evidence in developmental psychology that speaks of very early acquisition and practice of epistemic vigilance (cf. Clément 2010; Sperber et al. 2010; Mascaro & Sperber 2009). Another issue with regard to the positive reasons component in social epistemology is the so-called *infant/child-objection*. This concerns the hearer's competence in evaluating the speaker's reliability that small children lack, which is often construed as an argument against reductionism (Lackey 2006). For a general discussion see Lackey (2005).

7   As will be seen in section 5.1, there are some exceptions where personal properties are relevant.

Ad hominem attack

(1) Speaker S gives a testimony t.[8]
(2) The speaker's S property φ is a negative property with regard to trustworthiness.
(3) Speaker S has a negative property φ, which is ascribed as relevant for her testimony t by hearer H.

(C) The testimony t, uttered by speaker S, is false as assessed from hearer H.[9]

The arguments of the speaker (implicitly represented or explicitly formulated) have not been challenged seriously by the hearer. She just considers personal traits sufficiently to reject the given argument or proposition.[10] The allegedly suboptimal personal characteristics of the person do not provide any evidence for rejecting the proposition p. The hearer neither shows that the deduction of the speaker includes fallacious reasoning nor that the premises on which her proposition is based are wrong. Informal logic does not support the hearer in this situation (Groarke 2011). Has the speaker been treated inequitably? Miranda Fricker (2007) tries to answer this question and introduces the notion of *epistemic injustice*. She generalizes the notion as follows:

> Any epistemic injustice wrongs someone in their capacity as a subject of knowledge, and thus in a capacity essential to human value; and the particular way in which testimonial injustice does this is that a hearer wrongs a speaker in his capacity as a giver of knowledge, as an informant. (Fricker 2007, p. 5)

8 I assume that a testimony t expresses an argument that contains the relevant proposition p.
9 One could of course distinguish between a testimony and an argument. Here I presuppose that a testimony is somehow a conclusion of an argument. Fricker (2007, p. 61) supports this view as follows: "One might be inclined to put a familiar picture of justification to the fore and argue that in order to gain knowledge that p from somebody telling her that p, the hearer must in some way (perhaps very swiftly, perhaps even unconsciously) rehearse an argument whose conclusion is p."
10 For the purpose of this commentary I will defend a weak view of propositions. The utterance of a speaker expresses a proposition that is true if it represents a state of affairs. There is of course an asymmetry between the propositional content of an utterance and the propositional content of the speaker's belief or thought. I agree with Jacob (1987) that it is sufficient to assume similarity between the two.

It fits Fricker's generalization that the capacity of a speaker to convey true beliefs is undermined. The positive reasons clause of Lackey's dualism also supports this step of reasoning because the character or the identity of a speaker could be relevant for her evaluation of trustworthiness in epistemic contexts (cf. Fricker 2007; Lackey 2006). Crucially, stereotypes and prejudices—based upon *ad hominem* arguments—are paradigmatic cases of epistemic injustices (cf. Fricker 2007). But is it not rational for a hearer to distrust our politician? Jacob (this collection, pp. 4–5) claims that "not every speaker is (or should be) granted equal epistemic or practical authority on any topic by every addressee." Remember that the hearer's positive reason component is a remainder of the reductionist account with regard to testimony as a justifier of knowledge. Is it not a necessary condition for the positive reason component to remain vigilant in such contexts? If epistemic vigilance does not play a role in this context, then Lackey's suggestion of the necessary condition of positive reasons on the hearer's side is implausible. In the following I shall argue that epistemic vigilance is very important and that the dualistic account could account for it. Nevertheless, one has to accept what I call a local *ad hominem* argument in order to be epistemically vigilant in our particular case.

5 Two kinds of *ad hominem* attack

In the following section I make a suggestion in order to disarm the problem of the *ad hominem* argument with regard to the *positive reason* component. Does an *ad hominem* attack always include fallacious reasoning? Walton (2008, p. 170) claims that "the a*rgumentum ad hominem* is not always fallacious, for in some instances questions of personal conduct, character, motives, etc., are legitimate and relevant to the issue." Even though cases of *ad hominem* arguments might sometimes be informally fallacious, there are some highly relevant cases in which a particular *ad hominem* attack could be committed in order to remain epistemic vigilant. Since you, as a hearer, have a set of positive reasons —for instance being aware of the usual verbal

espousals of politicians during an election campaign—you are forced to commit a personal attack. Did your reliability assessment rely on fallacious reasoning? In the literature there is a common distinction between three types of the *ad hominem* argument: the *abusive*, the *circumstantial*, and the *tu quoqe argument* (Groarke 2011; Walton 1998, 2008).[11] These kinds of personal attacks describe various pragma-dialectical reasoning in interpersonal communicative relationships. Below (cf. section 5.1, 5.2) I want to draw a further distinction between two kinds of *ad hominem* attack that are closely connected to communicative situations explicitly involving knowledge transmission. Hence I want to provide a framework that fits well with social epistemological dualism.

Before this, I want to address the *Bayesian argumentation model*, which is presupposed by the following account of *ad hominem* arguments. Few things have been said about the inductive reasoning model which is the underlying mechanism of an *ad hominem* attack. Roughly, one has to consider past experiences with regard to reliability, constituted by contexts and speaker properties, to adjust this experience for future communication. Harris et al. (2012) provide an account that fits well with an inductive model of reasoning, because, potentially evidence is not provided by deductive reasoning. They claim that the evaluation of a proposition or a given testimony is based on an individual's probabilities, which could be described formally using *Bayes' Theorem*. A big advantage of this account is that it describes our subjective evaluations in daily experiences very well. Often, when we are asked "do you believe *S*?" we are inclined to say something like "I am not sure. I guess not". This could be well explained with the Bayesian model, where an individual's belief does not have a truth-value of 0 or 1. The relevant belief is instead estimated in one's subjective degree of that belief, as a probability between 0 and 1. Let us embed this in our current considerations. The utterance type of the politician is already embedded in a

kind of bias or in posterior beliefs about politicians in general: this is called the hypothesis *h,* and has a particular probability $P(h)$ in isolation from evidence *e*. Evidence *e* in this particular case is constituted by personal characteristics, properties, and circumstances of the utterance. The receiving of the new evidence *e* *should* update $P(h)$, the probability of the hypothesis. Individuals ought, according to the normative stipulation, if they receive any evidence, to let it influence the probability of the proposition: "[this] normative procedure by which individuals should update their degree of belief in a hypothesis h upon receipt of an item of evidence e is given by Bayes' Theorem:

$$P(h|e) = \frac{P(h)P(e|h)}{P(e)}$$ "(Harris et al. 2012, p. 316)

$P(h/e)$ describes the conditional probability of a hypothesis being true after one has received evidence *e*. $P(e/h)$ terms the conditional probability of receiving evidence *e*, given hypothesis *h*. $P(e)$ just describes the evidence in isolation from the truth-values of the hypothesis *h* (cf. Harris et al. 2012).

5.1 Local *ad hominem* attack

I am now able to distinguish two kinds of *ad hominem* attack, a local and a global one. I will thus sketch out some considerations with regard to the presented Bayesian framework.

The positive reason component describes the practice of a speaker's credibility assessment. This process of credibility assessing could lead to what I will call a *local ad hominem* attack. Roughly, one commits a local *ad hominem* argument if one acknowledges someone to be trustworthy in general, but with some exceptions in particular cases. If you ask the politician what time it is or the straightest way to the subway station, it is very unlikely that she would have the intention of deceiving you (Sperber 2001). Hence, one would count her as a trustworthy person. Nonetheless, given the particular information about her party and the reduction of taxes, you might find it unlikely that she is telling the truth. As long as you do not dismiss her in general as an eligible bearer of

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11 For some very interesting empirical investigations with regard to these three kinds of *ad hominem* arguments, see van Eemeren et al. (2000) and van Eemeren et al. (2008).

knowledge, it is vigilant in a rational way to distrust her in this case. This view could be described as a subclass of epistemic vigilance, because it is an evolved tool that minimizes the risks of deception which is—according to Sperber et al. (2010)—a condition for cooperative communicators.

At this stage, subjective Bayesian probability comes into play. The general bias of your past experiences with regard to politicians, which enters the stage before you have received the evidence, could be described with *(h)*. The probability of the hypothesis $P(h)$ is the probability of your believing her without having received evidence *e*. Given (1), evidence *e* describes that the person is a politician during a campaign, which also has a particular probability, termed $P(e)$. The evidence condition is the part that divides the local *ad hominem* attack from the global, because the evidence is able to influence one's subjective degree of probability. The personal traits of the speaker as well as the context of utterance-use serve as evidence *e*. $P(h/e)$ is then the conditional probability of *h*, if the hearer *H* receives evidence *e*. Given the hypothesis *h*, the probability of receiving evidence *e* is described by $P(e/h)$. As presented above, this could be calculated within *Bayes' Theorem* (cf. Harris et al. 2012).

As you can see, the *content* and the *source* of information, which serve as evidence *e,* are both similarly relevant for a testimony (cf. Sperber et al. 2010). Buenting (2005) calls this kind of reasoning *relevance-based* with regard to the relevant circumstances that could invoke *ad hominem* attacks. The context and content of the utterance or proposition in question is important for assessment. Walton (1998) calls such a context and content-related *ad hominem* attack a *credibility function*. The proposition in question undergoes an *ethotic rating*, a kind of evaluation of a person's epistemic input value (of her testimony), which can go up or down. When committing a local *ad hominem* attack, the rating goes down. Hence the credibility of the speaker is undermined in a specific case that affects the proposition, which fits with the account of Bayesian argumentation. The local *ad hominem* argument is an example of a non-

fallacious *ad hominem* attack because it is *content* as well as *context-related* and epistemically equitable. The normative stipulation of the Bayesian account that a hearer "should update [her] probabilistic degrees of belief in a hypothesis in accordance with the prescriptions of Bayes' Theorem" (Harris et al. 2012, p. 316) is fulfilled in the local version. The take home message of this passage could be presented in a more simplified way:

Local *ad hominem* attack (non-fallacious)
(1) Speaker *S* gives a testimony *t*.
(2) Speaker's *S* property φ is a negative property with regard to trustworthiness.
(3) Speaker *S* has a negative property φ that is relevant evidence *e* for a hypothesis *h* with regard to the content of the particular testimony *t* by hearer *H*.

(C) The testimony *t*, uttered by speaker *S*, is probably false as assessed by hearer *h*. [12]

5.2 Global *ad hominem* attack

I call the opposite kind of reasoning the *global ad hominem argument*, which I claim, is fallacious. The hearer commits a global attack if she does not believe the speaker in general. The hearer discredits her any kind of trustworthiness. Consider some stereotypes and prejudices that could suffice for such a radical conclusion.[13] This behavior is clearly irrational, since it undermines any testimony of a speaker in every situation. As you can see, this kind of fallacy is neither a *content-related* nor *context-related ad hominem* argument. In distinction from the global attack, here the content does not play any role in the evaluation of the speaker's reliability. First, the evidence *e* only includes per-

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[12] As Jacob (1987) suggests, beliefs are shared in different communities with different ideological backgrounds that are themselves constitutive of belief-formation. One could defend that the local *ad hominem* attack is an important tool for running a communicative society. If so, we would be using local *ad hominem* attacks as a form of self-deception, which would then be somehow an instance of a shared optimism bias. I will not discuss this phenomenon any further, because it is not a tool or cognitive filter that improves knowledge transmission. Hence, positive local *ad hominem* attacks, one could argue, have at least a propensity for being epistemically unvigilant mechanisms.

[13] Yarp (2013) suggests that *ad hominem* fallacies like prejudices could be unconscious or at least not transparent to the hearer's reasoning.

sonal traits and not the circumstances of the utterance. Second, the evidence e does not influence the degree of belief that the hypothesis h is true. This is the reason why the belief, formed via the process of a global *ad hominem* fallacy, could not be calculated in *Bayes' Theorem*. The normative stipulation that evidence e should affect the probability of a hypothesis h is not satisfied.

Another reason why this type of personal attack is fallacious is because it includes irrelevant circumstances and personal traits as the basis of the speaker's evaluation (Buenting 2005). The speaker, as she is assessed, is not in any way disposed to maximizing the hearer's set of true beliefs.[14] In other words, the hearer undermines any potential benefit she may gain through any of the speaker's testimony (Sperber 2001), which could be described as a paradigmatic case of epistemic injustice (Fricker 2007). Hence, a general assessment of the speaker's credibility has nothing to do with the process of positive reason formation. In other words, the global *ad hominem* attack is not an epistemic tool, because it lacks any *credibility function*, because the speaker assesses the testimony as necessarily false, because of her personal properties. Since it is not an epistemic tool, this kind of reasoning is not epistemically vigilant (Sperber et al. 2010). To summarize:

Global *ad hominem* attack (fallacious)
(1) Speaker S gives a testimony t.
(2) Speaker's S property φ is a negative property with regard to trustworthiness.
(3) Speaker S has a negative property φ that is ascribed as relevant for every testimony t by hearer H.

(C) The testimony t, uttered by speaker S, is necessarily false as assessed by hearer H.

6 *Ad hominem* arguments and communicative agency

I agree with Jacob that some aspects of Grice's theory of meaning are in a broad sense incompatible with Millikan's account of communicat-

ive agency. The focus of this commentary so far has been communicative agency in epistemic contexts and its implications, and in particular the personal attack. I will now evaluate whether Millikan's account of direct perception or Grice's account of mindreading could account for *ad hominem* arguments in epistemic contexts. My answer is that the Gricean mindreading thesis is more plausible. I then compare the separability thesis with the cooperative devices. The separability thesis fits best with the practices of *ad hominem* fallacies. The presupposition of cooperative devices is less plausible.

6.1 Mindreading vs. direct perception

Recall from section 1 that the mindreading thesis relies on the twofold account of informative and communicative intention. First, the speaker has to recognize or understand the speaker's informative intention, which is the speaker's communicative intention. For the *fulfillment* of the informative intention, the trustworthiness of the speaker has to be accepted. In other words, in order to *fulfill* the informative intention, the hearer commits neither a local nor a global *ad hominem* argument (or she would not accept it). But in order to be an epistemically vigilant agent, the hearer has to make some further inferences, which are inductive (as well as the *ad hominem* fallacies). This inductive inference model involves some kind of mindreading that could affect the reliability judgment.[15] Millikan claims that the acceptance of a given testimony as a source of knowledge is a form of direct perception without any kind of inference (Millikan 1984; Sperber et al. 2010). She talks about *translation* instead of inference. The hearer translates the utterance via direct perception into a new belief (Millikan 2004):

> Forming a belief about where Johnny I on the basis of being told where he is I just as direct a process (and just as indirect) as forming a belief about where Johnny is on

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14 I will not consider the ethical implications of this view any further in this commentary.

15 Unfortunately, I cannot address in this paper which kind of mindreading is supported by this view and how it could perhaps be related to social cognition and mirror-neurons. For a general discussion see Jacob (2008, 2013).

the basis of seeing him there. (Millikan 2004, p. 120) There is no reason to suppose that any of these ways of gaining the information that Johnny has come in requires that one perform inferences. (Millikan 2004, p. 125)

It is doubtable that these circumstances explain our everyday communicative agency, especially with regard to epistemic conversations. According to Millikan, the acceptance of a new belief does not involve any representation of the speaker's intention. But in order to assess the reader as benevolent and competent (or reliable), one has to rely—as argued in section 5— on inductive inferences which are of course derived representations manifested in beliefs about the speaker's intention.

In epistemic contexts of communication only the mind-to-world direction is involved, *qua* descriptive utterances. One criticism offered by Jacob is that Millikan's account of perception could only account for descriptive utterances, hence only for the mind-to world direction. Another issue is closely related to this kind of criticism. It concerns testimony that has very little to do with perceptual capacities. With regard to very complex utterances like (1), I agree with Jacob (this collection, p. 9) that "it does not make much sense to assume that either the speaker or her addressee could perceive what the speaker's utterance is about." Consider the nature of testimonial reports. Even some direct perception of a testimony about some state of affairs is perceptually impoverished compared to directly perceiving the state of affairs in question. Imagine some testimonial reports that have been heard through the radio. In such a case, you are not in a perceptually close relationship to the reported state of affairs. If you evaluate the credibility of the speaker, it is very likely that you would run through different processes of inductive inference in order to commit an *ad hominem* argument or avoid one. The more abstract the testimony, the more implausible it becomes that it has anything to do with direct perception. It becomes even more complicated with complex indexical utterances or a group of different but

equally eligible interpretations of a particular testimony. Consider again example (1). Here it is very likely that a hearer represents some intentions of the speaker that are linked to her psychological states. If one representation is that the speaker could deceive the hearer in particular circumstances, the hearer will probably commit a local *ad hominem* attack. To sum up: *Ad hominem* arguments are ascriptions that result from inductive inferences that also depend on belief-desire psychology, because the hearer gains a representation of the second-order representation of the sentence expressed by the speaker. The representation of the hearer is a third-order representation of the second-order linguistic representation of the speaker (cf. Jacob 1987).[16]

6.2 Separability thesis vs. cooperative devices

The problems addressed so far are closely related to the separability thesis. The separability thesis is the claim that the hearer and the speaker could have different interests, which are causes of the informative intention remaining unfulfilled, because there are two cases that suggest that the interests of both parties fall apart. In the first, the hearer gains a new belief that is not true, because the speaker has the informative intention to deceive the hearer. So her informative intention has the aim that the speaker gains a false belief and not one about some states of affairs, as described in section 2. In the second, the sentence, uttered by the speaker, is true, but nonetheless denied by the hearer on the basis of an *ad hominem* argument (Sperber & Wilson 1986).[17] These two cases do not support Millikan's (2005) claim that the interests of both speaker and hearer are balanced. If a hearer commits a global *ad hominem* argument, it is even harder to ascribe balanced interests to speaker and hearer. Sperber (2001) defends a plausible weak version of coincidence of interests. It is only necessary that they over-

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16 According to Jacob (1987), a belief-ascription is not constitutive of the subject's belief in the first place.

17 There are, of course, plenty of other options for different interests (cf. Sperber 2001).

lap in the long term in order to establish successful practices of social knowledge transmission.

Cases of global *ad hominem* arguments could only occur if a speaker understands the informative intention which she combines with some particular personal properties of the speaker in order to reject the testimony in question. Hence the speaker succeeds in establishing the communicative intention, but fails to fulfill the informative intention. In Millikanean terms, the direct proper function of the speaker is that the hearer gains a new belief. If the hearer commits an *ad hominem* attack, the direct proper function remains unfulfilled. But the communicative intention is still fulfilled, and that is all that is required for successful communication according to the separability thesis of communicative intentions (Sperber & Wilson 1986). The hearer recognizes that the speaker wants to inform her of her informative intention, which means that the communicative intention has been fulfilled. But the informative intention—which is that the hearer gains some new information or a true belief—fails, because an *ad hominem* attack has been committed. This circumstance could be well explained with the separability thesis and the weak account of communication that we addressed in section 6.1. To sum up, and in agreement with Jacob, if an *ad hominem* attack has been committed, even a weaker version, communicative agency is violated in the Millikan (2004, 2005) framework because the cooperative conventional transmission is violated in the first place.[18]

The picture I draw with regard to the *ad hominem* arguments rests on the assumption that trustworthiness has to be assessed by the hearer in order to be counted as epistemic vigilant, which would be the reductionist component. On the other side, the speaker has to utter a true sentence to transmit knowledge to a speaker, which would be the anti-reductionist-component. This view is supported by Lackey's dualism. As can be seen, the establishment of a dualistic account and all its implications for the

inductive reasoning model can be better explained with the separability thesis.

7 Conclusion

In this commentary I have extended the refreshing account given by Jacob, who presents Grice's individual account of meaning and assesses its plausibility with regard to communication and knowledge transmission. I defended the view that one promising way to talk about testimony as a source of knowledge is offered by Lackey's dualism. Here, both speaker and hearer are the important in knowledge transmission. In order to secure this transmission, the speaker has to utter a true sentence and the hearer has to check the speaker's trustworthiness. I distinguished two kinds of personal attack:

(i) The local *ad hominem* argument, which is not fallacious, focuses on the proposition and personal properties of the speaker, and is a content-related, relevance-based attack based upon one's subjective probabilistic estimation of the speaker's reliability, which can be calculated in *Bayes' Theorem.*

(ii) The global *ad hominem* argument, which is fallacious, is an extreme prejudice that denies that the speaker is reliable in any case. It is not usable as a tool for knowledge transmission, because it violates the stipulation of the Bayesian argumentation in which one should include some evidence in the subjective probability estimation. This extreme kind of a personal attack could be racism or stigmatizing, for instance.

(iii) Here I argued—in agreement with Jacob—that the Gricean account of mindreading is more plausible than Millikan's account of direct perception. To use the inductive model of reasoning when evaluating a speaker's reliability, one also has to rely on the use of belief-desire psychology. It is important to *infer* the intentions of the speaker, and to think about whether she has good reasons or a general propensity to speak the truth. Millikan's framework of direct perception does not account for this, because the direct perceptibility of some

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18 The question, of course, is in which sense it is violated, in detail, and how this affects Millikan's theory of language in general. However, these implications cannot be addressed here.

abstract cases of testimony and their evaluated reliability is very implausible.

(iv) Last, I argued that the description of speaker and hearer as cooperative devices is implausible, too. First, we know that the speaker could have deceptive intentions. Second, if somebody is committing a global *ad hominem* attack, the interests of the utterer and her addressee fall apart. Nonetheless, the communicative intention still holds. Both parties communicate successfully, even if the hearer does not gain a new belief. So we could conclude with Grice and Sperber and Wilson that the communicative intention is sufficient for a successful communication. If the addressee commits an *ad hominem* fallacy, the proper function is unfulfilled. But in this case the conventional speaker action, which is part of successful communication, has been violated. I have argued that the Gricean account could well explain our communicative practices regarding epistemic contexts.

In terms of future research, it would be very interesting to see, how the Gricean philosophy of a speaker's individual meaning and mindreading could be embedded in theories about social cognition, social epistemology and informal logics. Jacob has presented an illuminating account of how the Gricean philosophy could be embedded in modern philosophy of mind and the cognitive sciences. I propose that one should further reflect on Jacob's arguments and adopt his conceptual framework, which I think is very precise and explanatorily fruitful. But for my own proposal of a distinction between local and global *ad hominem* attacks, it will be important to flesh out these accounts with regard to Bayesian reasoning and argumentation in epistemic contexts. A good candidate for elaborating this kind of research is the recent account of *predictive processing*, which is also based on Bayesian probabilities.

In this commentary I have claimed that these personal attacks are inductive mechanisms. But much more could be said about their functionality or even their instantiation in a cognitive system. Then it would be interesting to see if non-human cognitive systems could commit these kinds of *ad hominem* attacks. How precise could they be in evaluating a speaker's reliability? Are instances of *ad hominem* attacks bound to a specific type of brain through which the relevant representational and functional architectures are realized? How could such a phenomenon like the global and local *ad hominem* attack evolve in *homo sapiens*, and what are the deeper underlying cognitive mechanisms of such attacks? These questions need to be answered if we want to understand these important mechanisms and processes of social knowledge, as well as our communicative society as a whole.

Acknowledgements

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