

A Pragmatic Model of Justification for Social Epistemology

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Abstract: Social epistemology presents different theories about the status of shared knowledge, but only some of them retain a fruitful relation with classical epistemology. The aim of my contribution is to present a pragmatic model which is, on the one side, related to the classical concepts of “truth” and “justification”, while, on the other side, addressing to a fundamentally “social” structure for the justification of knowledge. The shift from formal semantics to pragmatics is based on a notion of “material inference” embedding commitments implicit in the use of language, that favors the recognition of the social source of shared knowledge.

Keywords: social epistemology, truth, justification, material inference, deontic statuses, deontic attitudes.

1 Introduction

Social epistemology presents different perspectives concerning the assessment of “social evidence”. We can (I) assess the epistemic quality of individual doxastic attitudes when social evidence is used; (II) assess the epistemic quality of group attitudes or (III) assess the epistemic consequences of adopting certain institutional devices or systemic relations as opposed to alternatives [1]. The so-called “communitarian epistemology” (Hardwig, Welbourne, McIntyre, Brandom, Kusch) falls into the first stream and, particularly, maintains that knowledge is “essentially” social.

In this contribution, we’ll sketch a social model of knowledge representation made explicit by a form of “expressive logic”, which rests on a complex game of deontic statuses and deontic attitudes [2]. This pragmatic order of explanation focuses on the role of expression rather than representation. In this context, “expression” means to make explicit in assertion what is implicit in asserting something. A fundamental claim of this form of expressivism is to understand the process of explicitation as the process of the application of concept. According to the relational account, what is expressed must be understood in terms of the possibility of expressing it. Making something explicit is to transform it in premise and conclusion of inferences. What is implicit becomes explicit as reason for asserting and acting. Saying or thinking something is undertaking a peculiar kind of *inferentially* articulated commitment. It shows a deontic structure that entails the *authorization* of the inference as a premise and the *responsibility* to entitle oneself to that commitment by using it (under adequate circumstances) as conclusion of an inference from other commitments one is or can become entitled. To apply a concept is to undertake a commitment that entitles to and precludes other commitments.

Actually, there is a relevant difference between the Wittgensteinian theory of linguistic games and the scorekeeping model. Inferential practices of producing and consuming reasons are the point of reference of linguistic practices. Claiming is being able to justify one's claims and other claims (starting from one's claims) and cannot be considered as a game among other linguistic games. Following Sellars, Robert Brandom uses the metaphor of the "space of reasons", but he understands it as a "social" concept, i.e. as the space of the intersubjective justification of our assertions [3]. Reasons contained in assertions possess a content that is inferentially structured. The formal structure of communication gives us the possibility to make explicit this content. From the point of view of a "social" concept of the space of reasons, beliefs, mental states, attitudes and actions possess a content because of the role they play in social "normative" practices (inferentially articulated).

Before to introduce a social concept of the space of reasons we want to make clear the sense in which we are talking of "normativity" as grounded on linguistic rules. The functioning of scorekeeping in a language game has been presented by David Lewis [4]. The result of Lewis' model is useful to understand the context dependence of ordinary conversation and this option helps us to grasp in plausible way the nature of the content in the game of giving and asking for reasons. The content of beliefs and actions is "phenomenalistic" because it expressed by inferential rules in the sense of material incompatibility. Moreover, the grasp of the conceptual content is possible only using intersubjective pragmatic rules that in some sense "harmonize" the collateral beliefs of the participants.

2 Communitarian Epistemology

To clarify the notion of "communitarian epistemology" it is important to analyze the concept of 'evidence', mostly considered in the philosophy of science and in the sociology of scientific knowledge. John Hardwig has subjected the conception of the 'individual' evidence to a critical analysis full of interesting ideas. According to this conception, there may be good reasons for a belief 'that p' if we have 'evidence' in favor of it; and the evidence is "anything that counts toward establishing the truth of p (i.e., sound arguments as well as factual argumentation)"[5].

Suppose that my trusted doctor told me that I have been suffering from a rare foot disease for many years. He or she has good reasons for diagnosis; in fact, given his professional experience, he can form a reliable judgment by studying the x-rays on my foot and the manner of walking. However, it may be that I do not feel pain, do not see anything strange in the manner of walking and do not find anything surprising on the radiographs (after all I am not a doctor). Clearly my doctor has good reasons to believe that I have that condition. In turn, I have good reasons to believe my doctor's diagnosis. But do my reasons constitute the evidence for the truth of the diagnosis? According to individualism, the answer must be negative. My reasons for believing in the diagnosis do not correspond to my doctor's reasons. The good reasons of my doctor are not enough to establish a connection of trust. They do not strengthen after the announcement of the diagnosis. But, according to Hardwig, the 'narrow' conception of evidence conflicts with common sense. We must therefore ex-

pand it by introducing a concept that includes second-hand evidence. Normally we believe what our trusted doctor tells us and therefore our reasons correspond to his. In general, we rely on the knowledge of experts and in everyday practice it would be irrational to do otherwise, because we are unable to control the truth and accuracy of the testimony. Sometimes we test the credentials of the experts when they conflict with the judgments of other experts. But we are not obliged to always use our head.

Hardwig extends the authority of testimony to knowledge in general (so it does not apply only to ‘rational belief’). He writes [6]:

belief based on testimony is often epistemically superior to belief based on entirely direct, non-testimonial evidence. For [one person] b’s reasons for believing p will often be epistemically better than any [other person] a would/could come up with on her own. If the best reasons for believing p are sometimes primarily testimonial reasons, if knowing requires having the best reasons for believing, and if p can be known, then knowledge will also sometimes rest on testimony.

This thesis is supported by arguments drawn from the scientific practice. Scientists form routine teams and these teams are formed on the basis of testimony and trust. Hardwig refers as an example to an experiment conducted by physicists on high energy in the early 1980s [7]:

After it was funded, about 50 man/years were spent making the needed equipment and the necessary improvements in the Stanford Linear Accelerator. Then approximately 50 physicists worked perhaps 50 man/years collecting the data for the experiment. When the data were in, the experimenters divided into five geographical groups to analyze the data, a process which involved looking at 2.5 million pictures, making measurements on 300, 000 interesting events, and running the results through computers...The “West Coast group” that analyzed about a third of the data included 40 physicists and technicians who spent about 60 man/years on their analysis.

The research gave rise to an article with 99 co-authors, some of whom will not know how they have arrived at such number. To producing data for such an article presupposes that scientists exchange information and that they consider the results of others as evidence for the measurements in question. It cannot be done otherwise. None of the participating physicists could replace his testimony-based knowledge with perception-based knowledge: doing this would take too much vital time. This type of ‘epistemic dependence’ can also be found in mathematics; for example, in the de Branges proof of the Bieberbach conjecture, a proof that involved mathematicians with very differ-

ent forms of specialization. Reading Hardwig, Kusch begins to identify three epistemological alternatives:

1. 'Strict individualism' for which knowledge is in the possession of the individual and presupposes the evidence is sufficient on the resources available.
2. 'Weak individualism' for which it is not necessary to possess evidence for the truth of what is known and perhaps not even fully understand what is known.
3. 'Communitarianism' which sees the community as the primary source of knowledge. It maintains the idea that the acquaintance must have 'direct' possession of the evidence, but breaks with the assumption that this acquaintance must or can be an individual.

According to Kusch, Hardwig tends to community; and not only for epistemology but for philosophy in general. Testimony is located in an area where epistemology meets ethics. Whether or not the expert's result provides good reasons for believing that *p* will depend on the recipient's perception of the reliability of the expert's testimony which in turn will depend on an assessment of its character. Here we find the relevance of the reflections of the sociologist Max Weber on the figure of the scientist and the politician. Was the expert sufficiently responsible for considering himself informed for developments in the field? Was he conscientious, and realistic in the self-consideration of how a reliable judgment should be produced? To answering these questions is to make an assessment about a moral and epistemic character together.

The work of Hardwig on teams and trust in scientific practice has been taken up by relevant exponents of contemporary social epistemology (Galison, Knorr Cetina, Shaffer, Shapin and MacKenzie). Kusch highlights two limitations of it. In the first place, Hardwig favors real and proper scientific communities, therefore it does not investigate cases of cooperation more related to daily practice and where testimony plays a crucial role, given that we rely on numerous public messages without investigating sincerity or competence of the sources. In the second place, the way in which Hardwig refers to the evidence of true belief can be criticized. He rejects strong individualism because the evidence can belong to the individual if testimony is allowed (mild individualism) and only teams have sufficient direct evidence. The latter notion is not clear; in fact one wonders: do teams have direct evidence as they have mental states like individuals? Finally, many epistemologists reject the thesis that knowledge is true belief based on evidence. Knowledge is not 'true justified belief', nor 'true belief based on evidence', but 'true belief produced in a reliable manner'. Trustworthiness does not require one to be able to provide reasons for his belief; it is sufficient that this is formed through a reliable process. It may be that reliability is compatible with communitarianism, but, according to Kusch, Hardwig did not clarify this compatibility.

Michael Welbourne wrote the book, *The Community of Knowledge*, which represents a good example of communitarian epistemology based on testimony [8]. The decisive theoretical step is the

consideration of testimony not as a mere ‘transmission’ of information as for classical epistemology. Knowledge takes place in a community where knowledge is transmitted, according to a certain vision of ‘shared knowledge’. To share knowledge means sharing commitments and entitlements with others, at least in many standard cases [9]. His theory of ‘authority’ runs counter to the theory of evidence. Entitlements imply that we consider knowledge as a base or premise for our inferences since we consider it as an external and objective standard for what others should also recognize. Commitments include the investigation of the authorizations of others so that a dialogic dynamic is created that generates new shared knowledge. In Kusch’s words [10]:

Assume that I claim to know how long it takes to travel from Cambridge to Edinburgh; I tell you, and you believe me and tell me so. In doing so, we agree that we should not consent to anyone who suggests a different travel period, that we shall inform each other in case it turns out that we did not possess knowledge after all, that we shall let this information figure in an unchallenged way in travel plans, and so on. We can perhaps go beyond Welbourne by saying that the sharing of knowledge creates a new subject of knowledge: the community. And, once this community is constituted, it is epistemically prior to the individual member. This is so since the individual community members’ entitlement and commitment to claiming this knowledge derive from the membership in this community. The individual knows as “one of us”, in a way similar to how I get married as ‘one of a couple’, or how I play football as ‘one of the team’.

The major limitation of Welbourne’s work, according to Kusch, lies in the fact that he did not consider the ‘normative’ basis of testimony or the background of knowledge. The fact of believing in what another says, depends very much on sharing the background of the knowledge that provides ‘normativity’ to the speaker and the hearer; the formation of a community of knowledge presupposes previous communities of knowledge. In addition, the attitude to believe in someone can be described more effectively by notions such as ‘participant attitude’ or ‘trust in others’, notions that also imply a moral aspect.

Since the position of Welbourne invites us not to consider testimony as mere transmission, but as the dialogical process of exchange of commitments and entitlements (Wilfrid Sellars’ game of giving and asking for reasons’) which has a normative background, a further step could be to consider knowledge as ‘built’ from testimony by means of a sort of ‘institutionalization’. In such case we will have the need of a theory of social institutions and social states that are based on the use of the so-called ‘performatives’ (Austin). The major references for social epistemology are John Searle, Barry Barnes and David Bloor.

‘Performative’ testimony starts from the act we perform by saying something and how this act is received by our interlocutor. It is not concerned simple ‘to say so and so’ or mere transmission as in traditional epistemology, but a common construction process. A performative testimony does not allow to consider a state of things *p*, to refer and to know as discrete, sequential and independent events. For example [11]:

The registrar *a* tells the couple *b* that they have now entered a legally binding relationship of marriage; and by telling them so, and their understanding what he tells them, the registrar makes it so that they are in the legally binding relationship of marriage. For the registrar’s action to succeed, the couple has to know that they are being married through his say-so, and he has to know that his action of telling does have this effect. Moreover, *a* and *b* form a community of knowledge in so far as their jointly knowing that *p* is essential for *p* to obtain. That is to say, *a* and *b* enter into a nexus of entitlements and commitments, and it is this nexus that makes it so that each one of them is entitled to claim that *p*. The registrar has to use certain formulas (By the power invested in me by the state of California...etc.) bride and groom have to confine themselves to certain expressions (a simple “yes” will be fine), and each one commits himself or herself, and entitles the other, to refer to *p* as a fact subsequently. More principally, we can say that “getting married” is an action that one cannot do on one’s own (or just with one’s partner). It is an action that is primarily performed by a ‘we’.

The new social status and the knowledge that is created between the spouses is generated by the performative testimony, or by the linguistic act performed by the authority in question. The knowledge that ‘*p*’ did not exist ‘before’ the declaration (to use Searle’s language). The reasons to explain why performative testimony generates knowledge lie in two important characteristics of performatives: self-reference and self-validity. The act refers to itself in as much as it announces what it does and if is done in the right circumstances (therefore given the institutional setting) it generates the validity of the reality it creates. The act that creates the new social situation is like a common act carried out through an agreement between people. This act is fragmented and distributed to other linguistic acts; it is implicit in daily practices, such as when we greet someone, we talk about greeting colleagues we meet or criticize those who have not responded to our greeting. All these acts for the most part assertions and contain shared performatives. This thesis is fundamental for the epistemology of testimony, since it is mostly realized through shared and widely distributed.

Testimony generates (for the most part) its references and knowledge of them. We can isolate three options for defining knowledge:

(1) Knowledge is equivalent to a term for a natural species such as ‘elephant’ and then whatever is connoted by the term it continues to exist (although not as knowledge) even if we stop using the common performative (which establishes animal taxonomy and the specimens of ‘being an elephant’);

(2) Knowledge outlines a social state such as ‘money’ or ‘marriage’ and the social institution of knowledge disappears as soon as we stop using the performative.

(3) Knowledge is like the ‘typewriter’. The physical or mental entity or the processes that we produce and call ‘knowledge’ can continue to exist (even if they are no longer called in this way) when we stop using the performative (which establishes the relevant taxonomy and the specimens of ‘being a typewriter’).

Also in case (1) we have to understand knowledge on the basis of a shared performative because the category of ‘elephant’ has its specimens and models that are socially established and maintained. Kusch’s thesis is that knowledge is a social state consisting of a shared performative (We hereby declare that there is a single, recommendable way of possessing the truth, and we call this way ‘knowledge’). Knowledge is a social referent created through references to it; and these references occur in testimony, as in other forms of dialogue. Dialogue in fact includes affirming that something is knowledge, posing challenges to knowledge, testing knowledge, doubting knowledge and so on through a broad spectrum of possible references.

3 The Role of Conditionals for Human Discursive Practices

Before to briefly sketch the social normative source of shared knowledge in inferential terms, we need to clarify the very notion of “inference” embedded in conditionals. We are not only creatures who possess abilities such as to respond to environmental stimuli we share with thermostats and parrots but also “conceptual creatures” i.e. we are logical creatures in a peculiar way. It is a fascinating enterprise to investigate how machines simulate human behavior and the project of Artificial Intelligence, a project that began meads of the XX century, could tell us interesting things about the relationship between syntactical abilities and language. Brandom seriously considers the functioning of automata because he moves from some basic abilities and he gradually introduces more sophisticated practices, which show how an autonomous vocabulary raises [12]. This analysis is a “pragmatist challenge” for different perspectives in analytic philosophy such as formal semantics (Frege, Russell, Carnap and Tarski), pragmatics both in the sense of the semantics of token-reflexive expressions (Kaplan and Stalnaker) and of Grice, who grounds conversation on classical semantics. Conditionals are the paradigm of logical vocabulary to remain in the spirit of Frege’s Begriffsschrift. But, according to Brandom, the meaning-use analysis of conditionals specifies the genus of

which logical vocabulary is a species. In this sense, formal semantics is no more the privileged field for providing a universal vocabulary or meta-language.

Starting from basic practices, we can make explicit the rules that govern them and the vocabulary that expresses these rules. There are practices that are common to humans, non-human animals and intelligent machines that can be also artificially implemented like the standard capacities to respond to environmental stimuli. But, it seems very difficult to artificially elaborate the human discursive practices which depend on the learning of ordinary language. In particular, humans are able to make inferences and so to use conditionals because they move in a net of commitments and entitlements embedded in the use of concepts expressed in linguistic expressions. Logical vocabulary helps to make explicit the inferential commitments entailed by the use of linguistic expressions, but the meanings of them depend on the circumstances and consequences of their use. The last meta-language is ordinary language in which we give and ask for reasons and therefore acquire a sort of universality. It seems that, we do not need to apply the classical *salva veritate* substitutional criterion, as conditionals directly make explicit the circumstances and consequences namely inferential commitments and entitlements possessed by singular terms and predicates [13].

The source of the normativity entailed by conceptual activity is a kind of “autonomous discursive practice” that corresponds to the capacity to associate with materially good inferences *ranges of counterfactual robustness* [14, 15, 16]. In this sense, “modal” vocabulary represented by modally qualified conditionals such as if p then q has an expressive role. Modal vocabulary is a *conditional* vocabulary that serves to *codify* endorsements of material inferences: it makes them explicit in the form of material inferences that can themselves serve as the premises and conclusions of inferences. According to the argument Brandom calls “the modal Kant-Sellars thesis”, we are able to secure counterfactual robustness (in the case of the introduction of a new belief), because we “practically” distinguish among all the inferences that rationalize our current beliefs, which of them are update candidates. The possibility of this practical capacity derives from the notion of “material incompatibility”, according to which if we treat the claim that q follows from p as equivalent to the claim that everything materially incompatible with q is materially incompatible with p. So, for example if we say “Cabiria is a dog” entails “Cabiria is a mammal” we are stating that everything incompatible with her being a mammal is incompatible with her being a dog.

For the sake of my discussion, it is interesting how we can intend Kantian normativity in terms of “incompatibility” relations between commitments. Actually, there is a distinction between empirical vocabulary and modal vocabulary, because the world cannot tell us what we ought to do in certain situations. The content is normally understood in terms of *representation of objects*. The scorekeeping model replaces the Kantian notion transcendental *apperception* with a kind of synthesis based on incompatibility relations. In drawing inferences and “repelling” incompatibilities, a person is taking oneself to stand in representational relations to objects that she is talking *about*. A commitment to A’s being a horse does *not* entail a commitment to B’s being a mammal. But it *does* entail a commitment to A’s being a mammal. Drawing the inference from a horse-judgment to a mammal-judgment *is* taking it that the two judgments represent one and the same object. Thus, the judgment that A is a horse is not incompatible with the judgment that B is a cat. It *is* incompatible

with the judgment that A is a cat. Taking a horse-judgment to be incompatible with a cat-judgment is taking them to refer or represent that object, to which incompatible properties are being attributed by the two claims.

The normative *rational* unity of apperception is a synthesis to expand commitments inferentially, noting and repairing incompatibilities. In this sense, one's commitments become reasons for and against other commitments; it emerges the rational critical responsibility implicit in taking incompatible commitments to oblige one to *do* something, to update one's commitment so as to eliminate the incompatibility.

According to the scorekeeping model, attention must be given not only to "modal" incompatibility but also to "normative" incompatibility. Again, modal incompatibility refers to states of affairs and properties of *objects* that are incompatible with others and it presupposes the world as independent of the attitudes of the knowing-and-acting subjects.

Normative incompatibility belongs to discursive practices on the side of the knowing-and-acting subjects. In discursive practice the agent cannot be entitled to incompatible doxastic or practical commitments and if one finds herself in this situation one is obliged to rectify or repair the incompatibility. On the side of the object, it is impossible for it to have *incompatible* properties at the same time; on the side of the subject, it is *impermissible* to have incompatible commitments at the same time. In this sense, Brandom introduces the metaphysical categorical sortal metaconcept subject whereas it represents the conceptual functional role of *units of account for deontic normative incompatibilities*. In my opinion, we can intend this role as a "social" role because of the fact that we learn how to undertake deontic attitudes in the process of socialization. The possibility of criticizing commitments in order to be able not to acknowledge incompatible commitments is bound to the normative statuses of commitment and entitlement and we ought to grasp the sense of them.

4 The Dimensions of Justification

The scorekeeping model describes a system of social practices in which agents performs assertions that express material inferential commitments [17]. In the previous section, I considered together with the modal vocabulary also the normative vocabulary both related to the use of ordinary language. Let's see now what are the inferential relations that agents ought to master in order for justifying their claims. Our assertions have a "sense" or are "contentful" by virtue of three dimensions of inferential social practices. To the first dimension belongs the *commitment-preserving* inference that corresponds to the material deductive inference. For example, A is to the west of B then B is to the east of A and the *entitlement preserving* inference that corresponds to inductive inference like if this thermometer is well made then it will indicate the right temperature. This dimension is structured also by *incompatibility* relations: two claims have materially incompatible contents if the commitment to the one precludes the entitlement to the other.

The second dimension concerns the distinction between the *concomitant* and the *communicative* inheritance of deontic statuses. To the concomitant inheritance corresponds the *intrapersonal* use of a claim as a premise. In this case, if a person is committed to a claim is, at the same

time, committed to other concomitant claims as consequences. Correspondently, a person entitled to a commitment can be entitled to others by virtue of permissive inferential relations. Moreover, incompatibility relations imply that to undertake a commitment has as its consequence the loss of the entitlement to concomitant commitments to which one was before entitled. To the communicative inheritance corresponds the interpersonal use of a claim, because to undertake a commitment has as its “social” consequence to entitle others to the “attribution” of that commitment. The third dimension shows the two aspects of the assertion as “endorsed”: the first aspect is the “authority” to other assertions and the second aspect dependent to the first is the “responsibility” through which an assertion becomes a “reason” enabling the inheritance of entitlements in social contexts.

The entitlement to a claim can be justified (1) by giving reasons for it, or (2) by referring to the authority of another agent, or (3) by demonstrating the capacity of the agent reliably to respond to environmental stimuli. The scorekeeping model is based on a notion of entitlement that presents a structure of “default” and “challenge”. This model is fundamental in order to ground a pragmatic and social model of justification, that requires the participation to the game of giving and asking for reasons. A fundamental consequence of this description is that the deontic attitudes of the interlocutors represent a perspective on the deontic states of the entire community.

We begin with the intercontent/interpersonal case. If, for instance, B asserts “That’s blue”, B undertakes a doxastic commitment to an object being blue. This commitment ought to be attributed to B by anyone who is in a position to accept or refuse it. The sense of the assertion goes beyond the deontic attitudes of the scorekeepers, because it possesses an inferentially articulated content that is in a relationship with other contents. In this case, if by virtue of B’s assertion the deontic attitudes of A change, as A attributes to B the commitment to the claim “That’s blue”, then A is obliged to attribute to B also the commitment to “That’s colored”. A recognizes the correctness of that inference when she becomes a scorekeeper and, therefore, consequentially binds q to p . Again, the incompatibility between “That’s red” and “That’s blue” means that the commitment to the second precludes the entitlement to the first. Then A treats these commitments as incompatible if she is disposed to refuse attributions of entitlement to “That’s red” when A attributes the commitment to “That’s blue”. In the infracontent/interpersonal case, if A thinks that B is entitled (inferentially or not inferentially) to the claim “That’s blue”, then this can happen because A thinks that C (an agent who listened to the assertion) is entitled to it by testimony.

An interesting point is to see how the inferential and incompatibility relations among contents alter the score of the conversation. First, the scorekeeper A must include “That’s blue” in the set of commitments already attributed to B. Second, A must include the commitments to whatever claim which is the consequence of “That’s blue” (in committive-inferential terms) in the set of all the claims already attributed to B. This step depends on the available auxiliary hypothesis i relationship with other commitments already attributed to B. These moves determine the closure of the attributions of A to B by virtue of the commitment-preserving inferences: starting from a priori context with a certain score, the closure is given by whatever committive-inferential role A associates with “That’s blue” as part of its content.

Incompatibility also limits the entitlements attributed to B. A can attribute entitlements to what ever claim is a consequence in permissive-inferential terms of commitment to which B was already entitled. For example, B is entitled to “That’s blue” because she is a reliable reporter i.e. she correctly applies responsive capacities to environmental stimuli. The correctness of the inference depends also on A’s commitment, namely on the circumstances under which the deontic status was acquired (these conditions must correspond to the ones in which B is a reliable reporter of the content of “That’s blue”). Moreover, A can attribute the entitlement also by inheritance: reliability of another interlocutor who made the assertion in a prior stage comes into play.

Conclusion

The pragmatic model I sketched could represent a valid perspective for social epistemology by virtue of its “relational” perspective. It rests on social evidence that derive from semantic relations among material-inferential commitments and entitlements and pragmatic attitudes expressed by a net of basic speech acts. The structure represents a view of knowledge as projected by the discursive practices of an entire community of language users. Moreover, it is a dynamic model as social practices are always exposed to the risk of dissent. In this context, social practices entail the dimension of challenge, i.e. the case in which the speaker challenges the interlocutor to justify and eventually to repudiate his/her commitment. Even in the case in which an agent acquires the entitlement to act by deferral i.e. by indicating a testimonial path whereby entitlements to act can be inherited, the query and the challenge assume the function of fostering the reflection among the participants.

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