

Toulmin's Model of Argument and the Question of Relativism

LILIAN BERMEJO-LUQUE *University of Murcia*

Abstract: In *The Uses of Argument*, Toulmin proposed a distinction between field-dependent and field-invariant standards for argument appraisal that gave rise to a relativistic understanding of his theory. The main goal of this paper is to show that epistemological relativism is not a necessary consequence of Toulmin's model of argument. To this end, I will analyze the role that fields are to play within this model, given a certain conception of one of its key elements: the warrant of an argument.

Résumé: Dans *The Uses of Argument*, Toulmin propose une distinction entre les critères d'évaluation d'arguments qui s'appliquent à seulement un domaine et ceux qui s'appliquent à divers domaines. Cette distinction semblerait mener à une compréhension relativiste de sa théorie. Le but de cet article est de montrer que ce sa théorie d'argument n'implique pas nécessairement un relativisme épistémologique. Avec cet objectif en vue, j'analyse le rôle que sa notion de domaine joue dans sa théorie en me basant sur une certaine conception de loi de passage des prémisses à leur conclusion, une loi qui constitue un élément central de sa théorie.

Keywords: Toulmin's model of argument, relativism, argument fields, warrants, inference licenses, deductivism.

Toulmin's Model of Argument

According to Toulmin, every argument is composed of a *claim*, the *reason*¹ for that claim and the *warrant* that licenses the step from this reason to that claim. In principle, this is the simplest form of argument. But Toulmin observes that in everyday arguments, we can also distinguish three more elements: *backings*, *rebuttals* and *modal qualifiers*. Backings are defined as "other assurances" that stand "behind our warrants" (1958: 103). And rebuttals are "circumstances in which the general authority of the warrant would have to be set aside" (1958: 101).

About modal qualifiers, Toulmin says that they are "an explicit reference to the degree of force which our data confer on our claim in virtue of our warrant" (1958: 101). Although he observes that many arguments do not contain this explicit reference, this should not prevent him from holding that such a reference must be present, at least implicitly, for something to be an argument. Actually, following Toulmin's considerations about logic and their consequences for his non-deductivist

conception of justification, we can take it that, in his model, to argue is to try to establish the modality of a claim. Consequently, despite the fact that Toulmin is not directly concerned with this question, we may say that to evaluate an argument would be to determine which modal qualification is appropriate for the claim, given the reason adduced for it, or whether the modal qualification provided by the arguer is correct or not.

In order to determine the appropriateness of a modal qualification, we should first determine the meaning of the corresponding modal terms. Indeed, this is Toulmin's first goal in *The Uses of Argument*: in its very first pages, he analyses the meaning of 'impossible' by attending to the different uses of expressions like 'cannot'; and he concludes that all of them can be reduced to the following pattern: "P being what it is, you must rule out anything involving Q: to do otherwise would be R, and would invite S" (1958: 29).²

Observing this pattern, Toulmin distinguishes two aspects of the meaning of modal terms: the force and the criteria of their use. The force of a modal term is the practical implications of its use (1958: 30), and it is field-invariant: for example, whenever we say that something is 'possible' we pragmatically mean that it is worth considering. Following Toulmin's conception, we obtain the result that these pragmatic consequences of modal terms are normative because they *cannot* be avoided: that is, to say that something is possible and then not to take it into account is performatively inconsistent, and this is something to rule out when we try to make accessible our verbal behaviour to others. According to his notion of the meaning of 'impossible', we would say: "pragmatic conditions for the use of modal expressions being what they are, you must rule out anything involving their violation; to do otherwise would be to attribute/commit a performative inconsistency and that may render incomprehensible your/other's verbal behaviour".

On the other hand, the criteria for the use of a modal term are "... the reasons by reference to which we decide in any context that the use of a particular modal term is appropriate" (1958: 30). These criteria determine the meaning of modal terms as much as the pragmatic consequences of their use. But they do that by accomplishing the qualification that modal terms are able to bear. In Toulmin's view, things are not impossible, possible, necessary, probable, etc. *simpliciter*, but they are morally, pragmatically, legally, economically, linguistically, logically, etc. impossible, possible, necessary, probable, etc. Because of that, the criteria for the use of modal terms are field-dependent.

The Relativistic Reading of Toulmin's Model

But the idea of field-dependency has often given rise to a relativist reading of Toulmin's proposal. In this reading, the nature of fields and their role in argument appraisal is at the core. Indeed, the very notion of field appears as a matter of controversy. For example, Schroeder (1997) argues that there exists a "general tendency towards relativism within the Toulmin approach", and he characterises fields as follows:

(T)he concept of argument fields (...) refers to the modes used by a person to assess arguments, the standards of reference to which a person assesses them, and the manner in which a person qualifies her or his conclusions about them. (Schroeder 1997: 98).

Burleson (1979) says that fields provide the *substantive context* of an argument, which:

either implicitly or explicitly, provides the criteria against which the merits of an argument should be evaluated. Each language-game is a locus of communally shared and tested standards of intelligibility, truth, sincerity and correctness—the components of rationality which all good arguments must meet. (1979:147).

For Klumpp (1981), fields are subject matter and they determine what types of data can be used to support a claim. And Zarefsky (1982) considers that “(Toulmin) proposed that, for any given field, there are accepted standards for judging the worth of arguments” (1982: 191).³

The view that fields provide standards for argument appraisal is tied, at least, to a moderate epistemological relativism: the justificatory power of arguments becomes a property to be decided “intra-fields”. But authors like Willard⁴ have extracted deeper relativistic consequences from this idea. In “Argument Fields and Theories of Logical Types”, Willard argues that we should conceive fields as “sociological entities” if we do not want to make them “redundant to studies of language and logic” (1981: 137). In his view, justification is a set of different practices belonging to fields as sociological entities (1981: 141). These sociological entities provide their own standards for the practice of argumentation, but these very standards cannot be further justified: they stand at the basis of any protocol of argumentation within a given practice. Rather, they are “conventions” that hold for those particular fields and their argumentative practices. Consequently, in “Argument Fields”, he proposes “an embryonic theory of argument fields” as the cornerstone of a wider proposal on argumentation theory as a merely explicative endeavour (1981: 75).

Let me remind the reader at this point that in *The Uses of Argument*, Toulmin’s interest is in the way “we actually assess the soundness, strength and conclusiveness of arguments” (1958:1). At the end of this paper, I will try to show that there is a sense of “field” related to the rhetorical dimension of argumentation that should play a role in Argumentation Theory. But in arguing against the alleged relativistic consequences of Toulmin’s model, my point is just to show that fields do not provide standards for determining the way “we actually assess the soundness, strength and conclusiveness of arguments”.

But my task is slightly more complicated because the logical and rhetorical dimensions of argumentation are deeply interwoven. If we wish to deal with real, everyday argumentation, we have to be able to interpret certain speech acts as argumentation. The way arguments should be assessed within a given practice would determine the sort of things that counts as attempts at rational persuasion

within a given field. But this is tantamount to determining what counts as argumentation within that field. In that sense, we should observe that the sort of relativism that Willard endorses is the ultimate one because it implies incommensurability. Willard's thesis is not only that "argument goodness" is a property to be decided "intra-fields", but also that the very idea of argument evaluation is pointless: we would have no reason to rule out any argument, for it would always be possible that it belongs to a field whose standards of rationality are alien to us. The point of Argumentation Theory would be just to try to explain these practices of arguing within their corresponding fields.

To be more precise, I think we can distinguish two levels of incommensurability in Willard's conception. On the one hand, as far as standards for justification could only be applied within their corresponding fields, it would be senseless to try to establish their intrinsic value as standards for argument appraisal: to that end, we should produce an argument to be sanctioned either by these very standards or by other standards; in the first case, we would have circularity, in the second, infinite regress. Thus, it would be impossible to compare the quality of the standards of different arguments' fields. As a consequence, for example, we would have no reason to prefer Psychology to Astrology. At this level, incommensurability means incomparability between fields, and also between argumentation belonging to different fields.

On the other hand, Willard also establishes incommensurability as the structural impossibility of deciding on certain arguments: the idea that justification depends on those standards that determine the practice of argumentation within a given field implies that we cannot decide on arguments belonging to fields which are alien to us because their standards are also alien. At this level, incommensurability is not only a thesis about appraisal but also about interpretation, because to be alien to a field's standards for justification is tantamount to being unable to understand its related practices as argumentation.

In what follows, I will try to show that this position is untenable in itself and also that Toulmin's model is not committed to epistemological relativism, but rather it could represent an excellent antidote against it.

Reason, Warrant and Claim as Constitutive Elements of Argumentation

The speech act of arguing: reasons and claims

The normativity involved in our use of the concept 'argumentation' implies that, whatever the field, we distinguish argumentation from other types of speech acts by stressing two main features. First, when we argue we do not merely try to communicate beliefs, but also to induce certain beliefs. Second, that inducement is conducted by means of reasons. Because of that, argumentation is usually defined

as an attempt at rational persuasion, that is, persuasion by means of reasons.⁵ Thus, in order to interpret a piece of discourse as argumentation, we have to recognise, at least, the belief to be induced and the reason by means of which this belief is intended to be induced, whether or not any of them is elicited in the actual performance of the discourse. In this sense, to say that a given discourse is argumentation implies that we already interpret that discourse as instantiating, at least partially, the form “reason, so claim”. We do not “discover” reasons and claims after acknowledging a piece of discourse as argumentation. Rather, we interpret a piece of discourse as argumentation because we interpret it as an attempt at persuading someone of a claim because of a reason. In that sense, reasons and claims are constitutive elements of argumentation. Whenever we take it that two propositions play, respectively, the role of a claim and its reason in a given discourse, we are interpreting that discourse as argumentation.

On the other hand, to acknowledge something as a claim or as a reason only requires being able to acknowledge certain intentional attitudes, namely, claiming and supporting a claim, whether or not this support seems sound to us. Otherwise, we would only be able to acknowledge reasons when they seem good reasons to us. But then, we would only acknowledge arguments when they seem good arguments to us, and the question of relativism would vanish from the very beginning: there would be no argument which is good within one field but bad within another. Therefore, if the relativist does not want to rule out his position so quickly, he must agree that we are able to recognise reasons even in case they are not good reasons. But this means that we recognise reasons and claims, not because of their logical function in argumentation, but rather because of their communicative function in discourse, namely, that of accomplishing the intentional attitudes of claiming and supporting a claim.⁶ As a result, it is not our acquaintance with the field the argument comes from and its standards for justification that enables us to interpret a piece of discourse as argumentation. It is our ability to recognise reasons and claims, in this sense.

But this does not suffice for assuring the possibility of argument appraisal, and this is the other aspect of the relativist challenge. We will need another element that is also constitutive of argumentation and that enables us to explain its justificatory power—the warrant.

A proposed conception of warrants

Toulmin defines warrants as “general, hypothetical statements which can act as bridges (between datum and claim) and authorise the sort of step to which our particular argument commits us” (1958: 98).⁷ In order to distinguish warrants from reasons—something that it is at the core of his proposal—Toulmin also says that reasons “are appealed to explicitly, warrants implicitly” (1958: 100).⁸ So, it seems that generality and implicitness are two key features of warrants.

On the other hand, he says that the difference between warrants and backings is that “statements of warrants (...) are hypothetical, bridge-like statements, but the backings for warrants can be expressed in the form of categorical statements of fact” (1958: 105). But, as Hampl has pointed out, grammatical differences do not necessarily amount to functional ones (1977: 2). Pointing to a functional distinction, Hitchcock explains that “the warrant is the person’s justification for inferring the claim from those grounds. [By contrast] a challenger may ask for justification of the warrant, to which the answer will be a proposed backing for the warrant” (2002: 485).

But I find this attempt at providing a functional distinction between warrants and backings rather problematic: what sort of “justification for our inferences” would provide warrants? It could only be epistemic justification: someone may be morally justified in inferring whatsoever because of his sorrow, but this by no means is a way to warrant his claims. So, if warrants justify the inferences, not the actions of inferring, they should be reasons for the corresponding inference claims. But, if warrants “justify” our inferences in this sense, every argument contains another argument, namely the argument “warrant, so inference claim”. But then, we would need a new warrant to justify our inference from our warrant-reason-for-the-inference to our inference claim, and this warrant would be another reason with a new warrant to bridge the new gap, and so on. Thus, we would never be entitled to infer a claim from a reason if warrants, as bridges between reason and claim, should bridge the gap as justifications for our inferences. Actually, why should any justification of the inference, as an inference rule or as a general statement, stand necessarily implicit in arguments?

I am not sure about Toulmin’s own position on this question, for he frequently insists that warrants are general. But he also characterises them as being necessarily implicit and as bridging the gap between reason and claim. Moreover, as I will show below, the idea that warrants are justifications for the inference is a vestige from deductivism, the epistemological position which is at the core of Toulmin’s criticisms in *The Uses of Argument*. In order to give priority to this aspect of his work, I propose to conceive warrants as the corresponding inference claim of each argument; that is, as the particular conditional that licenses the step from a particular reason to a particular claim.

The inference claim is not a justification of the step from reason to claim, but the explicit form of this step. When the inference claim is true (or highly plausible), the argument justifies its claim because of its reason. When we use a warrant, what we do is to infer a claim from a reason.

Following a well-known argument by Carroll (1895), Grennan has shown that inference claims are necessarily implicit in arguments because they cannot be incorporated in it without changing the meaning of the former argument:

[C]onsider an argument utterance symbolised 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: 69)

Contrary to inference claims, general rules do not really bridge the gap between reasons and claims. There are several rules of inference suitable for any given argument. Take Scriven's (1976: 166) well known example: "She's red-haired, so she's probably quick-tempered". As Scriven observes, the general rule "if a person is red-haired, then that person will probably be quick-tempered" is not the only one that could justify the argument's inference: for example, "if a woman is red-haired, then she will probably be quick-tempered" could do it as well. Indeed, there are many more possible candidates: "if someone has something red in his body, then that person will probably be quick-tempered", "if someone belongs to a minority because of the colour of his hair, then that person will probably be quick-tempered", etc. This will depend on the aspect of the reason on which the general rule pivots.

In addition, every rule of inference can have conditions of rebuttal applicable to the particular case stated by the argument. For example, the inference rule "if a woman is red-haired then she will probably be quick-tempered" may fail to justify our inferring that someone is quick-tempered because she is red-haired, if she is not a woman but a baby, or if she is dead, or a calm person, etc.

For both reasons, general rules are not direct licenses to obtain the claim from the reason. Rather, they behave as reasons for inference claims.⁹ When they are good reasons, they justify the inference, but they are not "bridges", in the sense inference claims are.

As inference claims, warrants are not only necessarily implicit, but they are also constitutive of arguments. Thus, having a warrant is not a property just of good arguments: every argument has a warrant as far as every argument patterns the form "reason, so claim". The difference between good and bad arguments is not that good arguments have warrants, but rather that good arguments have warrants that are true, or highly plausible, whereas bad arguments have false or lowly plausible warrants and/or reasons. Thus, the truth-values of reason and warrant determine the truth-value of the claim. And this value determines not only the general value of the argument but also which modal term is appropriate for the claim, given the reason. This reason provides the criteria for the use of that modal term, whereas the force of this modal term provides the pragmatic role of the claim within its context.

A Vestige of Deductivism

As mentioned above, my main reason to favour a conception of warrants as inference claims is to be faithful to Toulmin's goal of fighting deductivism. Why

do we need justification for our inferences? The obvious answer is that we need it in case they are challenged, and this answer is perfectly sound. By contrast, the idea that good arguments need justified inferences is a vestige from deductivism. Within this epistemological model, to justify a given proposition is not only to show that this proposition is true because of a given reason, but to show that this proposition will always be true, if the reason is true. This demand is accomplished by demanding a necessary true inference claim, usually an inference claim that it is true in virtue of its form. Accordingly, cogent non-valid arguments were supposed to have implicit premises that would render them valid; usually, formally valid, in virtue of a self-evident true inference claim like *modus ponens*, or the like.

The abandonment of deductivism meant to not demand necessarily true inference claims. Still we might think that our claims are not sufficiently justified if our inference claims are not themselves justified. But the truth is that in order to justify our claims, we need neither our inference claims to be necessary, nor to be justified. We just need them to be true, or highly plausible. The inference claim is what enables us to pass from reason to claim; if it is true, or highly plausible, the claim is justified because of the reason. Second-level justification may be desirable in certain cases, but it does not preserve us from falsity, because we can always demand third-level justification, fourth-level justification, and so on. Moreover, because deductivism just postpones the problem: it leaves open the question of determining the truth-value of the inference, whether we take it to be a warrant or a missing premise.

Fields as Providers of Truth-Values

According to the view proposed, reason, claim and warrant are constitutive of argumentation, and the justificatory power of arguments depends on the truth-values of their reasons and warrants. All that we need in order to appraise an argument is to determine these truth-values.

Our acquaintance with an argument's field may make the task of determining certain propositions' truth values much easier. For example, if we are physicians, it may be easier to determine the truth value of P: "Inherited mutations in the bone morphogenetic protein receptor 2 gene are associated with primary pulmonary hypertension".¹⁰ But there is no structural impossibility for a non-physician to decide on this proposition. The non-physician will probably find it more difficult to determine its truth-value, he will need some more information, new arguments, explanations or whatever. But these all are available because they are the means by which others—for example, certain physicians—came to know that P is true.

In any case, 'difficulty' is not 'structural impossibility', rather the opposite: only that which is possible can be difficult to get. The field of medicine provides the truth-values of certain propositions, but it does not provide standards for argumentation whatsoever. The non-physician is not in need of standards that he cannot achieve because he is alien to the field; he is only in need of information.

Thus, strong relativism, which conceives fields as providers of standards for justification, and thus, is committed to incommensurability as the structural impossibility of deciding on certain arguments, loses its ground.

In *Human Understanding*, Toulmin considers fields as rational enterprises, or more specifically, as intellectual disciplines. Consequently, in his view, there would be arguments that do not belong to any field, namely, those which stand outside of what we may call a proper "intellectual discipline". In this conception of fields, they constitute sets of propositions with an ascription of truth-values. The truth-value attributed to each proposition can be either the result of the corresponding arguments, or a matter of stipulations, axioms or primitives of the field.

The Rhetorical Role of Fields Within Argumentation Theory

Consider Wenzel's view: "A field of argument is an integrated complex of concepts, propositions and arguments, persisting over time, directed to shared explanatory goals, embodying shared judgmental standards, held consensually by initiates of a discipline" (1982: 211). Obviously, not every argument has a field in this sense. Thus, according to this conception, fields could not determine the standards for argument evaluation; otherwise those arguments without a field could not be appraised.

We can say that arguments belong to fields as far as fields are subject matter, intellectual disciplines, or, in general, systems of propositions. Because of that, fields accomplish a rhetorical role in Argumentation Theory. That role works at two levels. The first level has to do with the determination of the persuasive power of arguments. In this respect, to ascribe a given argument to a certain field enables its appraisal according the truth-values that the audience normally addressed by that field would ascribe to its reason and inference claim. For example, if we are interested in the effectiveness or suitability of a given argument for a particular audience, namely, the normal audience of a given field, it might be useful to appraise this argument according to the beliefs commonly held by that audience. These beliefs will likely be accessible by reference to the things the field, as a system of propositions with a given ascription of truth-values, has established.

Consequently, when someone determines that a given argument belongs to a given field, this very ascription usually determines the truth-values that she attributes to the propositions involved in the argument. In those cases, the field behaves as the matrix in which the question of further justifications is addressed, and where these questions are supposed to be solved—either at the present, or in the future. This does not mean that the field provides standards for the argument because, if that person did not ascribe the argument to any field, or if the very field were in question, she would have to determine the truth-values of the propositions involved by her own means. Thus, she would only lack a given ascription of truth-values, not standards to appraise the argument. This aspect of fields as providers of truth-

values would explain Zarefsky's observation that "scientists might dismiss certain data or claims as unscientific while another discipline might embrace the very same data and claims" (1982: 195). This disagreement does not point to a set of different standards for argument evaluation, but only to a disagreement about the truth-value of our reasons and warrants.

The second level of the rhetorical role of fields within Argumentation Theory is a heuristic one. In this respect, to ascribe a given argument to a given field enables a better understanding of the argument itself. It especially enables us to understand which are its real claims and reasons: it is much easier to determine what is going on if we realise that, for example, a certain debate about medical practices is not legal but moral. The reason is that many terms, like 'good' or 'advisable', do also have force and criteria of use. And these criteria, that is, the reasons that justify our use of such terms, vary according to the field: something might be advisable for legal reasons, but not for moral ones. In certain circumstances it may be advantageous to pretend that a given reason has moral consequences when, in fact, it just has legal ones. Goodnight (1982) faces the strategic importance of appointing a piece of discourse to a given field. This effect may be the consequence of two causes. On the one hand, that when we determine that a given argument belongs to a given field, we point at the way we should understand it. On the other hand, that such an ascription also determine the alleged audience that is supposed to evaluate it.

Conclusion

Toulmin's distinction between the force and the criteria of use of modal terms just points out the idea that in order to determine that a claim is morally plausible, we have to give reasons belonging to the field of morals, whereas in order to determine that a claim is mathematically impossible, we have to give reasons belonging to mathematics. The criteria that determine the use of a modal term vary from field to field, but this does not mean that each field provides its own standards for argument appraisal, nor does it mean that fields are incommensurable sets of standards for rationality. Rather, it means that the reasons that support our modally qualified claims may belong to fields as established sets of propositions with an ascription of truth-values. But such reasons are always to be justified by new arguments. Indeed, whichever the field, it is both our duty and our inclination as rational beings to do so.¹¹

Notes

¹ What I call "reasons" were named "data" in Toulmin, (1958), and "ground", in Toulmin, Rieke and Janik. (1979).

² Toulmin remarks that this kind of pragmatic definition of modal terms does not stand for an ontological characterisation, but rather for a functional one. Actually, Toulmin thinks that it is senseless to try to develop ontological characterisations of modal terms because their only role in language is just to qualify our assertions, given the "strength of the backing which we have for the assertion, evaluation or whatever" (1958: 90).

³ That interest in argument fields is alien to *The Uses of Argument*. There, Toulmin is hardly concerned with a proper characterisation of the concept, rather he seems to use it in a loose way. This should have induced at least some doubts on those who take fields as the cornerstone of argument appraisal: if this concept were intended to have such an important role, the author that introduced it would have been more concerned with its definition and the way fields manage to provide those standards. On the contrary, in *The Uses of Argument*, the clearest account of fields is the following definition: "Two arguments will be said to belong to the same field when the data and conclusions in each of the two arguments are, respectively, of the same logical type: they will be said to come from different fields when the backing or the conclusions in each of the two arguments are not of the same logical type" (1958: 14). This definition could lead us to believe that fields are "logical types", but according to Toulmin's examples, we should understand that Euclid's *Elements*, statistical reports about the Swedes, or the Nautical Almanac constitute logical types, and this is such a peculiar concept of "logical type" that it is not of great help in shedding light on the concept of field and its role for argument appraisal.

⁴ Willard, C. A. (1983) *Argumentation and the Social Grounds of Knowledge*.

⁵ In Bermejo-Luque, L. (2004) I have argued that this is the only intelligible meaning of "rational persuasion".

⁶ In F. Snoeck-Henkemans (2002) and P. Houtlosser (2002), there are interesting analyses of the ways English speakers can perform/recognise intentions of claiming and supporting a claim. These works are part of a research project on argumentative indicators carried out by these authors and Professor F. van Eemeren.

⁷ Toulmin says that warrants can be written as the corresponding conditional of every argument that renders it formally valid, but he considers that the proper way to make them explicit is: "Data such as D entitle one to draw conclusions, or make claims, such as C" (1958: 98). Hitchcock among others has criticised this, writing "Toulmin equivocates on whether a warrant is a statement or a rule", but he considers that "the equivocation is harmless, since a warrant-statement is the verbal expression of a warrant-rule" (2002: 484).

⁸ Hampe (1977: 1) takes the following passage from *The Uses of Argument* in order to show that Toulmin himself would not seem to consider implicitness as an essential feature of warrants: "any argument can be expressed in the form 'Data; warrant; so conclusion' and so become formally valid" (1958: 119). But Hampe's observation does not work: nothing prevents Toulmin from saying that this is a new argument which has another warrant, a formal one as it corresponds to a formally valid argument—namely, *modus ponens*—which is, again, implicit in it.

⁹ That is, they may constitute arguments' backings as much as "categorical statements of fact" because, as Hampe (1977) pointed out, grammatical differences do not necessarily amount to functional ones. Within this picture, the backing, as a reason for the inference claim, can be either a general rule or a categorical statement of fact, and it is required when the inference itself is challenged.

¹⁰ This proposition may justify inference claims like "if John has a mutation in the bone morphogenetic protein receptor 2 gene, then he will probably develop pulmonary hypertension."

¹¹ The work presented in this paper has been financially supported by a fellowship of the Spanish Ministry of Education and Science, FPU program AP2002-1373.

References

- Bermejo-Luque, Lilian (2004). "Rhetorical criteria for argument evaluation?" in *Proceedings of the 2nd Tokyo Conference on Argumentation and Social Cognition*. Tokyo: Japan Debate Association.
- Burleson, Brant R. (1979). "On the analysis and criticism of arguments: some theoretical and methodological considerations", in *Journal of the American Forensic Association*, 15: 137-147.
- Carroll, Lewis. (1895). "What the Tortoise said to Achilles", in *Mind* 4: 278-80.
- Goodnight, Thomas. (1982). "The personal, technical and public spheres of argument: a speculative inquiry into the art of public deliberation", in *Journal of the American Forensic Association*, 18: 214-227.
- Grennan, Wayne. (1996). *Informal Logic: Issues and Approaches*. Montreal: McGill-Queen's University Press.
- Hample, Dale. (1977). "The Toulmin model and the syllogism", in *Journal of the American Forensic Association*, 14: 1-9.
- Hitchcock, David (2002). "Toulmin's warrants", in *Proceedings of the fifth International Conference of the International Society for the Study of Argumentation*. Amsterdam: Sic Sat. pp. 485-90.
- Houtlosser, Peter (2002). "Indicators of a point of view", in *Advances in Pragma-dialectics*. Amsterdam: Sic Sat. pp. 169-184.
- Klumpp J. F. (1981). "A dramatistic approach to fields", in Ziegelmüller and Rhodes (eds.) *Dimensions of Argument: Proceedings of the Second Summer Conference on Argumentation*. Annandale, VA: Speech Communication Association, pp. 44-55.
- Rowland, Robert C. (1982). "The influence of purpose on fields of argument", in *Journal of the American Forensic Association*, 18: 228-245.
- Scriven, Michael (1976). *Reasoning*. New York: McGraw-Hill.
- Schroeder, C. (1997). "Knowledge and Power, Logic and Rhetoric, and Other Reflections in the Toulmin Mirror: A Critical Consideration of Stephen Toulmin's Contributions to Composition", in *Journal of Advanced Composition*, 17: 95-107.
- Snoeck-Henkemans, Francisca. (2002). "Clues for reconstructing symptomatic argumentation", in *Advances in Pragma-dialectics*. Amsterdam: Sic Sat. pp. 185-196.
- Toulmin, Stephen E. (1958). *The Uses of Argument*. Cambridge: Cambridge University Press.
- Toulmin, Stephen E. (1972). *Human Understanding: Volume 1: The Collective Use and Evolution of Concepts*. Princeton: Princeton University Press.
- Toulmin, Stephen E., Richard Rieke and Allan Janik. (1979). *An Introduction to Reasoning*. New York: Macmillan.
- Walker, G. B. and DiPaolo Congalton J. (1987). "Generic argument and argument fields", in *Journal of the American Forensic Association*, 23: 125-135.
- Wenzel, Joseph. W. (1982). "On fields of argument as propositional systems", in *Journal of the American Forensic Association*, 18: 204-213.

Willard, Charles Arthur (1981). "Argument Fields and Theories of Logical Types", in *Journal of the American Forensic Association*, 17: 129-145.

Willard Charles Arthur (1982). "Argument Fields", in *Advances in Argumentation Theory and Research*. Cox & Willard, Eds. Carbondale, IL: Southern Illinois University Press.

Willard, Charles Arthur (1983). *Argumentation and the Social Grounds of Knowledge*. University of Alabama Press: Alabama.

Zarefsky, David (1982). "Persistent questions in the theory of argument fields", in *Journal of the American Forensic Association*, 18: 191-203.

*Lilian Bermejo-Luque
Department of Philosophy
University of Murcia
Campus de Espinardo 30071
Murcia, Spain*

lilianbl@um.es