



**UvA-DARE (Digital Academic Repository)**

**A transition stage in the theory of fallacies.**

van Eemeren, F.H.; Grootendorst, R.

*Published in:*  
Journal of Pragmatics

*DOI:*  
[10.1016/0378-2166\(89\)90111-2](https://doi.org/10.1016/0378-2166(89)90111-2)

[Link to publication](#)

*Citation for published version (APA):*

van Eemeren, F. H., & Grootendorst, R. (1989). A transition stage in the theory of fallacies. *Journal of Pragmatics*, 13, 99-109. DOI: 10.1016/0378-2166(89)90111-2

**General rights**

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

**Disclaimer/Complaints regulations**

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <http://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

## REVIEW ARTICLE

### A. TRANSITION STAGE IN THE THEORY OF FALLACIES\*

Frans H. VAN EEMEREN and Rob GROOTENDORST\*\*

*Received July 1988*

#### 1. Introduction

Professor Douglas N. Walton's book *Informal Fallacies* was published in 1987. It is his most recent publication on fallacies, but certainly not his last word on this subject. No doubt, in the future many more books and articles will be added to his already long and impressive list (cf. Woods and Walton (1989)).

In our opinion, *Informal Fallacies* represents an important stage in Walton's work. It also represents an important stage in the development of a fully-fledged theory of fallacies.

Valuable as Walton's contribution to the development of such a theory may be, there is still a long way to go. That is why we think *Informal Fallacies* represents a transition stage in the theory of fallacies. We will indicate what direction we think this development should take and what role Walton's approach can play in furthering this.<sup>1</sup>

#### 2. Problems with the Standard Treatment

Thanks to Hamblin's book *Fallacies* (1970), one may take it by now to be common knowledge that the so-called Standard Treatment of fallacies suffers from serious theoretical and practical defects. So a brief reminder will do.

According to the standard definition, a fallacy is an argument that 'seems to be valid but is not so' (Hamblin (1970: 12)). Many instances of generally recognized fallacies, however, clearly fall outside the scope of this definition.

\* Review of: Douglas N. Walton, *Informal fallacies. Towards a theory of argument criticisms. Pragmatics and Beyond Companion Series, 4, 1987. Amsterdam/Philadelphia: John Benjamins.*

\*\* Authors' address: F.H. van Eemeren and R. Grootendorst, Instituut voor Neerlandistiek, Universiteit van Amsterdam, Spuistraat 134, 1012 VB Amsterdam, The Netherlands.

<sup>1</sup> We thank John Woods for his useful comments on an earlier version of this paper. We have profited from his remarks, but as he will have expected, we have not adopted all his views.

In some cases there is not the slightest question of their being *arguments* (for example the fallacy of *many questions* and the *argumentum ad baculum*). In other cases, logically speaking, the argument concerned is not *invalid* at all (as in *circular reasoning* or *petitio principii* or *begging the question*). In still other cases (as in *argumentum ad verecundiam* and *argumentum ad populum*) it would be highly overdoing things if one looked for the error in the invalidity of the argument.

Though Hamblin's devastating criticism of the Standard Treatment has not seemed to worry writers of some textbooks, it elicited strong and divergent reactions from others.<sup>2</sup>

At one end of the spectrum there are people like Lambert and Ulrich who want to banish fallacies until further notice as a subject from logic textbooks (1980: 28). At the other end there are people who are in favour of a more positive appreciation of fallacies. They claim, for example, that *tu quoque* (Gerber (1974)), *slippery slope* (Govier (1982)), or *composition and division* (Broyles (1975)) need not always be condemned as malpractices, but can be perfectly legitimate arguments.

The radical exclusion of the topic of fallacies from textbooks seems to us an over-reaction to the flaws of the Standard Treatment. It carries the danger that in the end the study of fallacies will totally disappear from systematic intellectual scrutiny, and that would be a big loss.

Referring to mitigating circumstances which make a fallacy no fallacy after all, however, does not solve anything. This only creates new and serious problems. One of these problems is that the detection and identification of fallacies becomes very much *ad hoc*: Each case has to be examined on its own merits. In this way it becomes extremely difficult, if not impossible, to draw up general criteria for distinguishing between fallacious and non-fallacious arguments. As a consequence, it will be difficult to develop a workable method for analyzing fallacies. And, even more seriously, an adequate theory of fallacies is then out of the question.

### 3. Woods and Walton's logical analysis

The work of John Woods and Douglas Walton provides a more constructive reaction to Hamblin's criticism of the Standard Treatment than the reactions we have just discussed. Right after the publication of *Fallacies* Woods and Walton took up the challenge laid down in Hamblin's book. They made it their task to improve the poor condition of the study of fallacies. Their efforts

<sup>2</sup> A critical survey of the reactions to Hamblin's criticism of the Standard Treatment is presented in Grootendorst (1987).

have resulted in many articles on the various fallacies of the standard list.<sup>3</sup> The theoretical insights developed in these articles are summarized and put to practice in their textbook *Argument: The Logic of the Fallacies* (1982).

Woods and Walton's point of departure in *Argument: The Logic of the Fallacies* is their belief that the Standard Treatment fails to work because it only uses classical syllogistic logic, propositional logic and predicate logic. In their opinion, the remedy could be to call on other, non-classical, logics. Woods and Walton try to show that in many cases it *is* possible to give a satisfactory analysis of fallacies.

The systematic exploration of advanced logical systems in order to analyze fallacies is characteristic of Woods and Walton's approach. In *Argument: The Logic of the Fallacies*, for example, they use inductive logic for the analysis of the fallacies of *secundum quid* and *post hoc ergo propter hoc*. For the analysis of *argumentum ad verecundiam*, they use the logic of plausible reasoning, for the analysis of *many questions* and *petitio principii*, dialectical game theory, and for the analysis of *ignoratio elenchi*, relatedness logic. Apart from these, they discuss the usefulness of epistemic, doxastic, and modal logics for clarifying a number of other fallacies.

This approach amounts to applying an appropriate logical system in analyzing a particular fallacy. Every fallacy needs, so to speak, its own logic. For practical purposes this approach is not very realistic. In order to be able to carry out the analyses, a considerable amount of logical knowledge is required. It seems like asking too much of an ordinary language user if one expects him to learn a new logic each time when he wishes to analyze a different fallacy.<sup>4</sup>

There are also some theoretical disadvantages inherent to this approach. By relying on so many different logical systems, one only gets fragmentary descriptions of the various fallacies, and no overall picture of the domain of the fallacies as a whole. No doubt, the fallacies constitute a heterogeneous category, but this need not automatically mean that they can only be analyzed by means of varying theoretical instruments. Ideally, one unified theory that is capable of dealing with all the different phenomena, is to be preferred. Perhaps this proves to be more than we can achieve, but it is at least worth trying. Up to *Argument: The Logic of the Fallacies*, Woods and Walton have not systematically taken this direction: their logical approach has basically been kaleidoscopic.

<sup>3</sup> The main articles of Woods and Walton are included in their *Collected Papers*. Cf. also Walton (1987).

<sup>4</sup> Unlike quantum theory, the theory of fallacies should have practical applications which are, directly or indirectly, accessible to ordinary language users (after appropriate instruction). Otherwise, the theory of fallacies, as it has traditionally been envisaged, misses its point.

#### 4. Walton's *Informal Fallacies*: A turning-point

Walton's book *Informal Fallacies* (1987) marks a radical breakthrough in the one-sided logical approach to fallacies. Right from the start, Walton makes it clear that the scope of the book is not restricted to the logical validity or invalidity of arguments. Instead, he deals with the broader problem of the evaluation of 'realistic arguments in natural language'. He wants to answer the question "how to criticize an argument, and when a criticism is reasonably justified" (p. 1). Hence the subtitle of the book: *Towards a Theory of Argument Criticisms*.

Throughout the book Walton repeatedly points out that in criticizing arguments, formal logic doesn't have the only and final say. The same goes for the analysis of fallacies: "The theory of the fallacies is not, at any rate exclusively, to be found in formal logic" (p. 96). In order to find a solution to the problems involved in analyzing fallacies, Walton turns to *dialectic* and *pragmatics*.

In the first chapter he announces that he will concentrate on "the dialectical model" because it is "paradigmatically central" (p. 3). In the final chapter (chapter 11) he concludes that the dialectical model "offers the most promising vehicle for the future study of argumentation and fallacies". On the very last page of the book he says that it "is the most appropriate theoretical model for rational disputation" (pp. 294, 322).

According to Walton, the study of criticism of everyday arguments falls under the subject of "applied" or "informal logic". Therefore, he describes his project as "a kind of theoretical linguistic investigation in the field now called the pragmatics of discourse" (p. 1). Again on the very last page of his book, he emphasizes that pragmatics should be "taken more seriously by all who profess an interest in our commitment to informal logic" (p. 322).

What exactly does Walton mean by dialectic and by pragmatics? Dialectic is defined by him as the study of "a logical game of dialogue, a verbal sequence of question-answer moves where the objective of each player is to prove a thesis to the other" (p. 3). What this entails becomes clear in chapter 4, where Walton discusses the logical dialogue-games of Hamblin (1970), Hintikka (1976), Kamlah and Lorenzen (1973) and other members of the Erlangen School (Lorenz, Schwemmer) at length.

What he means by pragmatics is less clear, especially in relation to the study of argumentation and fallacies. In chapter 3 he says that pragmatics is concerned with "where the premisses came from", "whose premisses they are in the argument", "where the conclusion came from", "its relation to the issue", and "certain relationships between premisses and conclusion, comprising the general direction and flow of the over-all argument as a chain of sub-arguments in a sequence of replies to questions" (p. 89). This is still pretty vague. In the final chapter (chapter 11) he adds that "pragmatics has to do

with conversations and other interpersonal processes that find their medium in the continuity of discourses on issues or topics of dialogue" (p. 294). This is hardly helpful.

Fortunately, it becomes clearer what Walton means by pragmatics when he discusses the relationship between semantics and pragmatics with regard to argumentation. According to him, "pragmatics is built around semantics and is an extension of it" (p. 90). As the basic concepts of semantics, Walton mentions *truth*, *validity*, and *consistency*; as the basic concepts of pragmatics, he mentions *assertion*, *retraction*, and *questioning*. The basic concepts of pragmatics are defined by the procedural rules of a game of dialogue. Walton summarizes the relationship between semantics and pragmatics as follows: "Semantics is what makes a game of dialogue 'logical'. Pragmatics is what makes a game of dialogue applicable to realistic contexts of questioning and disputation of a thesis at issue" (p. 91).

Since Walton himself equates dialectic with games of dialogue (p. 130), it becomes clear that pragmatics refers here to all non-logical rules of a game of dialogue. As such pragmatics is part of dialectic. It is, therefore, surprising that Walton speaks, on another occasion, of "logical pragmatics" (p. 96). Given his own definition of pragmatics, this is a *contradictio in terminis*.<sup>5</sup>

Stressing the importance of dialectic and pragmatics does not lead Walton to a complete rejection of formal logic in the study of argumentation and fallacies. On the contrary, as is shown by his discussion of the relationship between semantics and pragmatics, formal logic plays a central role in his approach to argument criticism and to the analysis of fallacies. In chapter 3, for example, he says: "the best way to understand the normative force of reasonable criticisms and well-argued refutations in realistic controversies is through the use of formal logic in dialogue" (p. 77). In his last chapter (chapter 11) Walton discusses the possibilities of "informal logic as a discipline". His conclusion is that the very term "informal logic" is a "misnomer" (p. 295). This proves how important he thinks that formal logic is. After we have seen that he devotes a whole chapter on propositional logic (chapter 3), this comes as no surprise.

Dialectic without formal logic seems to be something which is inconceivable to Walton. Formal logic is omnipresent in his work. What *is* new here, however, is that formal logic now is made subservient to dialectic. Formal logic without dialectic seems to have lost its significance for Walton for the study of argumentation and fallacies.

The use of various logical systems, both classical and non-classical logics, throughout the book, again poses the same problem pointed out before: If the analysis of each fallacy requires, so to speak, a different logic, how do we then ever arrive at a comprehensive theory of fallacies? In *Informal Fallacies*

<sup>5</sup> This is not to say that we think that a pragmatic theory cannot be a formal theory.

Walton seems to be aware of this problem. Though he argues for the use of non-classical formal models, such a many-valued logic, relatedness logic, inductive concepts of argument, aggregate theory, graphs of arguments, et cetera for the analysis of fallacies (pp. 292, 295), he also discusses one of the dangers of this "pluralism": "a problem can arise where an argument turns out to be valid by analysis of one of those logics, yet invalid by another" (pp. 295–296).

Initially, Walton thinks that dialectic can reduce this pluralism. But then he asks, referring to the varying degrees of rigour between the formal dialogue-games of Hamblin, Hintikka, and Lorenzen: "Could we not standardize games of dialectic?" (p. 296). Walton relates this question to the rules of winning and losing and the role of commitment-stores. His answer is that "further study needs to be done". Until further notice, the problem remains unsolved.

With *Informal Fallacies*, Walton has made an important step in the right direction, but he has not yet stepped far enough in that direction. In his discussion of the fallacies in the various chapters of his book, Walton sometimes neglects either the dialectical or the pragmatic aspect of his approach. In chapter 4, when analysing *ad ignorantiam*, *many questions* and *ignoratio elenchi*, Walton does pay attention to the help he can get from logical dialogue-games. When discussing *ad populum* and *ad baculum* in chapter 2, *ad verecundiam* in chapter 7, *post hoc ergo propter hoc*, *slippery slope*, *composition and division* in chapter 8, and *ad hominem* in chapter 9, however, he falls back on a more traditional account.

Even when dealing with subjects such as *equivocation*, which are characteristically linguistic in nature, Walton does not try to solve the problem with the help of pragmatic insights, but he tries to do this (in chapter 10) with the help of the logical systems of Priest (1979) and Lewis (1982). It hardly comes as a surprise that he concludes that these cannot provide the solution. The point amounts only to this: "The basic fact about equivocation is that you can never be sure that you are excluding it as a possibility, as long as you are using a natural language with empirical terms that are not defined tightly for all possible contexts" (p. 286). When dealing with equivocation in argumentative discourse, Walton advises "to check each term that occurs in more than one sentence in an argument, and see if a shift can be detected" (p. 286). This is a big help, indeed. Was all the discussion of complicated logical systems really necessary for this?

It is clear from the way Walton repeatedly emphasizes the need of a *formal* dialectic, that the pragmatic aspect, after all, does not count so much to him (cf., e.g., pp. 292, 322). Speech act theory, conversation analysis, discourse analysis, and other central contributions to the theory of pragmatics, are nowhere mentioned in Walton's book. This is not just a pity, but a real miss. His main concession to his own professed pragmatic orientation seems to be

that he uses examples which are taken from (real-life) parliamentary debates. And it must be said that these examples are really illuminating.

Of course, an ambitious book is bound to suffer from all kinds of minor mistakes and defects. In this respect, Walton's book is no exception. To name just a few criticisms: Walton formulates (in chapter 1, pp. 2–3) 12 requirements for the study of argument, but he does not explain where they come from, what their theoretical background is, whether this is an exhaustive list or not, and in what ways his own contribution meets these requirements; by asserting that the maxim of relevance is derived from the politeness principle (in chapter 3, p. 81), Walton does not do justice to the theory of Grice; Walton's notion of *presupposition* (in chapter 4, p. 107) is quite different from the way presuppositions are usually conceived in pragmatics; in the chapter (5) which he devotes to enthymemes, Walton does not explain why he pays so much attention to this phenomenon, neither does it become clear exactly what role the notion of *dark-side commitments* plays in his account; and, finally, while explaining the fallacy of *circular reasoning* (in chapter 6, pp. 167–168), he confuses *argumentation* and *explanation*.

But the main thing is that Walton is still a logician who has now become a dialectician. In order to become a pragmatist as well, he still has some way to go. What is needed for the development of the study of argumentation and fallacies is, in our view, a radical pragma-dialectic approach. Walton is on his way. He only needs a last small push.

## 5. The need for Radical Pragma-Dialectics

Walton is interested in more than just detecting and identifying fallacies. In order to criticize arguments in everyday discourse, an adequate analysis and evaluation of that discourse is required. This is a major and in some ways also a hazardous operation. There is no ready-made and watertight method that will always produce the desired result. At every stage of the analyzing and evaluating activities decisions have to be taken.

Therefore, in our opinion, it is necessary to realize that analyzing and evaluating argumentative discourse is always an *open* matter. This can be clarified by turning to the connection between logic and the theory of argumentation. There are essential differences between these two disciplines, but that is not to say that logic is quite without significance for the theory of argumentation.<sup>6</sup>

<sup>6</sup> The differences between logic and argumentation theory are explained in Van Eemeren and Grootendorst (to appear 1988). In some analytical and evaluative tasks the application of logical insights is indispensable. This is true, for example, of the dialectical addition transformation when unexpressed premisses are to be supplied. Here the guiding principle is that the operation must produce a valid argument – and that is a matter of logic. As the term would suggest, logical

However, it is also important not to exaggerate the role of logic, even if the absolute certainty that a purely logical approach *appears* to offer is thereby sacrificed. The practical significance of 'logical' errors can only be properly assessed if it is first clear what place the argumentation, or other speech act in which the error occurs, occupies in the wider context of a critical discussion. Here, communicative and interactive factors play a central role. It is only by bringing this kind of pragmatic knowledge into the analysis that we can do justice to the fact that argumentation is a functional component in the verbal interaction between people. Argumentation plays a 'repairing' role by trying to remove the doubt which one language user has concerning the standpoint of the other.

Only a pragmatic approach can make it possible to arrive at a proper interpretation and explanation of implicit and indirect language use. Logic alone will in these cases not suffice.<sup>7</sup> However, in some cases it does give us something to go on. By bringing in pragmatic considerations at the same time, justice is done to the functionality of language, but a sizeable dose of uncertainty is introduced as well. This explains why a ready-made procedure for analyzing and evaluating argumentative discourse is not a realistic possibility.

Because of its *ad hoc* nature, a logically oriented method for detecting fallacies is usually extremely difficult to apply. In addition to this, in practice one tends to find all sorts of exceptions to the rule, so that in certain circumstances some fallacies suddenly become permissible (such as *argumentum ad ignorantiam* in the principle of criminal law that a suspect is innocent until his guilt is proved). Identifying fallacies then soon turns into little more than a superior art of labelling.

In *Speech Acts in Argumentative Discussions* (1984) we presented a system of discussion rules that was intended, among other things, to provide a better way of identifying fallacies.<sup>8</sup> For the resolution of a difference of opinion it is necessary for the parties to engage in a critical discussion in which they observe certain commonly agreed rules. Each discussion rule represents a necessary condition for the resolution of the dispute. Together, the rules constitute a sufficient condition for it. Thus, observing all the rules makes a

knowledge is also necessary for the formulation of the 'logical minimum'. Checking the consistency of argumentative discourse also calls for logic for the detection of contradictions and to evaluate the validity of the arguments used. Some 'formal' fallacies (such as affirming the consequent) can be analysed only by using a logical system (in the case of affirming the consequent this would be propositional logic, since the fallacy is a false use of the *modus ponens*).

<sup>7</sup> In order to make unexpressed premisses explicit in a proper way, it is also necessary to have contextual information of a pragmatic nature. In this way, the logical minimum can be replaced by a 'pragmatic minimum'.

<sup>8</sup> This function of the rules is explained in more detail in *Argumentation, Communication and Fallacies* (to appear).

positive contribution to the resolution of the dispute, while breaking one or more of them puts it at risk.

Each infringement of one of the discussion rules, whichever party commits it and at whatever stage in the discussion, constitutes a threat to the resolution of a difference of opinion. It must therefore be regarded as a dialectical error. For the sake of compatibility with current terminology, we term all these rule-violations fallacies.

This pragma-dialectical approach to fallacies is both broader and more specific than the conventional logical approach represented by the Standard Treatment. It is broader in the sense that right from the start all violations of the discussion rules, not just the 'logical' errors, are brought into the analysis. It is more specific, because fallacies are here functionally connected to the resolution of a difference of opinion. The crucial difference, however, is that this approach provides insight into the *why* of the rejection. If it is clear that something is a threat to the resolution of a dispute, it is also clear why it is called a fallacy.

By looking at the particular rule that has been violated it is also possible to indicate what the implications might be. A violation at the confrontation stage (such as takes place in the *argumentum ad baculum*) will have other consequences than a violation at the opening stage (such as takes place in *shifting the burden of proof*), at the argumentation stage (e.g. *post hoc ergo propter hoc*) or at the concluding stage (e.g. *argumentum ad ignorantiam*).

The discussion rules do not provide a simple trick that merely has to be learnt by heart.<sup>9</sup> The rules can only be applied to argumentative discourse which is designed to resolve a difference of opinion. However, precisely what purpose a particular specimen of language use has is not always clear. It is for this reason that the identification of fallacies is always *conditional*: Fallacies are only fallacies if the discourse involved can be regarded as part of a critical discussion. It is only given a particular interpretation that an allegation that a fallacy occurs may be justified.

## 6. Integrating logic in a pragma-dialectical framework

A pragma-dialectical approach to fallacies does justice to the fact that invalidity is only one of the reasons why a dispute may not be resolved. In this approach, invalidity is not ignored, but put into its proper perspective, serious attention also being paid to the great many other things that can go wrong in an argumentative discourse. A lot of fallacies are linked to other rules of

<sup>9</sup> Because of the implicit nature of much of the language used in argumentative discourse, it is not always possible to say with certainty whether a dialectical rule of discussion has been broken. This has nothing to do with the analytical instruments or the way they are used: it is inherent to the nature of the subject under investigation.

discussion which refer to other stages in the discussion than the argumentation stage.<sup>10</sup>

Because the validity of an argument cannot be established without the help of logic, logic is a valuable tool for the analysis of certain fallacies. However, taking into account everything that can go wrong in everyday argumentation, it cannot, in our view, provide a comprehensive theory of fallacies. By abstracting from the peculiarities of colloquial language and by concentrating on argument forms, all practical phenomena of implicitness, indirectness and other characteristics of language use which may play a part in argumentative discourse, are ignored in the Standard Treatment of the fallacies. A pragma-dialectical approach to argumentation provides better means to detect fallacious discussion moves, and also provides a better insight into practical argumentative reality.<sup>11</sup>

Of course, the pragma-dialectical argumentation theory as it has been developed so far, is by no means complete. Even if the rules we have formulated really reflect all relevant aspects of a critical discussion, the listing of the various ways in which they may be violated and the associated fallacies need further specification. Furthermore, many questions still need to be answered concerning the way in which a dialectical analysis may be carried out and can be justified. Logicians may be extremely helpful in carrying out all these tasks. In our opinion, however, their logical contribution should be incorporated in a pragma-dialectical framework which places it in a proper perspective.

Here we think the kind of research which is carried out by Walton (and Woods) could be combined with a pragma-dialectical approach. Lots of problems are waiting for a solution: *argumentum ad consequentiam*, *composition and division*, *hasty generalization*, *post hoc ergo propter hoc*, *petitio principii*, to name just a few. The combination of Walton's insights and the pragma-dialectical approach could probably lead to a lot of progress in dealing with these problems. A well-considered co-operation between a logically oriented dialectical approach and a pragmatically oriented dialectical approach to fallacies may provide even more satisfactory results than Walton has achieved so far.

<sup>10</sup> Only four of the fallacies we distinguished in Van Eemeren and Grootendorst (1987: 283-301) can be analyzed as direct violations of the validity rule.

<sup>11</sup> For an adequate analysis of fallacies, argumentative reality as it presents itself in argumentative discourse must be reconstructed normatively as a critical discussion. (Cf. Van Eemeren (1986).)

## References

- Broyles, James E., 1975. The fallacies of composition and division. *Philosophy and Rhetoric* 8: 108-113.
- Gerber, D., 1974. On argumentum ad hominem. *Personalist* 55: 23-29.
- Govier, Trudy, 1982. What's wrong with slippery slope arguments? *Canadian Journal of Philosophy* 12: 303-316.
- Grootendorst, Rob, 1987. 'Some fallacies about fallacies'. In: Frans H. van Eemeren et al. eds., *Argumentation: Across the lines of discipline*. Dordrecht/Providence: Foris. pp. 332-342.
- Hamblin, C.L., 1970. *Fallacies*. London: Methuen.
- Hintikka, Jaakko, 1976. *The semantics of questions and the questions of semantics*. Amsterdam: North-Holland.
- Kamlah, Wilhelm and Paul Lorenzen, 1973. *Logische Propädeutik*. Mannheim: Hochschul-taschenbücher-Verlag.
- Lambert, Karel and William Ulrich, 1980. *The nature of argument*. New York: Macmillan.
- Lewis, David, 1982. Logic for equivocators. *Noûs* 16: 431-441.
- Priest, Graham, 1979. The logic of paradox. *Journal of Philosophical Logic* 8: 219-241.
- Van Eemeren, Frans H., 1986. Dialectical analysis as a normative reconstruction of argumentative discourse. *Text* 6(1): 1-16.
- Van Eemeren, Frans H. and Rob Grootendorst, 1984. *Speech acts in argumentative discussions*. Dordrecht/Cinnaminson: Foris. PDA 1.
- Van Eemeren, Frans H. and Rob Grootendorst, 1987. Fallacies in pragma-dialectical perspective. *Argumentation* 1(3): 283-301.
- Van Eemeren, Frans H. and Rob Grootendorst, 1988. The analysis and evaluation of discursive texts. To appear.
- Van Eemeren, Frans H. and Rob Grootendorst, 1988. *Argumentation, communication and fallacies*. To appear.
- Walton, Douglas N., 1987. *Informal fallacies. Towards a theory of argument criticisms*. Amsterdam/Philadelphia: John Benjamins. *Pragmatics and Beyond Companion Series*, No. 4.
- Woods, John and Douglas N. Walton, 1982. *Argument: The logic of the fallacies*. Toronto: McGraw-Hill Ryerson.
- Woods, John and Douglas N. Walton, 1989. *Collected papers*. Dordrecht/Providence: Foris. PDA 6. To appear.