Chapter 10
Pragma-Dialectics Amidst Other Approaches to Argumentation

10.1 The Current State of Argumentation Theory[1]

In argumentation theory, next to pragma-dialectics, various other approaches have been developed during the past decades—all associated in some way or other with the dialectical and rhetorical perspectives on argumentation outlined in Sect. 1.5. Having explained the main thrust of pragma-dialectics in this volume, we can now situate this approach to argumentation among other prominent theoretical approaches. For this purpose we first sketch the neo-classical views of argumentation theory presented by Toulmin and by Perelman and Olbrechts-Tyteca in the 1950s that have determined the current state of argumentation theory to some extent. Next we will discuss the formal dialectical approaches to argumentation (Sect. 10.2), informal logic (Sect. 10.3) and the rhetorical and linguistic approaches (Sect. 10.4), which are all prominent in present-day argumentation theory. After a brief description of the various approaches we will indicate their relationships with the dialectical and rhetorical perspectives, with the five components of the research program of argumentation theory and with pragma-dialectics.

Both the Toulmin model and Perelman and Olbrechts-Tyteca's new rhetoric are developed in an effort to counterbalance in dealing with argumentation the formal approach to analytic reasoning provided by modern logic. In *The uses of argument*, first published in 1958, Toulmin (2003) reacted against the then dominant logical view that argumentation is just a specimen of the reasoning and can be treated formally. As an alternative, he presented his model of the "procedural form" of argumentation, which is designed to capture the functional elements that can be distinguished in the defence of a standpoint by means of argumentation. The various elements included in the model represent different steps in the argumentative

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This chapter is to a large extent based on van Eemeren et al. (2014).

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[1]This section is primarily based on van Eemeren et al. (2014: 31–32, 203–299).

procedure. According to Toulmin, the procedural form of argumentation is "field-independent", which means that the steps that are taken and are represented in the model always remain the same, irrespective of the kind of subject that is discussed.

In discussing the evaluation of the soundness of argumentation Toulmin gives a different meaning to the term *validity* than it has in formal logic. The validity of argumentation is primarily determined by the degree to which the (usually implicit) *warrant*, which connects the *data* advanced in the argumentation with the *claim* at issue, is acceptable—or can be made acceptable by a *backing* if the warrant is challenged What kind of backing is required in a particular case depends on the "field" to which the standpoint at issue belongs: the discipline or domain that has the jurisdiction in legitimizing the warrants that are used. While the "claim" is the standpoint that is defended and the "data" are factual reasons advanced in support of the claim, the "warrant" is a more general justifying premise of a rule-like nature —the "backing" refers to sources that back up the warrant. According to Toulmin, in different fields claims will be justified in different ways. In justifying a legal claim, for instance, another kind of backing of the warrant will be required than in justifying an ethical claim. In Toulmin's view this means that the criteria for evaluating the validity of argumentation are "field-dependent" and need to be put in an empirical and historical context.

In their monograph *The new rhetoric*, also first published in 1958, Perelman and Olbrechts-Tyteca (1969) regard argumentation as sound if it adduces or reinforces assent to the standpoint at issue of the audience that is addressed. The soundness of argumentation is in the new rhetoric measured against its effectiveness with the "audience", the target group the arguer aims to convince or persuade. This target group may be a "particular" audience consisting of a specific person or group of people that is in a certain case addressed by the speaker or writer, but it can also be the "universal" audience consisting of the (real or imagined) company of people that embodies reasonableness to the arguer.

In the new rhetoric Perelman and Olbrechts-Tyteca list the various kinds of elements that are part of the point of departure of argumentation, distinguishing between facts, truths, presumptions, values, value hierarchies and *loci* (the equivalent of the Greek *topoi* in Latin). In addition they provide an overview of the argument schemes that can be used in the layout of argumentation aimed at convincing or persuading an audience. According to Perelman and Olbrechts-Tyteca's observations, the argument schemes used in argumentation can be *quasi-logical* (or *quasi-mathematical*), *based on the structure of reality* or *structuring reality*. These argument schemes are employed in argumentative techniques of "association", which connect a premise with a standpoint in order to achieve a transfer of acceptance from the premise to the standpoint. Another kind of argumentative technique distinguished by Perelman and Olbrechts-Tyteca is "dissociation", which is used to divide an existing conceptual unity into two separate conceptual units (van Rees 2009). For the purpose of preventing that the negative meaning of being vain also applies to someone who loves beautiful clothes, the concept of "vanity"

could, for instance, be dissociated into the original concept of "being vain" and the new concept of "loving beautiful clothes".

Next to obvious differences, there are some striking commonalities between Toulmin's approach to argumentation and the approach chosen in the new rhetoric. Starting from a philosophical background and an interest in the justification of views by means of argumentative discourse, Toulmin as well as Perelman and Olbrechts-Tyteca emphasize that values play an important part in argumentation. In both cases formal logic is rejected as a theoretical tool for dealing with argumentation and in both cases the authors turn to juridical procedures for finding an alternative model. Although the originators themselves did not make a connection between their approaches, a theoretical link between the Toulmin model and the new rhetoric could be made by viewing the constituents of the point of departure distinguished in the new rhetoric as representing different types of data in the Toulmin model and the argument schemes distinguished in the new rhetoric as different types of warrants in the Toulmin model.

The two approaches are "neo-classical", not only because of their great influence on modern argumentation theory but also because both of them are imbued with notions and distinctions that can already be found in classical rhetoric. Toulmin's model of the argumentative procedure is in fact conceptually equivalent to the extended syllogism in Roman-Hellenistic rhetoric known as the *epicheirema*. In addition, there are striking similarities between the role of warrants in the Toulmin model and that of the classical *topoi*. As for the new rhetoric, its general goals agree well with those of classical rhetoric, albeit that the classical rhetorical systems were primarily used as heuristics. The crucial role the new rhetoric assigns to the audience in the classification of the starting points constituting the point of departure of argumentation is similar to its role in classical rhetoric. It is also noteworthy that the argument schemes that are distinguished in the new rhetoric remain for the most part close to the classical topical tradition. The types of argumentation covered by the argument schemes based on the structure of reality are reminiscent of those treated in Aristotle's *Topics* and *Rhetoric*. Moreover, the distinction between these argument schemes and those of structuring reality runs parallel with the classical distinction between rhetorical syllogisms and rhetorical induction.

In spite of the considerable impact his model has had on scholarship in argumentation theory, Toulmin was in the first place a philosopher, not an argumentation theorist. Toulmin's contributions to argumentation theory pertain in the first place to the theoretical and the philosophical components of the research program. His theoretical model in particular was a source of inspiration to a considerable number of argumentation theorists (e.g. Brockriede and Ehinger 1960; Freeman 1991, 2005). His philosophical views about reasonableness Toulmin (1976) unfolded in *Knowing and acting* when introducing the division between the "geometrical", "anthropological" and "critical" conceptions of reasonableness. In *Return to reason*, Toulmin (2001) complemented his vision of reasonableness with a historical expose on the lost link between logic and rhetoric. It stands to reason that Toulmin did not carry out any further analytical or empirical research regarding

argumentation. To the practical component of the research program he contributed only indirectly by co-authoring a textbook (Toulmin et al. 1979).

The new rhetoric of Perelman and Olbrechts-Tyteca is primarily a substantial contribution to the theoretical component of the research program of argumentation theory. Although Perelman's philosophical interests manifest themselves clearly in other publications, sometimes concentrating specifically on the rational and the reasonable (Perelman 1979), his main influence on argumentation theory was exerted through the theorizing with Olbrechts-Tyteca in the new rhetoric. Perelman and Olbrechts-Tyteca themselves did not carry out any further analytical, empirical or practical research, but the insights they set forth in the new rhetoric were put to good use in several case studies in the empirical component of the research program of argumentation theory (e.g. Nimmo and Mansfield 1986; Haarscher 2009).

Although neither the Toulmin model nor the new rhetoric has been in any way constitutive to the pragma-dialectical theory of argumentation, there certainly are some commonalities between these two approaches and pragma-dialectics. With the Toulmin model pragma-dialectics shares a preference for developing a procedural model of argumentation and a preference for taking a functional view on the elements playing a part in the argumentative process. However, both the procedural and the functional dimension of the approach to argumentation are in pragma-dialectics substantiated in an entirely different way. The procedural dimension is in the pragma-dialectical model of a well-regulated critical discussion more encompassing and more elaborately substantiated and the functional dimension is through the amended speech act theory more refined and more precisely articulated. With the new rhetoric pragma-dialectics shares an interest in the rhetorical dimension of aiming for effectiveness in argumentative discourse. This shared interest manifests itself most clearly in the way in which in the two approaches the point of departure of argumentation and the argument schemes employed are put to good use in adapting argumentative discourse to audience demand. However, unlike in the new rhetoric, in pragma-dialectics the aiming for effectiveness is bounded by well-motivated and well-defined standards of reasonableness instrumental in resolving a difference of opinion on the merits.

10.2   Formal Dialectical Approaches[2]

Although they are not as familiar to most argumentation theorists as the Toulmin model and the new rhetoric, Crawshay-Williams's criteria for putting an end to intractable controversy and Naess's methods for dealing with misunderstandings in discussions are other early contributions to the field that are of great importance to modern argumentation theory. Crawshay-Williams's (1957) approach to controversies expounded in *Methods and criteria of reasonableness* is vital to judging the

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[2]This section is primarily based on van Eemeren et al. (2014: 32–33, 175–197, 301–372).

standards of reasonableness argumentative discourse has to comply with, because it constitutes the basis for the fundamental distinction between problem-validity and conventional validity (see Sect. 2.5). And Naess's (1966) view of argumentative discussions as intersubjective verbal communication that must be conducted in accordance with certain procedural and material discussion rules, elucidated in *Communication and argument*, gave a major impetus to the development of modern dialectics.

In spite of Toulmin's and Perelman and Olbrechts-Tyteca's scepticism, formal logicians have continued their efforts to put their formal systems to good use in dealing with real-life argumentative discourse. Formal logical systems are not only formal in the sense that they provide a regimentation by means of constitutive rules, as is also the case in the pragma-dialectical rules for critical discussion. They are formal, too, in the sense that they consist of locutions whose linguistic shapes determine their logical forms and are rigorously determined by grammatical rules. In addition, as a rule they are also formal in the sense of being purely logical, not providing for any material move or rule that depends on the meaning of non-logical terms, so that the logical systems involved are not in any way conditional upon facts or interpretations.[3] By creating certain kinds of laboratory situations, such formal systems of logic can be a useful part of a more encompassing approach to real-life argumentative discourse. However, due to the abstractions involved in the formalization, they do not lend themselves to making an adequate analysis and evaluation of pieces of real-life argumentative discourse as they are.

Applying formal systems of logic to the analysis and evaluation of argumentative discourse requires making a translation of each of the arguments considered into, for instance, the language of propositional logic and determining their validity with the help of the truth table method or some other method available in propositional logic. Such an approach to argumentation, however, meets with all kinds of objections (van Eemeren et al. 2014: 304–306). First, the process of translation that needs to take place is by no means straightforward. Second, even if the outcome of the evaluation with the help of, say, the truth table of propositional logic is negative, this does not necessarily mean that the argument involved is indeed invalid, because in some other system of logic, e.g. classical predicate logic, it could be valid. Third, this approach misses the crux of the argument since the unexpressed premises that must be reconstructed and the argument scheme that is used are overlooked. Fourth, this approach reduces the evaluation of argumentation to an evaluation of the reasoning that is used while neglecting issues such as the adequacy of the premises and the appropriateness of the use of the mode of arguing concerned in the given context.

Hamblin (1970) introduced in *Fallacies* the term *formal dialectic* in order to refer to formal dialectical systems.[4] When doing so he was not aware of the formal

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[3]For a discussion of the distinction between these and other senses of "formal", see van Eemeren et al. (2014: 303–304).

[4]For a more detailed discussion of the various formal dialectical systems, see van Eemeren et al. (2014: 307–367).

dialectical systems proposed earlier by Lorenzen and his Erlangen School, which may be considered as systems of formal dialectic *avant la lettre* (Kamlah and Lorenzen 1967; Lorenzen and Lorenz 1978). The Erlangen approach is more closely tied to logic than Hamblin's. It boils down to the development of "dialogue logics" in which existing systems of formal logic, such as propositional logic and predicate logic, are given a dialectical interpretation. Since they focus on criticism and defence of a "thesis", the type of dialectical systems proposed by Lorenzen *cum suis* are in principle purely argumentative, whereas the type of dialectical systems favoured by Hamblin also admit of other purposes, such as the exchange of information. The Lorenzen-type systems are generally more restrictive in the options presented to the discussants; the Hamblin-type systems are more permissive, allowing the participants to put forward any statements, arguments, questions or challenges they like. In the former retracting one's commitment to a statement is complicated or even not allowed whereas in the latter this can be done easily.

The scholars responsible for the revival of dialectic in argumentation theory in the second part of the twentieth century treat argumentation as part of a formal discussion procedure for resolving a difference of opinion by testing the tenability of the "thesis" at issue against certain challenges. The most complete proposal for a formal dialectic was presented by Barth and Krabbe (1982) in *From axiom to dialogue*. Building on the proposals for a dialogue logic made by the Erlangen School, this formal dialectic offers, among other things, a translation of formal logical systems into formal rules of dialogue. Barth and Krabbe's formal dialectic describes dialectical systems for determining by means of a regimented dialogue game between the proponent and the opponent of a thesis whether the proponent's thesis can be maintained given the premises that have been allowed as "concessions" by the opponent. In such a dialogue the proponent attempts to bring the opponent in a position of self-contradiction by skilfully exploiting the opponent's concessions. If the proponent succeeds in doing so, the thesis has been successfully defended *ex concessis*.

Systems of formal dialectic such as Barth and Krabbe's are used to formalize not just arguments but whole discussions, tracking down the contributions of each of the parties in the process. For this purpose a discussion needs to be translated into the language of a specific formal dialectical system and next it must be checked to what extent the argumentative moves that have been made are in conformity with the rulings. In practice, however, rather than being used in this way, formal dialectical systems tend to serve as a laboratory for achieving conceptual clarifications and initiating theoretical developments. Concepts such as "attack", "defence", "commitment", "fallacy", "losing" and "winning" are then more precisely examined by constructing formal dialectical systems in which they are put to work. The same method can be used for clarifying the concepts of some particular fallacies.

Hamblin's approach in particular has had a great impact on researchers who want to combine the potential of formal logic with a dialogical approach in order to achieve a better understanding of common ways of arguing (e.g. Woods and Walton 1989). An attempt has been made by Walton and Krabbe (1995) to integrate

the Hamblin-type and the Lorenzen-type formal dialectical systems. In *Commitment in dialogue*, they integrate the proposals of the Erlangen School (exemplified in a species Walton and Krabbe call *Rigorous Persuasion Dialogue*) with the more permissive kind of dialogues promoted in the dialectical systems proposed by Hamblin (exemplified in a species they call *Permissive Persuasion Dialogue*). Walton and Krabbe define commitments in such a way that in some cases arguers can retract their commitments, but not in others. After having provided a classification of the main normative types of dialogue they distinguish (such as "persuasion dialogues" and "negotiation dialogues"), they discuss the conditions under which in argumentation commitments should be maintained or may be retracted without violating any of the rules of the type of dialogue concerned.

As far as the philosophical component of the research program of argumentation theory is concerned, the formal dialectical approaches are primarily developed against the background of the important contributions to the philosophy of reasonableness in argumentation by Naess and, more in particular, Crawshay-Williams. In the case of Barth and Krabbe's formal dialectical approach, the influence of these two philosophers is not only explicitly accounted for but also supplemented by further clarifications. In the abundance of practically-oriented research connected with the formal logical and dialectical approaches in Artificial Intelligence there is usually less room for reflection upon meta-theoretical considerations. The main contribution of the formal approaches to argumentation theory pertains to the articulation of the normative dimension of argumentation theory in the theoretical component. In giving further substance to the insights propounded earlier by Hamblin, Lorenzen and kindred spirits, the formal dialecticians have carefully guarded the rigour, precision and systematic design of the theorizing. As stands to reason, significant contributions to the empirical and the analytical components of the research program have not been made. As far as the practical component is concerned, next to the traditional contribution of formal logic to the teaching of argumentation analysis and evaluation by means of textbooks, formal logical and dialectical insights into argumentation are mainly put to good use via the computer-mediated intervention orientation of Artificial Intelligence.

When it comes to the relationship of the formal dialectical approaches with pragma-dialectics, it should be clear that the main sources of inspiration are virtually the same. Pragma-dialectics has also developed in line with the reasonableness conception of Crawshay-Williams and it is even more strongly connected with the empirically-minded dialectical orientation of Naess than the formal approaches. In addition, pragma-dialectics has benefitted not only from the ideas of Hamblin and the Erlangen School that have to a large extent shaped formal dialectics, but also from the formal dialectical approach developed later by Barth and Krabbe. It should be clear, however, that the rationale for preferring a *pragma*-dialectical to a formal dialectical approach was that the pragma-dialecticians emphatically wanted their theorizing to relate explicitly to the communicative and interactional practices taking place in real-life argumentative discourse. For this reason, in their theorizing they have integrated the pragmatic dimension with the

dialectical dimension and they have paid serous attention to the empirical and the analytical component of the research program. For this reason, too, the pragma-dialectical standard theory has been extended with a contextualized account of strategic manoeuvring that can do justice to the functional variety of argumentative practices in the various domains of argumentative reality.

10.3   Informal Logic[5]

Since the late 1970s a group of Canadian and American philosophers have propagated a branch of argumentation theory known as *informal logic*. They started their efforts out of dissatisfaction with the treatment of argumentation in logical textbooks and were inspired to develop an alternative by the Toulmin model and to a lesser extent the new rhetoric. The label "informal logic" does not refer to one coherent theoretical perspective nor to a school of researchers sharing a common goal, but to a cluster of different approaches to the study of reasoning in ordinary language. Although these approaches are all normative and logic-oriented, they remain closer to argumentative reality than happens as a rule in formal logic. In most cases their general aim is to develop adequate and theoretically justified methods for interpreting, assessing and construing natural argumentation. Through its practical orientation, informal logic has become strongly connected with the educational reform movement dedicated to "critical thinking".

According to the informal logicians, the requirements that the argument should be deductively valid and have true premises are problematic when it comes to the evaluation of natural argumentation. As Johnson and Blair (2006) explain in their textbook *Logical self-defense*, the premises of an argument have to meet the criteria of "acceptability", "relevance" and "sufficiency". In the case of acceptability, the question is whether the premises that are used in the argument are true, probable or in some other way trustworthy. In the case of relevance, the question is whether there is a pertinent substantial relation between the premises and the conclusion of the argument. In the case of sufficiency, the question is whether the premises provide enough evidence for the conclusion. These criteria define, according to Johnson and Blair (1983: 34), a "logically good" argument and any argument which fails to satisfy any of them is in their view fallacious. Other informal logicians often adopted these three criteria, albeit sometimes under slightly different names (e.g. Govier 1987). In *Manifest rationality*, Johnson (2000) considers it necessary to add the criterion of "truth" to the criteria for evaluating the premise-conclusion structure. In addition, he argues that dialectical criteria are required to evaluate the extent to which an argument deals adequately with objections and alternative views. In this way, Johnson complements his predominantly logical approach with a "dialectical tier".

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[5]This section is primarily based on van Eemeren et al. (2014: 33–34, 373–423).

Although Freeman (2005) provides in *Acceptable premises* a comprehensive theory of premise acceptability (which he connects with presumption), generally informal logicians are in the first place interested in the premise-conclusion relations in arguments. In *Dialectics and the macrostructure of arguments* (1991) and *Argument structure* (2011), Freeman concentrates on the way in which the statements used in arguments combine into larger macro-structures. Inspired by the Toulmin model, he examines the structure of argumentation in a "dialogical" situation. This situation becomes by his definition "dialectical" when additional requirements are met concerning the kind of opposition between the parties and the rules they should follow in the exchange. In his view, Toulmin's warrants have a natural place in the process of conducting an argumentative dialogue but should not be included in the argument diagram of the product resulting from this process. Freeman's approach has been taken up by developers of argumentation support software (e.g. Reed and Rowe 2004).

In discussing the evaluation of argumentation, Hitchcock (2006) connects with Freeman's view of the Toulminian warrants. According to Pinto (2006), arguments are to be viewed as invitations to make an inference, since by means of an argument the addressee is invited to accept the conclusion on the basis of the premises. In line with Pinto (2006), who views them as material inferences that are not valid by their logical form, Hitchcock regards the warrants as inference-licenses and not as a specific kind of (implicit) premise. Remarkable in the context of informal logic is that Hitchcock, who has treated a diversity of topics, has also taken serious steps to give his theoretical positions an empirical foundation. In this endeavour he concentrates primarily on how arguments are used in medical discourse (Jenicek and Hitchcock 2005; Jenicek et al. 2011). In addition, he has contributed to establishing a link between informal approaches to argument and formal computational approaches (see also Verheij 1999; Reed 1997; Reed and Norman 2003).

The evaluation of argumentation is also a prominent topic in the enormous list of publications by Walton. We already discussed Walton's research on the fallacies with Woods and his formal dialectical work relating to dialogue types with Krabbe in Sect. 10.2, but his study of argument schemes (*argumentation schemes* in his parlance), which has been frequently adopted in artificial intelligence, still needs to be mentioned here. In *Argumentation schemes*, Walton et al. (2008) have listed argument schemes they collected for the most part from the existing literature under sixty heading. Among these schemes they include the familiar deductive and inductive forms of argument, but also defeasible, presumptive and abductive argument forms that are neither deductive nor inductive. In the method they use in argument evaluation of dealing with defeasible argument schemes with a matching set of critical questions, which they attribute to Hastings (1962), the underlying idea is that arguments can be regarded defeated when their proponent does not satisfactorily answer the opponent's critical questions pertaining to the argument schemes that have been used.

In Finocchiaro's approach to informal logic the logical and the dialectical perspectives are combined, albeit that the emphasis is more strongly on the dialectical dimension. Finocchiaro's method for analysing real cases of natural argument, more

in particular scientific controversies, emphatically includes the historical and empirical dimensions (e.g. Finocchiaro 2005). In Finocchiaro's view, in the cases he examines the standards for good arguments are exemplified in the argumentation put forward by the scientists involved in the controversy.

Until the end of the 1990s, it was characteristic of informal logic that the rhetorical perspective did not receive a lot of attention. A notable change in this state of affairs is made by Tindale, who defends in *Acts of arguing* (1999) and *Rhetorical argumentation* (2004) emphatically a rhetorically-grounded synthesis of the logical, dialectical and rhetorical perspectives (1999: 207). In order to achieve this aim, Tindale proposes the adaptation and further development of certain central notions introduced by Perelman and Olbrechts-Tyteca in their new rhetoric. He favours, for instance, adoption of the notion of the "universal audience" as the general standard of reasonableness and claims that the accusation of relativism can be contradicted by realizing that it depends on the argumentative context how the universal audience is to be conceived by the arguer and that in that decision the respondent or the particular audience that is addressed plays a "co-authoring role" (Tindale 2004: 129).

A scholar who has been actively engaged in the critical exploration of theoretical key issues in the non-formal approach to the analysis and evaluation of argumentation in natural language is Govier (1987). Govier has expressed similar criticisms of formal logic as Toulmin and others. In addition, she has criticized several forms of what she regards as "deductivism" and made proposals for analysing and evaluating argumentation on the basis of other standards than formal validity or standards related to formal validity. Her critical reflections on the key issues of argumentation theory focus in general on the assumptions scholars make in developing methods for argument analysis and standards for argument evaluation. In the process she has provided insightful analyses of, for instance, the characteristics of argument types, implicit premises and fallacies.

Next to his historical and conceptual study of the fallacies (Hansen and Pinto 1995), Hansen, too, has concentrated on the study of methods and key concepts of informal logic. Examples are his exploration of the various definitions of the notion of "argument" in the works of informal logicians and other argumentation theorists, which he compares with Johnson's (2000) prominent definition of argument in *Manifest rationality*. Contrary to the tendency to extend the scope of informal logic exemplified in Johnson's inclusion of a dialectical tier and Tindale's embracement of the logical, the dialectical as well as the rhetorical perspective, Hansen (2011) has proposed to narrow down informal logic in such a way that it is only concerned with issues relating to the premise-conclusion relationship in an argument or inference.

Some scholars in the informal logic community, such as Biro and Siegel (1995, 2006a, b, 2011) and Lumer (2005), take an epistemological approach. The basic idea behind this approach is that argumentative exchanges are to lead to an improvement in the epistemic state or situation of the people involved. After having completed the argumentative exchange they should have acquired new knowledge or be better able to justify the beliefs they already had. Ideally the argumentative

exchange should have brought their beliefs in accordance with or at least a step closer to the truth. The idea that argumentative exchanges are to lead to epistemic improvements agrees well with the basic idea behind the critical thinking movement that people should learn how to judge critically the opinions they are presented with. This explains why practically-oriented informal logicians such as Battersby (1989) and Weinstein (1994) have established a connection between the epistemological approach and critical thinking by defining critical thinking as applied epistemology.

In informal logic the emphasis is primarily on the normative dimension of the study of argumentation. The researchers involved have made in the first place substantial contributions to the theoretical component of the research program. This goes not only for the founding fathers, Blair and Johnson, with their criteria of acceptability, relevance and sufficiency, but also for Freeman's theories of premise acceptability and macro-structures of argumentation, Pinto's and Hitchcock's views of inferences, the list of argument schemes compiled by Walton *cum suis* and Tindale's concerted efforts to develop the rhetorical angle of approach. Contributions to the philosophical component of argumentation theory have not only been made by the epistemologist but also by scholars such as Govier and Hansen, who have reflected carefully on the meta-theoretical and methodological starting points of the theorizing. Just like, for instance, Johnson and Blair, Govier has also had a great impact on the practical component by the publication of original and well-considered textbook material. In preparing and accounting for the exposition of the insights included in their textbooks, these informal logicians have also contributed considerably to the analytical component of the research program, just as Finocchiaro did in explaining his method for analysing real cases of natural argument. In spite of Hitchcock's research of the use of arguments in medical discourse and Finocchiaro's analyses, the empirical component is in informal logic not really represented.

When it comes to the relationship between informal logic and pragma-dialectics, it is clear that there is a considerable amount of common ground. In certain areas some overlap can even be observed. Freeman's dialectical situation, for instance, ties in with the pragma-dialectical notion of a critical discussion and his approach to premise acceptability is connected with the pragma-dialectical idea of discussants agreeing on the basic premises at the opening stage of such a discussion (Krabbe 2007). Due to the different ways in which the insights propounded by the various informal logicians are embedded in the specific conceptual and terminological frameworks of particular theoretical backgrounds, it is often not so easy to get a good grip on the commonalities and differences with pragma-dialectics without first carrying out a minute analysis. Even on the basis of the brief sketch of the contributions to the theory of argumentation made in informal logic that we have just provided it can nevertheless already be concluded that there exists such an abundance of common interest and intellectual agreement that it would be worthwhile to join forces.

10.4   Rhetorical and Linguistic Approaches[6]

In modern times the study of rhetoric has fared best in the United States. From the nineteenth century onwards classical rhetoric has been represented in the American academic curriculum and modern rhetorical approaches have developed. At first sight, Burke's (1966) influential definition of rhetoric as the use of words to form attitudes or induce actions in others comes close to the traditional definitions concentrating on persuasion, but on closer inspection his view of persuasion as a result of "identification" involves an important change. In spite of this development, the argumentative view that connects rhetoric with the ability to find the appropriate means of persuasion is still predominant and considered to be paradigmatic in rhetoric.

In the last decades of the twentieth century the irrational and even anti-rational image rhetoric had acquired over time has been revised when scholars from various countries started to argue for a rehabilitation of the rhetorical approach, paying tribute to Perelman and Olbrechts-Tyteca's new rhetoric. Leaving aside the extension of the scope of rhetoric to Big Rhetoric, which includes "everything, or virtually everything" (Swearingen and Schiappa 2009: 2), in the United States Wenzel (1987) emphasized the rational qualities of rhetoric. In France, Reboul (1990) argued at about the same time for giving rhetoric its rightful position beside dialectic in the study of argumentation. He saw rhetoric and dialectic as different and sometimes overlapping disciplines. In his view, dialectic is in rhetoric applied to public discussions, while dialectic is at the same time part of rhetoric because it provides rhetoric with its intellectual tools. In Germany, Kopperschmidt (1989) argued that, viewed from a historical perspective, rhetoric is central to argumentation theory.

Although the American communication scholars engaged in argumentation theory may all be described as rhetoricians in the broad sense, they do not share a clearly articulated joint perspective. Zarefsky (1995) defines their most obvious common characteristic as being interested in the practice of justifying decisions under conditions of uncertainty. This view of argumentation as a practice, which contrasts sharply with the analytic view of argumentation as a logical structure, was inspired by the American debate tradition that had started in colleges and universities in the late nineteenth century. Connections with classical rhetorical theory made in the early and middle years of the twentieth century have led to the development of a debate tradition dominated by the paradigm of the "stock issues", which is related to the "stasis" doctrine of Hermagoras of Temnos.

An influential departure from this tradition was Ehninger and Brockriede's (1963) *Decision by debate*, which presented a debate with the help of the Toulmin model as a fundamentally cooperative rather than competitive instrument for making critical decisions. In the late 1970s and early 1980s this view led to several proposals of debate paradigms or models, with the traditional stock issues model

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[6]This section is primarily based on van Eemeren et al. (2014: 34–38, 425–515).

taking its place among the alternatives. The debate tradition in its various mani-
festations has had a huge influence on American argumentation studies. Even in
Hample's (2005) *Arguing*, which deals for the most part with argument production,
its impact can be observed.

   More or less independent of the immediate debate tradition, a considerable group
of American scholars continued to approach argumentation from the perspective of
classical rhetoric, taking account of insights from the new rhetoric in the process.
The most prominent of them are Zarefsky (2006, 2009), Leff (2003) and Schiappa
(2002), all of whom also contributed historical rhetorical analyses. Fahnestock
(1999, 2009) tackled argumentation in science with the help of rhetorical figures
and stylistics. A separate rhetorical trend affecting American argumentation studies
in the field of communication is the revival of "practical philosophy", which harks
back to the classical concept of *phronesis*—practical wisdom in a given case.

   In communication studies in the United States, World War II studies of per-
suasion and attitude change gave a significant boost to the social science approach,
which seeks to produce general and testable claims about communication rather
than shedding light on significant individual cases. This approach promotes
descriptive empirical research rather than normative reflection. In the 1970s, the
social science approach was brought to bear on argumentation studies by a group of
"constructivist" scholars. Willard (1983), for one, started to develop a constructivist
theory by defining argumentation as interaction of people who maintain what they
construe to be incompatible claims. Bitzer (1968) came to see the enthymeme as a
communicative act and rhetorical proof as a joint creation of speaker and listener.

   Concentrating on the public features of communicative acts, Jackson and Jacobs
(1982) initiated a research program for studying argumentation in informal
exchanges. Their research was aimed at understanding the reasoning processes in
ordinary conversations by which individuals make inferences and resolve their
disputes. A related empirical angle of research is the study of argument in natural
settings such as school board meetings, counselling sessions and public relations
campaigns, to produce "grounded theory" of the specific case (Putnam et al. 1986;
Aakhus 2011; Aakhus and Lewinski 2011; Hicks and Eckstein 2012). Currently
Jacobs and others concentrate primarily on "normative pragmatics" and the "de-
sign" of argumentation (Jacobs 1998, 2000; Manolescu 2006; Goodwin 2005,
2007; Kauffeld 1998, 2009).

   The notion of "fields", which Toulmin (1972) describes in *Human under-
standing* as "rational enterprises" identical to intellectual disciplines, has strongly
influenced American argumentation scholarship. The exploration of how the nature
of reasoning differs from field to field led to a vigorous discussion about what
defines a "field of argument": subject matter, general perspective, world-view, or
the arguer's purpose—to mention just a few of the possibilities discussed. The
distinction of fields of argument encouraged the idea that the soundness of argu-
ments is something context-specific and contingent rather than universal and nec-
essary. Instead of asking whether an argument is sound, the questions became
"Sound for whom?" and "Sound in what context?" The core idea of this renewed
interest in fields, involving that the grounds for knowledge claims lie in the

epistemic practices and states of consensus in knowledge domains, was in fact a new step towards resituating the study of argument within the rhetorical tradition.

Instead of the term *fields*, Goodnight prefers to use the term *spheres* for referring to "the grounds upon which arguments are built and the authorities to which arguers appeal" (1982: 216). To Goodnight "argument" means interaction based on *dissensus* and the grounds of arguments lie in doubts and uncertainties. In a similar vein as Habermas (1984), he distinguishes between the "personal" (or "private") sphere, the "public" sphere and the "technical" sphere of argument. This triad stresses the differences between arguments whose relevance is confined to the arguers themselves, arguments whose pertinence extends to people in general and arguments meaningful to a specialized or limited community (Goodnight 2012).

Another force that shaped the nature of argumentation studies in American communication research in the past decades is social and cultural critique. The intellectual underpinning of argument-as-critique is "postmodernism" in one of its many varieties. The most extreme variety of this perspective is the denial that there can be any communal standards or soundness criteria for argumentation and that what passes for such a standard is always socially constructed. If the communal standards are only defined by the interests of the powerful in a group or society, the goal of argument-as-critique is to expose this practice and to suggest alternatives that bring those who were excluded or marginalized into the process of deliberation.

Meanwhile, starting in the 1970s, in Europe a descriptive approach has been developed in which argumentation is viewed as a linguistic phenomenon that not only manifests itself in language use, but is even inherent in most language use. The protagonists of this approach, Ducrot and Anscombre, have presented in a number of publications (almost exclusively in French) linguistic analyses which show that almost all verbal utterances lead the listener or reader—often implicitly—to certain conclusions, so that their meaning is crucially argumentative. In *L'argumentation dans la langue* [Argumentation in the language] Anscombre and Ducrot (1983) refer to their theoretical position as *radical argumentativism*.

Radical argumentativism is characterized by a strong interest in words that can serve as argumentative "operators" or "connectors" that give a specific "argumentative force" and "argumentative direction" to linguistic utterances. Whatever conclusion a specific context allows to be drawn, the presence of the word "but", for instance, causes this conclusion to be viewed as the opposite of, and also stronger than, the conclusion to be drawn from the part of the sentence that is preceding "but". An explicit connection with rhetoric is that the opposite standpoint that is suggested by "but" selects an "argumentative principle" different from the argumentative principle operative in the preceding part of the sentence. Anscombre (1994) observes that the argumentative principles at issue here are on a par with the *topoi* from classical rhetoric. In the context concerned, the *topos* suggested after "but" has a bigger argumentative force than the *topos* suggested earlier; the argumentative force suggested earlier is, as it were, "overruled" by the argumentative force suggested later. The *topos* suggested after "but" therefore determines the argumentative direction of the sentence.

Among a group of primarily francophone European researchers it has become a tradition to approach argumentation from a descriptive linguistic angle while using an emic perspective. Plantin (1996) and Doury (1997), for instance, build on Ducrot and Anscombre's approach but are also strongly influenced by conversation analysis and discourse analysis. Another approach presented mainly in French is "natural logic" as envisaged by Grize (1982) and his collaborators in Neuchâtel (Borel et al. 1983). Natural logic is not so much linguistically oriented but psychologically and epistemologically. Its protagonists are in the first place influenced by Piaget's insights concerning the stages of development in the thinking of children and his general concept of an "action scheme" (Piaget and Beth 1961: 251). Other researchers based in Switzerland, such as Rigotti (2009), Rocci (2009) and Greco Morasso (2011), favour a linguistic approach, but allow also for normativity. They combine their linguistic approach with dialectical and rhetorical insights from classical and medieval sources and modern approaches to argumentation such as pragma-dialectics.

Although some reflection on the philosophy of reasonableness and the meta-theoretical starting points takes place, such topics are in the rhetorical and linguistic approaches to argumentation not thoroughly discussed. Generally these approaches do not focus on the philosophical and the practical components of the research program but on its theoretical and the empirical components. The most striking characteristic of the contributions they make to the theoretical component is that they are for the most part descriptive rather than normative. As far as theory is concerned, the rhetorical approaches build heavily on their classical roots, often supplemented by modern insights. The linguistic approach known as *radical argumentativism* has created its own theoretical premises but connects also with classical rhetoric. The other linguistic approaches tend to borrow insights from various pragmatic theories and use rhetorical insights where they fit in with their predominantly emic perspective. Characteristic of the rhetorical contributions to the empirical component of the research program is that they are virtually always qualitative, not quantitative, and consist to a large extent of case studies. Quantitative empirical research is also thin on the ground in the linguistic approaches. Due to their orientation towards the analysis of argumentative speeches, debates and argumentative texts, the rhetorical approaches contribute more to the analytic component of the research program than the linguistic approaches, but this contribution is generally limited to a discussion of the implementation of the available theoretical tools.

Pragma-dialectics relates most closely to the rhetorical approaches when it comes to giving substance to the effectiveness dimension of strategic manoeuvring. All three aspects of strategic manoeuvring, particularly adaptation to audience demand and the selection of presentational devices, are a topic of research in rhetorical studies, so that the connection with pragma-dialectics is obvious. The connection is also clear in the examination of the relationship between argumentative discourse and the macro-context of the communicative activity types in which the discourse takes place. In principle, in this regard there is also a connection between pragma-dialectics and communication research pertaining to

argument fields and spheres, but so far in American communication studies not much empirical research of specific fields or spheres has been conducted. The relationship between pragma-dialectics and the linguistic approaches is particularly evident in the examination of the ways in which presentational devices can play a part in strategic manoeuvring and in giving substance to the design of argumentative strategies. A special connection exists already for a long time between pragma-dialectics and the qualitative empirical research of ordinary argumentative discourse initiated in American communication studies by Jackson and Jacobs (e.g. van Eemeren et al. 1993; van Eemeren et al. 2011).

10.5 Future Prospects

In the previous sections of this chapter an overview has been provided of the contributions made to the five components of the research program of argumentation theory by the theoretical approaches to argumentation that are currently most prominent. It goes without saying that, outside and inside these theoretical approaches, other worthwhile contributions to argumentation theory could have been distinguished. First of all, there are a great many studies about argumentation that are published in other languages than English, so that they are not accessible to all concerned and could not be included in the overview.[7] Next, there are argumentation theorists who neither share a theoretical paradigm with other researchers nor can be reckoned to represent a specific perspective or to belong to a well-defined group or school, so that they are not included either. In addition, there are researchers contributing to argumentation theory who are not included because their research interest is primarily in another discipline, such as "critical discourse analysis", "history controversy analysis", "persuasion" (and related quantitative research) and "evolutionary cognitive psychology".[8] Figure 10.1 summarizes the results of the overview as it has been given.

Although this may be in some regards speculative, in completing this volume it seems worthwhile to pay some attention to future prospects in the development of argumentation theory. The philosophical component of the research program, to begin with, would benefit from further reflection upon the consequences that the fact that argumentative discourses are always situated in certain specific domains (and cultural environments) has for the implementation of the favoured conception of reasonableness. By virtue of its nature, the geometrical conception can be expected to remain unaffected, but the implementations of the anthropological and the critical conceptions of reasonableness are both likely to be in need of some contextual differentiation. In implementing the critical rationalist reasonableness conception of pragma-dialectics the reflections should concentrate in the first place

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[7]See van Eemeren et al. (2014: 698–777).
[8]See van Eemeren et al. (2014: 679–683; 683–688; 689–694; 695–698, respectively).

1 Philosophical component
(reasonableness conception)

[Formal (Dialectical)
approaches/AI]
- Informal Logic
- Pragma-Dialectics
[Rhetorical and Linguistic
approaches]

2 Theoretical component
(model of argumentation)

- Formal (Dialectical) approaches/AI
- Informal Logic
- Pragma-Dialectics
- Rhetorical and Linguistic
approaches

4 Analytical component
(systematic reconstruction)

- Informal Logic
- Pragma-Dialectics
- Rhetorical and
Linguistic approaches

5 Practical component
(handling specific practices)

[Formal (Dialectical)
approaches/**AI**]
- Informal Logic
- Pragma-Dialectics
[Rhetorical and Linguistic
approaches]

3 Empirical component
(capturing reality)

- Pragma-Dialectics
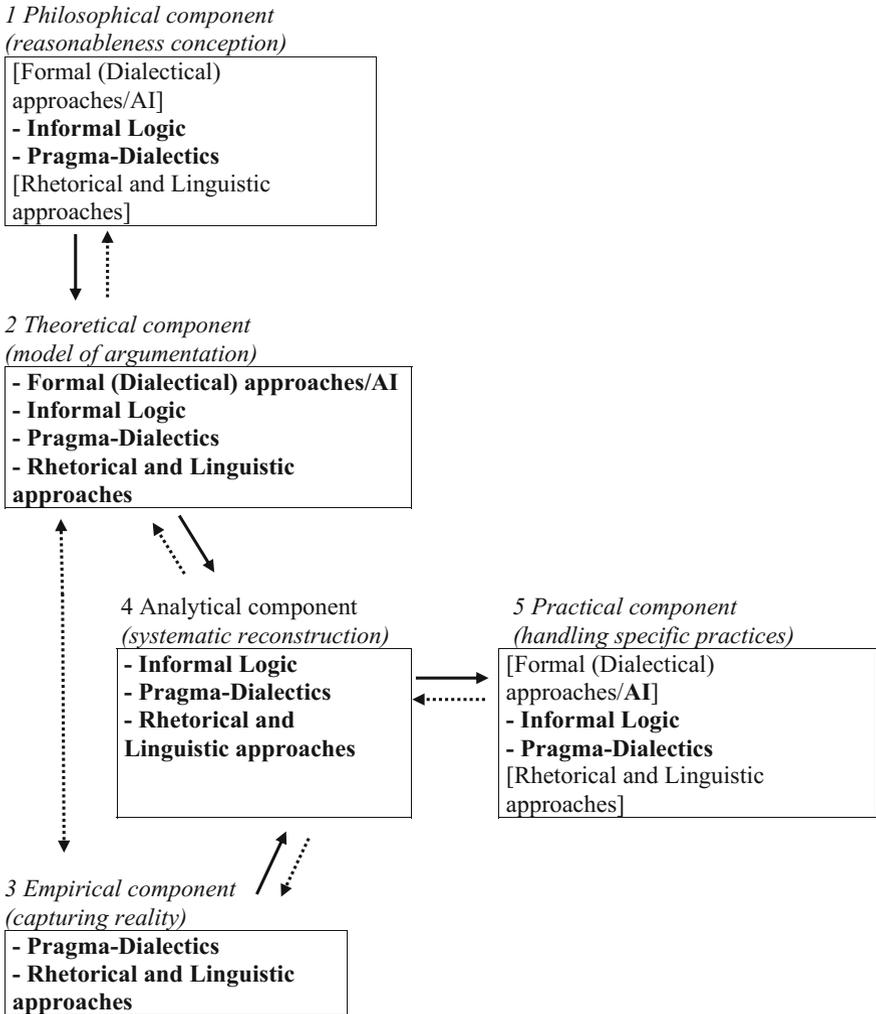**- Rhetorical and Linguistic**
approaches

Fig. 10.1 Current contributions to the five components of argumentation theory

on how the context-related adaptations of the soundness criteria for judging the
reasonableness of argumentative moves to the institutional (and culturally deter-
mined) context in which the argumentative discourse takes place are to be
accounted for from a philosophical perspective.

Which priorities will be chosen in future research in the theoretical component of
the research program depends as a matter of course to a large extent on what kind of
theoretical approach is chosen. In pragma-dialectics further substance should be
given to the contextualized specification of the criteria for judging the soundness of
argumentative moves in accordance with the exigencies of the various

communicative activity types in different domains (and cultural environments). Most urgent is it however to pay due attention to advancing the theorizing concerning the argument schemes that are used in the various types and subtypes of argumentation and the critical questions associated with them. Since the notion of argument schemes was discussed as a crucial concept in the first handbook of argumentation theory (van Eemeren et al. 1978: 20–21), the theorizing about argument schemes in pragma-dialectics has developed along the lines indicated in van Eemeren and Kruiger (1987/2015) and van Eemeren and Grootendorst (1992: 94–102). However, in spite of useful other contributions (such as Garssen 1997; van Eemeren and Garssen 2014), no further elaboration of the theory has taken place that does justice to the variety of subtypes that can be distinguished within each of the three main categories that were distinguished—let alone that the problem of the contextual specification of the general soundness criteria going with the use of these subtypes has been tackled.

The empirical component of the research program is bound to gain from the increased interest that can nowadays be observed in qualitative as well as quantitative research of argumentative discourse (van Eemeren 2015: 57–61). Some of the research concerning the factors and processes playing a part in the actual production, interpretation and assessment of argumentative discourse that has been referred to in Chap. 5 will just be continued. In pragma-dialectics the focus will in the near future be on investigating the peculiarities of argumentative discourse in the strategic manoeuvring that takes place in communicative activity types in the political, the legal and the medical domain. It would be useful if the ongoing qualitative investigations were complemented by quantitative research. In addition, in the comprehensive research project on hidden fallaciousness the experimental empirical research is to be continued with the examination of how certain factors in the strategic manoeuvring that takes place prevent the fallacious character of an argumentative move from being noticed in other types of fallacies than the *ad hominems* and *ad baculums* already reported about. Experimental studies concerning the manipulation of presumptions in the *argumentum ad consequentiam* and evading and shifting the burden of proof are already in progress. New quantitative research needs to be initiated with regard to the detection of stereotypical argumentative patterns in contextualized argumentative discourse and with regard to the pragma-dialectical version of effectiveness research.

A challenging task that is to be performed in the analytical component of the research program pertains to a related development that can be observed in argumentation theory: the trends towards contextualization (van Eemeren 2015b). This task involves developing context-specific analytic tools for the reconstruction of argumentative discourses in the various domains (and cultural environments) that are examined. Needed most urgently are analytic tools for determining in the various macro-contexts the most appropriate pragmatic optimum for the premises that have been left unexpressed. In this endeavour not only the institutional point of the communicative activity type that is examined should play a major part, but also its institutional conventionalisation and the specific institutional goals and missions

of the participants in the discourse. As a follow-up, adequate procedures need to be designed for identifying the argument schemes that are used in the various discourses.

In the practical component of the research program a third recent development in argumentation theory can be brought to bear: the trend towards "formalization" of the treatment of argumentation (van Eemeren 2015b). Because computerisation has nowadays more or less become a precondition for practical interventions, in compiling in the practical component the insights from argumentation theory that are crucial to such interventions, the required precision and rigour must be achieved that is necessary for their formalization (van Eemeren and Verheij 2017).[9] Only if the results of the empiricalization, contextualization and formalization of the treatment of argumentative discourse are in this endeavour systematically combined, an adequate basis can be created for successful computerized interventions in argumentative practices. In pragma-dialectics, the most crucial parts of the theory, such as the model of a critical discussion and the rules for reasonable argumentative discourse, should therefore be prepared for being put in an optimally formal shape. Some preliminary work to this effect has meanwhile already been accomplished (e.g. Visser 2016).

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[9]For the implementation of argumentation theory in artificial intelligence, see van Eemeren et al. (2015: 615–666).

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