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ARGUMENTATION THEORY AND THE CONCEPTION OF EPISTEMIC JUSTIFICATION¹

Abstract: I characterize the deductivist ideal of justification and, following to a great extent Toulmin's work *The Uses of Argument*, I try to explain why this ideal is erroneous. Then I offer an alternative model of justification capable of making our claims to knowledge about substantial matters sound and reasonable. This model of justification will be based on a conception of justification as the result of good argumentation, and on a model of argumentation which is a pragmatic linguistic reconstruction of Toulmin's model of argument.

Keywords: argument, argumentation, argumentation theory, deductivism, inductive arguments, justification, Toulmin's model of argument, warrant.

1. Introduction

S. Toulmin's *The Uses of Argument* (1958) was the origin of a new perspective for the evaluation of argumentation which tried to counterbalance the hegemony of Formal Logic and of the deductivist ideal of justification associated with it. In this paper, I shall follow Toulmin's work in order to show how Argumentation Theory may solve some problems created by deductivism. In sections 2 and 3, I shall characterize this ideal of justification and explain its shortcomings respecting the possibility of showing that many everyday arguments are good. Then, in section 4, I shall propose a model of argumentation based on a pragmatic linguistic reconstruction of Toulmin's model of argument. This model will provide an alternative characterization of one of its key elements – i.e. the *warrant* of an argument – which aims at avoiding some of the critical remarks concerning Toulmin's proposal, and at better characterizing some distinctions which are crucial for showing that deductiveness, as traditionally understood, is not a necessary condition for justification (sections 5 and 6). Finally, in section 7, I shall offer a conception

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of justification understood as the result of good argumentation. According to this conception, deductiveness will neither be a sufficient condition for justification. The latter contention involves a small step further I would like to take beyond Toulmin's approach: I am going to argue that it is not enough to focus on arguments in order to explain what epistemic justification is. Rather, we have to focus on argumentation, as an activity which is constrained not only semantically, but also pragmatically.

2. The deductivist ideal of justification

The skeptical challenge, which allowed Descartes to initiate the epistemological turn of Modern Philosophy, stated that since, for all that we know, any of our beliefs might be false, we cannot say that we really know something. Certainly, we frequently experience that our minds are somehow "disconnected" from the world; particularly, we have learnt that there is no necessary connection between what we believe and how the world actually is. The way in which we acquire beliefs does not seem to warrant their correctness. We acquire beliefs either by a direct examination, i.e. by, so to speak, contact with the world, or as a result of our processes of reasoning. Regarding the latter, it seems that there are at least two possible sources of failure: either the inadequacy of the basis we employ in order to get these beliefs; or a failure of the means which serve us to acquire them. As a way to try to avoid the latter source of failure, modern epistemologists began to promote a deductivist ideal of justification according to which the only way to make our processes of reasoning reliable is to ensure that they provide us with new beliefs which are the necessary consequences of our initial beliefs.

In *The Rationality of Induction* (1986), David Stove argued that it is the assumption of this deductivist ideal which made Hume come to the conclusion that most of the arguments we employ in everyday reasoning and arguing do not really justify their conclusions. According to Hume, inductive arguments are "founded on the presumption of a resemblance, betwixt those objects, of which we have had experience, and those, of which we have had none" (Hume 1739, p. 90). Thus, in order to conclude that "every raven is black" from a sentence like "every observed raven is black" we would have to presuppose something very close to the idea that nature is uniform – in this case with respect to the color of ravens: i.e. if each observed raven is black, then each raven is black. And this would render the corresponding argument rather circular.

Generalized beliefs are not the only sort of beliefs that may be problematic according to the deductivist ideal of justification. Beliefs supported by arguments like “it’s raining, therefore you should take your umbrella”, or “it’s twenty past twelve, therefore we are late”, according to this standard, would also lack justification. Because, for all that we know, all the premises of these arguments may be true while their conclusions are false, unless we assume that in each of these arguments there is an implicit conditional or universal premise, which conveniently links the premise with the conclusion – in order to turn the original argument into a deductively valid one. Certainly, in adding these alleged implicit premises, the premises of the new argument cannot be both true if their conclusion is false. But if we add this conditional or universal premise, we render the argument generated this way rather circular, and circular arguments do not justify their conclusions. Therefore, these arguments do not really justify their conclusions, as Hume concluded.

But, where is the circularity in “every observed raven is black, therefore every raven is black”; in “it’s raining, therefore you should take your umbrella”; or in “it’s twenty past twelve, therefore we are late?” At its best, we could assume that their premises do not entail their conclusions since it is possible that they are true while the conclusions are false. But, why should we think of these arguments as circular?

Actually, circularity is not a problem of such arguments as stated, but rather a result of the deductivist attempt at showing that their conclusions are “truly” justified. As Robert Brandom has incisively reminded us, Sellars – among the others – had already denounced “the received dogma... that the inference which finds its expression in ‘It is raining, therefore the streets will be wet’ is an enthymeme” (Brandom 2000, p. 53). Certainly, according to the deductivist model endorsed by Hume, most of our everyday arguments would be enthymemes, i.e. arguments lacking certain premises which, when added, would turn the original arguments into deductively valid, for example, conditionals turning original arguments into instances of *modus ponens*. But, why should we think that these arguments are incomplete? Why should we add the described premises to them? In order to make them more convincing, for example? The truth is that we often employ this type of arguments to persuade each other. In fact, those allegedly “complete” arguments – i.e. arguments supported by premises which turn them into deductively valid – are seldom used in everyday conversations. But why arguments should be deductively valid? The answer is: deductively valid arguments have a wonderful virtue: if their premises are true, they guarantee truth of their conclusion, no matter how the world happens to be. Therefore,

to require deductive validity does not mean to require only that the conclusion is true if the premises are true, but to demand a guarantee that it will always be so. This is the deductivist ideal of justification; an ideal which, on pain of circularity, cannot be reached by most everyday arguments.

3. Toulmin's criticism of deductivism

One of the most insightful critics of deductivism was S. E. Toulmin, whose ideas on this issue gave the origins of the Argumentation Theory, as we know it nowadays.² In *The Uses of Argument* (1958), Toulmin argued that the reason why a great majority of our arguments cannot reach what we call the deductivist ideal of justification is that they involve “a logical type-jump”, i.e. they support conclusions of a certain logical type by means of reasons of another logical type. In Toulmin's words:

We make assertions about the future, and back them by reference to data about the present and past; we make assertions about the remote past, and back them by data about the present and recent past; we make general assertions about nature, and back them by the results of particular observations and experiments, we claim to know what other people are thinking and feeling, and justify these claims by citing the things they have written, said or done; and we put forward confident ethical claims, and back them by statements about our situation, about foreseeable consequences, and about the feelings and scruples of the other people concerned (1958, p. 219).

Toulmin's goal in *The Uses of Argument* was to show that these arguments are substantial, in the sense that their validity depends on the sort of propositions which are true about the world, not on formal relations between their premises and conclusions. Actually, as we will see, the best ally for deductivism would be the dominant conception of Logic, according to which the normativity of inference is a formal matter.³

For the deductivist, as we have seen, most of everyday arguments are problematic because their premises do not “entail” their conclusions, unless

² Toulmin does not use the expression “the deductivist ideal of justification”, but his criticism of the analytic standard for argument evaluation is, to a great extent, as it will be shown later, another way of dealing with this problem.

³ In Bermejo-Luque (2008a) I have followed this Toulminian insight. I have argued there, that if we want to preserve a fully normative character of Logic respecting the acts in which inferences supervene, i.e. the acts of reasoning and arguing, we should not think of this discipline as a set of formal systems for characterizing the concept of “argument validity”, but as a set of models describing the concept of “inference”. On this account, Toulmin's model would be a particular proposal.

we interpret them as circular. In the light of this fact, a certain form of skepticism made its way, and concluded that we cannot provide a “real” justification for many of the beliefs we would like to preserve the most – like “those are my relatives”, “the Earth moves around the Sun”, “muffins aren’t poisonous”, etc. In Toulmin’s view, the history of epistemology would be a history of attempts to solve skeptical problems created by the traditional deductivist conception of ‘justification’. Particularly, he portrays three kinds of attempts at redeeming substantial arguments: transcendentalism, phenomenism and skepticism/pragmatism.

Certainly, a straightforward strategy to avoid this type of skepticism was to assume that non-deductive arguments are deductive arguments with certain suppressed premises that, if incorporated, would turn these arguments into deductively valid ones. At least in certain fields, scientific generalizations would seem to be the natural candidates to play this role. They would allow scientific theories to preserve and warrant our knowledge in those fields. But the problem with this strategy is that these generalizations are not in turn satisfactory, according to the deductivist’s standards: all the information which a scientist can provide would reproduce the logical gulf between her observations of facts and her generalizations. This is, according to Toulmin, the irredeemable nature of substantial arguments.

The transcendentalist would try a different strategy: to search for a direct grasp of the information which could bridge the logical gulf, like, for example: the faculty of “knowing other minds”, of “reading the past”, of “grasping the future”, etc. By means of those extra-faculties we would get general truths that could transform our substantial arguments into deductively valid ones. Yet, also this strategy cannot satisfy a skeptic: these new, directly grasped beliefs also lack justification.

For her part, the phenomenist would try to reject that there exists a logical gulf between our beliefs and the reasons that we have for holding them: the idea would be that the conclusions of our arguments are not as different from their supporting information as they seem to be. Allegedly, the type-jump involved would be only apparent. According to the phenomenist, conclusions of substantial arguments would be of the same logical type as the reasons by means of which we support them. Such is, for example, the behaviorist interpretation of Wittgenstein remarks on our knowledge on other’s minds: in this account, other’s mental states are supposed to be ontologically indistinguishable from behavior by means of which we are able to attribute mental states. It is also the underlying view of naturalistic ethical theories, which define values in terms of consequences, feelings or interests. However, this reductionist proposal becomes much more pro-

blematic in the case of claims about future or past events which are supposed to be supported by the reference to present events. In these cases, the phenomenalist would have only two options: either to assume that claims about future or past events only refer to present events, or to consider her data as implicitly stating the very events to be predicted. In the first case, she would be refusing predictions altogether; in the second case, she would reintroduce in the premises the same kind of type-jump she aimed to avoid.

Finally, the pragmatic skeptic would claim that the gulf is unbridgeable, and consequently, that our claims to knowledge are always defective. According to this view, in principle, we should renounce the attempt at justifying most of our substantial beliefs. At least, straightforwardly: there would be still a way to reconcile our philosophical results and our common-sense views, namely, as a sort of pragmatist armistice. As Toulmin characterizes it, pragmatism, under the assumption of the deductivist ideal of justification, would offer an indirect justification for our beliefs: that they are sufficiently good for practical purposes, and that is all they can be. This tendency is, according to Toulmin, revealed in the history of epistemology:

The transcendentalist Locke is answered by the phenomenalist Berkeley, only for the conclusions of both to be swept aside by the skeptic Hume. For all three, the logical gulf between ‘impressions’ or ‘ideas’ and material objects is the source of difficulty. (...) In moral philosophy, again, G. E. Moore rescues ethical conclusions, which are based at first sight on entirely non-ethical data, by treating them as underwritten by intuitions of ‘non-natural’ ethical qualities; I. A. Richards and C. L. Stevenson offer a phenomenalist reply, analyzing ethical statements in terms of non-ethical ideas alone, so that the gulf between feelings and values is disregarded; while A. J. Ayer, in turn, plays Hume to Stevenson’s Berkeley and Moore’s Locke, and so avoids or evades the problem which had been facing his predecessors (1958, p. 233).

All these responses would share a common mistake: the deductivist ideal of justification. Following Toulmin’s remarks, I would like to explain now why this ideal is mistaken and propose an alternative model of justification capable of making sense of our claims to knowledge of substantial matters.

4. A model of argumentation

The model of justification that I would like to offer is based on a conception of justification as the proper outcome of a good argumentation, and

on a model of argumentation that is a pragmatic linguistic account of Toulmin's model of argument. According to our model, an *argument* would be a representation of the semantic properties of an *act of inferring* – i.e. an act of putting forward a claim or belief as a reason for another claim or belief. An act of inferring would be either a *reasoning process* or an *act of arguing*,⁴ and an act of arguing – a communicative act, an object which has not only semantic, but also pragmatic properties – would be the smallest speech act which would allow us to justify a given a claim.

Acts of arguing emerge, normally, as attempts at answering the challenge to our claims. Thus, the *claim* that we attempt to make, and the *reasons* we adduce to support this claim, are two main elements which we can distinguish in any act of arguing. In principle, claims and reasons are assertions, but they become the second order speech acts of adducing and concluding when they are a part of a complex speech act of arguing.

On the other hand, the means by which two assertions become reasons and conclusions of an act of arguing would correspond, following Toulmin's terminology, to the *warrant* of this act. In our account, in order to be able to determine that an assertion that *p* has been put forward as a reason for an assertion that *q*, we have to attribute to the speaker an implicit conditional assertion whose antecedent is the reason of her act of arguing and which consequent is its conclusion. This implicit assertion would be common to even the simplest forms of argumentation, as it constitutes the inferential link that lies behind each act of arguing. Moreover, it would also be common to every act of reasoning: after all, it is because we can attribute the corresponding conditional belief to a given subject, that we can take her coming to believe that *q* after she came to believe that *p* as a process of reasoning, and not as a mere association of ideas or something alike. In Bermejo-Luque (2006a) I named this conditional belief, which makes an input-output mental process a reasoning one, a “motivation” to infer.

The concept of warrant is the key element of Toulmin's model of argument and, in general, of his views on logic and epistemology. He defines warrants as rules, principles, inference-licenses or any “general, hypothetical statements, which can act as bridges, and authorize the sort of step to

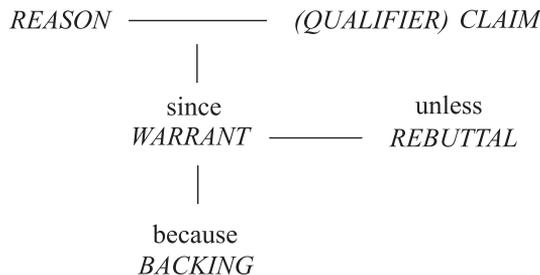
⁴ In Bermejo-Luque (2006a) I have tried to show that argumentation can be seen either as a justificatory or as a persuasive tool. I have also explained that the sort of invitation to infer – i.e. the reasoning process, that a piece of argumentation prompts on its addressee – is parallel to the justificatory structure of an act of arguing, i.e. a speech act in which a given assertion becomes a reason for a given claim. In that paper I have argued that, even though argumentation can be seen both as a justificatory and as a persuasive tool, its justificatory power is a matter of semantic and pragmatic conditions of acts of arguing.

which our particular argument commits us” (1958, p. 98). He says that the warrant of an argument can be always made explicit as the corresponding conditional whose antecedent is the reason and whose consequent is the claim of the argument. However, stressing its rule-like nature, he also says that the most “candid” way of expressing a warrant is: “Data such as D entitle one to draw conclusions, or make claims, such as C’ or alternatively ‘Given data D, one may take it that C’” (1958, p. 98).

For Toulmin it is very important to distinguish warrants from other elements of his model. Particularly, he stresses the differences between the warrant and the *backing* of an argument.⁵ Backings are defined as “other assurances” which stand “behind our warrants” (1958, p. 103) in order to show their legitimacy. They are categorical statements of fact that would eventually justify the legitimacy of the warrant, and they correspond to the answer to challenging acceptability of our warrants. Although Toulmin does not state it explicitly, we can think of backings as reasons supporting warrants. And contrary to warrants and reasons, backings would not be constitutive for acts of arguing: after all, warrants can be conceded without further challenge.

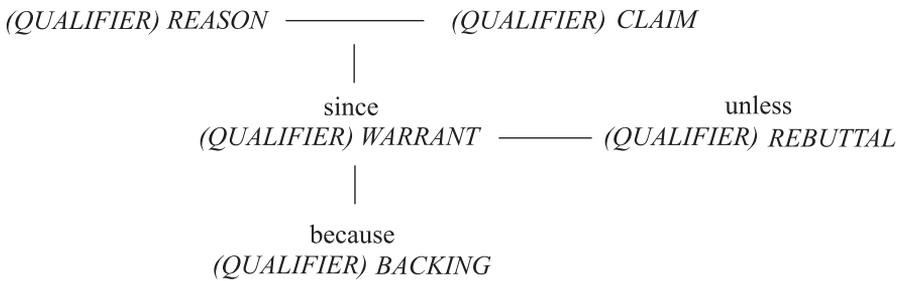
On the other hand, *rebuttals* would be “circumstances in which the general authority of the warrant would have to be set aside” (1958, p. 101). They are assertions that may appear in acts of arguing, but they are not constitutive for them either.

Finally, Toulmin defines *modal qualifiers* as “an explicit reference to the degree of force which our data confer on our claim in virtue of our warrant” (1958, p. 101). Thus, Toulmin’s model can be outlined as follows:



⁵ The distinction is crucial for his criticism of the concept of “major premise”. For example it allows him to explain away that the old problem of whether universal propositions should be interpreted as involving existential implications or not is a consequence of passing over the distinction between warrants and backings.

Our model of argumentation would add to Toulmin's model of argument only a pragmatic linguistic perspective according to which these elements are not propositions, but full-fledged speech acts constituting a second order speech act complex – i.e. the act of arguing. On this account, a modal qualifier would be an explicit reference to the degree of force with which a given proposition is stated. Consequently, whether or not this force is made explicit, every claim would be modally qualified, and hence, modal qualifiers would be constitutive for acts of arguing, as they would necessarily qualify all of its elements. This model can be outlined this way:



In Bermejo-Luque (2009) I define the second order speech act complex of arguing, characterized in this way, as an attempt to show that the target claim is correct.

5. A conception of warrant

Toulmin insists that warrants should not be counted as “premises”. For him, the term “premise” is ambiguous, as it may refer, indistinctively, to reasons, backings or warrants. In his account, implicitness and rule-likeness are key features which distinguish warrants from reasons or backings. However, most interpreters have stressed the latter while ignoring the first – partly misguided by Toulmin's own examples.⁶ Actually, in my view, this mistake would be a main theme of one of the most important critiques of Toulmin's ideas: according to Manicas (1966) and Castañeda (1960), Toul-

⁶ Toulmin says, for example, that we can express an argument “in the form ‘Datum; warrant; so conclusion’” (1958, p. 123). Certainly, that would seem to sustain the idea that warrants can be explicit. But this is not necessarily the case: nothing prevents Toulmin from saying that this reconstruction constitutes a new argument having another warrant that is, again, implicit for it.

min's characterization of *backings* and *warrants* is not based on different logical functions within arguments, but rather on different grammatical characterizations – backings as categorical statements of fact, and warrants as conditional, hypothetical statements. Contrary to Toulmin, Castañeda argued that there is no good reason for distinguishing warrants and backings from major premises. After all, both ways of phrasing an argument – that is, “Reason, Warrant, so Claim”, and “Reason, Backing, so Claim” – result in analytic arguments, and these are arguments which do not seem to need to be completed or rephrased in any way in order to show the sources of their validity.

A simple answer to this criticism would be to insist on the necessary implicitness of warrants, contrary to reasons and backings. However, Toulmin's approach is not clear about this. As I see it, for him the main difficulty to insist on this feature of warrants is that his model focuses on arguments as objects with merely semantic properties, rather than on argumentation as a communicative activity which is both semantically and pragmatically constrained. Contrastingly, in our proposed model, all the elements are communicative elements of the speech act of arguing. In our account, provided that we can attribute to this subject an implicit inference-claim – i.e. the warrant of her or his act of arguing – whatever a subject explicitly claims in support of a target claim, is a reason for it. It is the attribution of this implicit claim which entitles us to say that her act of putting forward a given claim counts as a speech act of adducing, i.e. as an act of putting forward a reason for another claim. Consequently, in our model, warrants cannot be confused with reasons because they are necessarily implicit in acts of arguing: they constitute the inferential step that lies behind any act of arguing.

Certainly, we can make warrants in arguments explicit – as long as the argument is just a representation of the semantic properties of an act of arguing. In fact, when we portray a given act of arguing according to Toulmin's model, we make its warrant explicit. However we cannot deal with this warrant as if it were a reason, as Manicas and Castañeda would claim. Neither can we deal with a backing as a reason for the target claim, instead of dealing with it as a reason for the warrant.

Indeed, there are very good reasons to think that warrants correspond to the elements of an act of arguing which are, and have to remain, implicit in it. Following a well known argument of Lewis Carroll (1895), Wayne Grennan (1997) showed that warrants – or ‘inference claims’ as he calls them – are necessarily implicit because they cannot be incorporated into arguments without changing their original meanings:

[C]onsider an argument utterance symbolized as “A, so B”. By definition, the inference claim is “if A then B”. Now suppose we add “if A then B” to the original argument, in an attempt to make the inference claim explicit. The argument form is now “A, if A then B; so B”. But the inference claim for the revised argument is “if A, and if A then B, then B”. If we now add this, we change the stated argument again, generating a new inference claim. Thus, an infinite regress begins when we try to make it explicit in the argument. (Grennan, 1997, p. 69)

That would explain why Manicas and Castañeda’s criticism is misleading: contrary to any kind of implicit premise, warrants cannot be incorporated into arguments as premises if we want to preserve the original inferential structure of the act of arguing which we want to represent. Certainly, we can incorporate a bare content of the warrant as a premise. But then we are no longer representing the original act of arguing – whose warrant is “if R, then C” – but a different act of arguing – whose warrant is “if R and W, then C”. As we are going to see, this new warrant is not claimed to be a substantial relation between R and C, but an analytical, formal relation between R, W and C.

6. “Crucial distinctions”

Toulmin’s model, and especially his concept of warrant, expressed his account of “substantial” argument. This account will be the core of our criticism of the deductivist ideal of justification. Like Toulmin, I aim to show that the validity of an argument is inextricably linked to the forcefulness of the reasons which we have for its conclusion, and that this is by no means an *a priori*, analytical or formal matter, but a matter of the substantial correctness of the warrant which is meant to justify the step from reason to conclusion. To that end, I am going to offer an account of Toulmin’s distinctions between necessary, analytical and formal arguments in order to show that the term “deductive” has been used to designate very different properties that arguments may have (1958, p. 9).⁷

Toulmin distinguishes between *necessary* and *probable arguments* by considering the type of entitlement which a warrant provides for drawing

⁷ For his part, Toulmin is willing to use the term “deductive” as a synonym of warrant-using argumentation, that is, an argumentation “applying established warrants to fresh data to derive new conclusions” (1958, p. 121).

the conclusion. When a warrant entitles us to draw the conclusion “un- equivocally”, the argument is necessary, i.e. it is an argument whose conclusion is to be claimed “necessarily”. But when “the warrant only entitles us to draw our conclusion tentatively (qualifying it with a ‘probably’), subject to possible exceptions (‘presumably’), or conditionally (‘provided that...’)” (1958, p. 148), the argument is only probable. According to this remark, what determines which arguments are necessary and which are probable is not the “logical form” of an argument but the nature of the state of affairs it concerns. Reasonings with conclusions drawn necessarily because of the fact that their warrants are necessary physically, morally, practically, mathematically, etc., will be as conclusive as those drawn from those warrants which are formally necessary. That is, the necessity of arguments would be a matter of their warrants being necessary truths.

On this account, our willingness to say that an argument is necessary would depend on our willingness to recognize not only formal or conceptual necessities, but also physical, moral, practical, mathematical, etc. Actually, in criticizing Formal Logic as a paradigm for the evaluation of arguments, Toulmin criticized the assumption that, in order to draw conclusions sanctioned with a label ‘necessarily’, rules of inference have to be exclusively formal – that is, they have to be the rules that sanction the meaning of the logical terms involved. As he points out, a warrant like “if Harry was born in Bermuda, then he is a British subject” is as much legitimate an inference rule, as it is *modus ponens*. And many warrants, not only formal ones, would equally entitle us to draw conclusions ‘necessarily’: for example, those stating conceptual truths like “if it is red, then it has a color”; or moral truths like “if, by doing that, you unnecessarily hurt someone, then you should not do it”; or – if your metaphysical convictions, like Toulmin’s ones, do not preclude them – warrants stating physical necessities like “if the experiment is supposed to reduce entropy in a close system, then it is erroneous” or even, “if it is a hundred tons, then you won’t lift it single-handed” (1958, p. 27); or legal necessities like “if she is the defendant’s wife, then you cannot oblige her to testify”; etc.

Toulmin’s second distinction is that between *formally* and *non-formally valid arguments*. Toulmin says that a formally valid argument is an argument “set out in such a way that its conclusion can be obtained by appropriate shuffling of the terms in the data and warrant” (1958, p. 148). However, this definition has the following consequence: an invalid argument like “No horse is a human; No human is four-legged; therefore no horse is four-legged” would be formally valid, because we can arrive at its conclusion by shuffling the parts of the premises and rearranging them in a new

pattern.⁸ So, I would rather define a formally valid argument as an argument whose warrant is formally true, or in other words, an argument whose warrant is a claim that it is true for “formal” reasons – that is to say, it is true because of the meaning of the logical terms involved.⁹ Thus, whereas the argument “Socrates is human, therefore, he is mortal” is a non-formally valid argument (its warrant is the “biological” truth “if Socrates is human, then he is mortal”), the argument “Socrates is human, and every human is mortal, therefore, Socrates is mortal” is a formally valid argument (its warrant is the formally true claim “if Socrates is human and every human is mortal, then Socrates is mortal”). Formal systems of inductive logic would also try to determine this type of “formal validity” for probable arguments. But in Toulmin’s view, they distort the real meaning of qualifiers like “probable” (1958, pp. 153, 160).

Next, Toulmin distinguishes between *analytic* and *substantial arguments*. For him, an argument is analytic if and only if “checking the backing of the warrant involves *ipso facto* checking the truth or falsity of the conclusion” (1958, pp. 133, 140). Toulmin says that this is “the key distinction” of his project (1958, p. 234). And, not surprisingly, it is the one which was subjected to the strongest criticisms. But I think we can avoid objections by saying that an analytic argument is an argument whose warrant is an analytic truth. As long as there are necessary truths which are not analytic, this definition would share with Toulmin’s definition the idea that not all necessary arguments are analytic: “in other fields also a time comes when we have produced in support of our conclusions data and warrants full and strong enough, in the context, for further investigation to be unnecessary – so in this sense non-analytic arguments also can be conclusive” (1958, p. 234). Yet, my proposal differs from Toulmin’s in an important aspect, because according to Toulmin, “where an analytic argument leads to a tentative conclusion, we cannot strictly say any longer that the conclusion follows ‘necessarily’ – only, that it follows analytically” (1958, p. 141). That is, on Toulmin’s definition, not all analytic arguments would be necessary. In contrast, according to our proposed definition, as long as all analytic truths are

⁸ I owe this observation to one of the referees of Bermejo-Luque (2008a), where part of this section appears. I have there also observed that Toulmin could have answered that the consequence of that argument cannot really “be obtained by any *appropriate* shuffling of the terms in the data and warrant”. But in that case, he should give further explanations of what “appropriate shuffling” is, and it is doubtful that he might do it without adopting certain formal criteria of argument validity.

⁹ Following Brandom’s criticism of the concept of “logical term”, in Bermejo-Luque (2008a) I have also questioned the idea of “formal truth”.

necessary, all analytic arguments are necessary as well.¹⁰ This is how we can respond to one of the criticisms that Castañeda (1960), among the others, made to Toulmin's proposal.

Finally, we should also introduce a distinction between valid and invalid arguments. However, at this point we have to take into account that in *The Uses of Argument* Toulmin does not address directly the question of the evaluation of arguments; he just offers some guidelines that can be derived from his ideas concerning probability and from his model of argument. For their part, many interpreters focused on his conception of the *field* of an argument and the idea that each field provides different standards for evaluating arguments. I argued against this approach in Bermejo-Luque (2006b). Following our proposed conception of arguments and the above model of argumentation, I would rather offer the following definition of the validity of argument: an argument is valid if its warrant is semantically correct.

As I mentioned above, I think of the warrant of an act of arguing as an implicit conditional claim. This claim is an associated conditional whose antecedent is the reason of an act of arguing, and whose consequent is its target claim. In Bermejo-Luque (2006b), I proposed a semantic account of this conditional as a material conditional. As D. Hitchcock (2007) indicated, such a view is open to apparent paradoxes: on this account, an argument like “this is my hand, therefore the Moon is not made of cheese” would seem to be valid, because its warrant, “if this is my hand, then moon is not made of cheese”, understood as a material conditional, is true. I defended myself against this criticism in Bermejo-Luque (2007), where I appealed to Grice's distinction between the semantics and pragmatics of conditionals. In my view, such a warrant is erroneous not because of its semantic properties, but because of its pragmatic properties. As H. P. Grice argued in “Indicative Conditionals” (1989), the reason why – under general circumstances – we should not put forward a material conditional when we try to say that its antecedent is false is that merely putting forward the negation of the antecedent expresses the same meaning in a simpler manner. The case is similar when we try to say that its consequent is true. Thus, if we just mean that the premise is false or that the conclusion is true, putting forward the warrant implicitly – i.e. an indicative conditional – would amount to

¹⁰ If we assume the Quinean thesis that the only type of analytic propositions are the logical ones, we may come to believe that the only possible type of analytic arguments are the formal ones, as defined above – more precisely, formal, first-order classical arguments, in Quine's view. But this is neither Toulmin's view, nor mine. I think we can distinguish between formally valid and analytic arguments by considering “formal” truths as a sub-set of “analytic” truths: an argument like “this is red, therefore it has a colour” would be analytic but not formally valid.

a violation of the Maxim of Quantity. And this is something we would not be allowed to do, according to our model. For in it a warrant is first of all a certain (implicit) assertion; thus, as any other statement, it has not only semantic but also pragmatic conditions of correctness.

On this account, warrants are meant to authorize an inference from reasons to conclusions, and in being semantically correct, they actually do so. Because they are assertions – i.e. contents put forward with a certain degree of assertive force – they may be qualified by as many types of qualifiers as any other statement. Actually, it would be the qualifier that corresponds to the warrant of our argument, what would entitle us to draw our conclusions “necessarily”, “probably”, “tentatively”, “possibly”, etc. This way, a *valid argument* – understood as a semantic notion – would be an argument whose warrant is semantically correct. That is to say: the qualifier that actually corresponds to this conditional assertion is the one that has been used for drawing the conclusion in the act of arguing. Alternatively, we may also preserve the traditional connotation of the concept of validity, according to which an argument is valid if, and only if, its conclusion “follows” from its premises. In this case we would have to say that an act of arguing is valid if, and only if, its warrant is semantically and pragmatically correct. But we will have to keep in mind that this type of validity is no longer a merely semantic notion, and therefore that it is not a property of arguments, but of argumentation.¹¹

In any case, arguments like “Every observed raven is black, and if every observed raven is black, then every raven is black; therefore (necessarily) every raven is black” or “every observed raven is black; therefore (likely) every raven is black” would both be valid, whereas arguments like “Every observed raven is black, and if every observed raven is black, then every raven is black; therefore (likely) every raven is black” or “every observed raven is black; therefore (necessarily) every raven is black” would both be invalid.

7. Conclusions

Following Austin’s analysis, Toulmin contends that claims to knowledge have the effect of making the speaker answerable to the reliability of her

¹¹ This is the conception of validity which I defended in Bermejo-Luque (2007), following Hitchcock’s intuition, claiming that the expression “So” stands for the concept of validity which we use in arguing.

assertions. He says that when we ask ‘how do you know that p ?’ we are, in principle, raising a logical question, namely, a question about the reasons which support p . For sure, we can also ask for an explanation of the process by means of which a given subject came to believe that p . But such a question would not imply to acknowledge that p is true. Rather, it would be just a question about a subject’s biography. As Toulmin points out, both questions can be appropriate, depending on the context; and in certain contexts, a report of the way the subject came to believe something may also count as an elicitation of the reasons which support the belief.

However, in most cases claims to knowledge work as modal qualifications of our assertions. When I say “I know that p ”, I am not only saying something about my beliefs, but I am also committing myself to the idea that p is true. When my claim is challenged, I am normally asked to produce grounds to establish that p is true – rather than being merely asked to explain how I came to believe that p . As far as claiming to know that p involves claiming that p is true, epistemology would be concerned with conditions for claiming that p is true. In this way, as it should be obvious by now, the conception of justification endorsed by Toulmin is not that of the additional condition that only true beliefs must fulfill in order to become “proper” knowledge. Rather, he would be thinking of justification as a normative outcome of argumentation, i.e. as a sort of property that good arguments confer to their target claims. This is why, in Toulmin’s view, epistemology would be concerned with the appraisal of arguments: its business is to determine the rationality of our claims to knowledge. The set of criteria that we need in order to determine the value of our arguments would paradigmatically determine, among other things, the cogency of our claims to knowledge. In Toulmin’s words, “the logical criticism of claims to knowledge is a special case of practical argument-criticism – namely, its most stringent form” (1958, p. 218).

The conception of justification here proposed is slightly different from that proposed by Toulmin. If we think of ‘justification’ as the output of good argumentation, it makes all the difference which conception of argumentation do we endorse. For us, argumentation is, first of all, a communicative activity, an attempt at showing a target claim to be semantically correct. By arguing, we put forward a claim – i.e. we present certain content with a certain degree of assertive force – and by arguing well, we justify that claim. On this account, justifying is in turn a certain sort of successful communicative activity, and therefore it has not only semantic but also pragmatic conditions of correctness. For an act of arguing to be a good one – i.e. an act of justifying, an object with semantic and pragmatic properties

– it has to fulfill both semantic and pragmatic conditions of correctness. In particular, all its elements have to be semantically and pragmatically correct: the warrant – so that the argumentation is valid, the reasons and the argumentative speech act, as a whole. In Bermejo-Luque (2008b) I dealt with these pragmatic conditions by adopting Grice’s Cooperative Principle and its maxims as regulative for argumentation. On this account, certain argumentative fallacies would be violations of these maxims as pragmatic conditions for showing a target claim to be correct. Thus, for a piece of argumentation to be good, it will not be sufficient that it is deductively valid, as most argumentation theorists are willing to claim nowadays.¹²

In the light of this proposal, we can determine now what was wrong in the deductivist ideal of justification, namely its assumption that the only kind of valid arguments are those whose warrants are necessary, a priori, analytic truths. This could explain why, in the view of authors like Hume, for an argument like “every observed raven is black, therefore every raven is black” to be a good one, we had to presuppose something like “if every observed raven is black, then every raven is black”: if we add such a premise to the original argument, the new argument is a formally valid argument, its warrant being the formal truth “if every observed raven is black and, if every observed raven is black, then every raven is black, then every raven is black”. Certainly this conditional is true not because of the things that are true of the world, but because of the meanings of the logical terms involved – i.e. it is a particular case of necessary and analytic argument.

In contrast, in our account, requiring this type of validity would be misleading: the only semantic property that is needed for an act of arguing to justify its conclusion is that its reasons and warrant are semantically correct. We do not need the warrant being a necessary truth, be it formal or not. This is the way we put ourselves in a condition which allow us to avoid the problem of circularity Hume worried about: in order to infer that every raven is black because every observed raven is black we do not presuppose that if every observed raven is black, then every raven is black. What we do is to implicitly say so: that is precisely the meaning of our implicit inference-claim, i.e. the warrant of our act of arguing. And if we are right, if this conditional is true, by inferring in this way we are in a condition to justify our claim that every raven is black. For sure, we may also need to determine whether this conditional is true. But this is not something we need “in order

¹² See, for example, T. Govier (1995).

to justify” that every raven is black by adducing that every observed raven is black. We need it in order to determine whether this act of arguing is a good one, i.e. whether it indeed justifies its conclusion. But determining justification is not the same as justifying: a claim may be justified whether or not we can determine that it is. And, at any rate, we may try to determine whether a given warrant is true by further considering the reasons that we have for thinking that it is, i.e the reasons that eventually would justify it.

Once we abandon deductivism, what determines justification is not the inevitability of a conclusion, given premises, but the nature of the case at stake. For sure, an argument having a necessary truth as a warrant will guarantee not only that its conclusion is true, but also that it necessarily has to be true, if the reason is true. Formal truths, if we think of them as necessary, are capable of playing this role. But turning substantial arguments into formally valid ones by adding their warrants as premises is just a trespass of the question of the goodness of the argument upon the question of the truth of its premises. And as I argued above, this is not only a useless strategy, but it is also illegitimate, as it perverts interpretation of the original act of arguing. Moreover, it may preclude us from appreciating the source of its eventual validity. And the worse is that it poses a standard of justification that cannot be reached by many good arguments, on pain of circularity.

References

- Bermejo-Luque, L. (2006a), ‘The normativity of argumentation as a justificatory and as a persuasive device’, in F. H. van Eemeren, M. D. Hazen, P. Houtlosser, D. C. Williams, eds., *Contemporary Perspectives on Argumentation*, Sic Sat, Amsterdam, pp. 47–67.
- Bermejo-Luque, L. (2006b), ‘Toulmin’s model of argument and the question of relativism’, in D. Hitchcock and B. Verheij, eds., *Arguing on the Toulmin’s Model: New essays in argument analysis and evaluation*, Kluwer Academic Publishers, Dordrecht, pp. 71–87.
- Bermejo-Luque, L. (2007), ‘Response to Hitchcock’, in H. V. Hansen, C. W. Tindale, J. A. Blair, R. H. Johnson, D. M. Godden, eds., *Dissensus and the Search for Common Ground. Proceedings of the Seventh OSSA Conference on Argumentation*, CD-ROM, Windsor, ON.
- Bermejo-Luque, L. (2008a), ‘Logic as (normative) inference theory: formal vs. non-formal theories of inference goodness’, *Informal Logic* 28/IV, 315-334.

- Bermejo-Luque, L. (2008b), 'Intrinsic vs. instrumental values of argumentation. The rhetorical dimension of argumentation', *Argumentation* (in press).
- Bermejo-Luque, L. (2009), 'Argumentation as a second order speech act complex' (to appear).
- Brandom, R. B. (2000), *Articulating Reasons. An introduction to Inferentialism*, Harvard University Press, Cambridge.
- Castañeda, H. N. (1960), 'On a proposed revolution in logic', *Philosophy of Science* 27, 279–292.
- Carroll, L. (1895), 'What the Tortoise said to Achilles', *Mind* 4, 278–280.
- Govier, T. (1995), 'Reply to Massey', in H. V. Hansen, R. C. Pinto, eds., *Fallacies: Classical and Contemporary Readings*, The Pennsylvania State University Press, Pennsylvania, pp. 172–180.
- Grennan, W. (1997), *Informal Logic: Issues and Approaches*, McGill-Queen's University Press, Montreal.
- Grice, H. P. (1989), 'Indicative conditionals', in *Studies in the Way of Words* (Ch. 4), Harvard University Press, Cambridge, Mass., pp. 58–85.
- Hitchcock, D. (2007), 'So', in H. V. Hansen, C. W. Tindale, J. A. Blair, R. H. Johnson, D. M. Godden, eds., *Dissensus and the Search for Common Ground. Proceedings of the Seventh OSSA Conference on Argumentation*, CD-ROM, Windsor, ON.
- Hume, D. (1739), *A Treatise on Human Nature*, P. H. Nidditch, ed. (1978), Oxford University Press, Oxford.
- Manicas, P. (1969), 'On Toulmin's contribution to logic and argumentation', *Journal of the American Forensic Association* 6, 1–11.
- Stove, D. C. (1986), *The Rationality of Induction*, Clarendon Press, Oxford.
- Toulmin, S. E. (1958), *The Uses of Argument*, Cambridge University Press, Cambridge.

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