In the volume reviewed *fallacies*, which constitute the core of every well-established argumentation theory, are studied from a pragma-dialectical perspective. The authors elaborate on their systematic empirical research with special emphasis on the views of everyday language users concerning fallacious argumentative moves.

Fallacies, inadequately defined as wrong moves in argumentative discourse, have been the subject of numerous studies since Antiquity. The classical works of Aristotle and his fellow scholars have had a massive impact (either direct or indirect) on approaches to argumentation and fallacies in which there is considerable interest nowadays: diverse logical, social, linguistic, juridical and psychological approaches have emerged, all of them carrying traces of the antique influence.

One of the linguistic expositions, the *pragma-dialectal* theory, underlies the empirical research explored in this volume, approaching argumentation from a communicative perspective. Pragma-dialectics (PD) aims at incorporating the essence of Pragmatics (the study of language in actual communication) into that of Dialectics (the study of persuasion, of critical exchanges). The goal of PD is to integrate empirical studies with theoretical considerations, normative approaches with descriptive ones. Pragma-dialectics originates in four meta-theoretical principles: *functionalization* (every speech act is assumed to be a goal-oriented part of the argumentation process); *externalization* (argumentation theory must start with what is explicit in speech acts); *socialization* (argumentation is conceived as a communication activity taking place between active participants) and *dialectification* (exchanging speech acts is viewed as an attempt to resolve a difference of opinion). According to PD, argumentation is a type of verbal communication regarded as a means of resolving a difference of opinion by protagonist and antagonist critically testing the acceptability of the standpoints put forward. Fallacies are viewed as obstacles that can occur at any of the four stages of the resolution...
process. Pragmatic-dialecticians advanced an ideal model and ten rules that conduct a critical discussion; fallacies appear as violations of these rules. As opposed to logic-based approaches, pragmatic-dialectics does not regard fallacies as formally invalid reasonings but as discussion moves that are unreasonable from a dialectical viewpoint. In PD, the quality of argumentation is evaluated based on the norms of reasonableness: criteria are offered along which reasonable contributions to an argumentative exchange can be distinguished from unreasonable ones. The experimental studies discussed in the volume attempt to find out whether and to what extent these criteria are conventionally valid, whether ordinary arguers (intuitively) agree with them. Do everyday speakers’ notions of reasonableness differ from the theoretically motivated criteria offered in PD, in other words, does practice follow theory? This is the central question to be answered in nine chapters summarized in the following paragraphs.

Chapter 1, Theoretical Background and Organization of the Study provides an overview of the study of fallacies from the Aristotelian to the diverse modern approaches that led to the development of the PD’al treatment. The latter is described in detail, involving the four different stages of the resolution process as presented in the ideal model of a critical discussion (confrontation stage, opening stage, argumentation stage and concluding stage) and the ten rules which regulate them. Fallacy is defined, as opposed to the standard treatment, not as a logical error but as a move in the argumentation that impedes the resolution of a difference of opinion, “a speech act that counts as a violation of one or more of the rules” (p. 20) at certain stages of the discussion. Due to considerations of the PD approach, all the four stages are included in the study with exactly one rule attached to each of them: the freedom rule regulating the confrontation stage, the obligation-to-defend rule regulating the opening stage, the argument scheme rule regulating the argumentation stage and the concluding rule regulating the concluding stage. Of course, not all the possible violations of these rules can be observed in a single volume, the authors offer a clear overview of the fallacies discussed in the following chapters on page 29.

In Chapter 2, Considerations Regarding the Design of the Study, two former empirical studies are discussed aiming to justify the method the authors had chosen. Bowker and Trapp’s research attempted to find out whether ordinary arguers judge the soundness of an argumentation on the basis of predictable, consistent criteria in five steps. The lack of a clear and solid definition of reasonableness results in the study’s implications being unclear, as reviewed by Eemeren et al. Schreier, Groeben and Christmann performed a theoretically more motivated investigation of the soundness standards of ordinary arguers, introducing the concept of argumentational integrity and developing diverse ethical criteria, but, as reviewed by the authors of the present volume, encountering several methodological errors, such as the omission of a control group or the usage of loaded topics in the data-collection procedure. In contrast to these two pieces of research, the authors of the volume reviewed start from a solid theoretical basis, from the PD concept of reasonableness: any discussion move is reasonable if it contributes to the resolution of a difference of opinion, if however, an argument frustrates
the resolution process, it is adjudged unreasonable. Starting out from this definition, fallacies are interpreted as contributions which impede the resolution of a difference of opinion. In the PD-study respondents are presented artificial text fragments constructed for this purpose in accordance with several methodological considerations and the PD discussion rules. In some of the fragments the discussion rules are violated, in others they are not. The authors postulate that, for a number of reasons, the conventional validity of the pragma-dialectical discussion rules and considerations on reasonableness and fallacies must be tested in an indirect manner.

Ad Hominem Fallacies: An Exemplary Study is the title of the third chapter which presents an ideal implementation of the method opted for in the second chapter; an experiment focusing on the argumentum ad hominem. A difference of opinion is made explicit in the confrontation stage of a discussion where, at the same time, the discussants must be given the opportunity to critically test the contributions of their partners. This requirement is made explicit by the freedom rule concerning the first stage of a critical discussion: “Discussants may not prevent each other from advancing standpoints or from calling standpoints into question.” (p. 52) The freedom rule can be violated either by limiting the discussant in putting forward a standpoint or personally attacking them by discrediting their expertise, impartiality or credibility (p. 52). These fallacious personal attacks, which have diverse variants, are called argumentum ad hominem, and their three subtypes are direct attack (abusive variant), indirect attack (circumstantial variant) and tu quoque (you too) variant. Not all ad hominem attacks are deemed fallacious according to PD, only those encountered while bringing forward a standpoint as a response in the confrontation stage, transgressing the freedom rule. In the experiment artificial discussion fragments in political, scientific and domestic topics are shown to secondary school students in the form of a pencil-and-paper quiz aiming to test the following four hypotheses: 1) Everyday discussants deem speech acts containing ad hominem violations of the freedom rule as less reasonable. 2) The abusive variant will be regarded as the most unreasonable while the tu quoque attack the least unreasonable. 3) In political and domestic contexts speech acts containing ad hominem rule-violations will be regarded as less unreasonable than in scientific contexts. 4) The reasonableness judgements of male and female respondents do not differ substantially (p. 59-62). All four hypotheses are confirmed supporting the conventional validity of the PD freedom rule. Taking variables into account that were left out from the first study, two alternative explanations of the test results are offered: the one is based on politeness, the other on the nature of the standpoints being different (descriptive, evaluating and inciting). Both are excluded due to the results of newly performed research. To maximize credibility of the findings, the original test is replicated with the participation of managers as respondents whose answer patterns are in agreement with those of the students supporting the pertinence of the four above listed hypotheses.

Chapter 4 discusses a study on The Confrontation Stage: The Freedom Rule, which can not only be violated by eliminating someone as a serious discussion partner, as seen in the case of ad hominem fallacies, but also by putting the opponent under pressure by foreshadowing physical violence or other negative consequences as in the case of argumentum ad baculum,
by blackmailing them emotionally which is called *argumentum ad misericordiam* (appeal to pity) or by making standpoints totally immune to criticism by *declaring them taboo or sacrosanct*. A similar test to the one investigating the conventional validity of the ad hominem fallacy is carried out with these violations of the freedom rule. Respondents deem each of the fallacies less reasonable than the fragments containing no fallacies and politeness as an alternative explanation can be excluded in this case as well with no significant differences among respondents from different cultures. Everyday speakers appear to judge the argumentum ad baculum as the least reasonable fallacy, and they seem to be the most sensitive to unreasonable discussion moves in scientific contexts. From these facts follows that the PD discussion rule for the confrontation stage reflects everyday arguers’ intuitions about reasonableness.

Chapters 5 and 6 cover the problems which occur in the opening stage when the obligation-to-defend rule is transgressed. The obligation-to-defend rule stipulates that “the party who brings forward a standpoint also has to defend that standpoint by putting forward argumentation if the standpoint is challenged” (p. 111). Fallacious discussion moves resulting from the non-observance of this rule are the following: *shifting the burden of proof, evading the burden of proof by presenting a standpoint as self-evident, evading the burden of proof by personally vouching for its correctness* and *evading the burden of proof by formulating the standpoints so that they become immunized to criticism*. Chapter 5, *The Opening Stage: The Obligation-to-Defend Rule* treats these fallacies when emerging in a non-mixed dispute where only one of the parties has a standpoint to defend, while Chapter 6, *The Opening Stage: The Obligation-to-Defend II* discusses them in mixed disputes. From the already familiar research described in Chapter 5 it becomes evident that respondents dismiss all fallacies related to the obligation-to-defend rule as unreasonable discussion moves. Although the subjects do not seem to have an abstract knowledge on fallacies of these types, they clearly recognize the differences between them, which, just like in the case of the freedom-rule, implies the conventional validity of the PD obligation-to-defend rule. In Chapter 6, the fallacy of shifting the burden of proof is studied in non-mixed disputes, while evading the burden of proof is studied in mixed ones. The central question in the latter case is that of the sequence of arguing, which does not hinder the resolution process in theory; in practice, however, it often leads to the fallacy of evading the burden of proof. The concept of *presumption* is borrowed from the terminology of criminal law: a standpoint must stand till sufficient reason is brought against it. However, research results indicate that it does not play a significant role in the respondents judging the upper fallacies as unreasonable, which, again, corresponds with the PD rules. The idea of contributing the unreasonableess judgements to a conventional order of arguments in a discussion is rejected as well. *Fillers* (fallacious moves discussed in the previous chapters) are used on the one hand to distract the subjects from the real purpose of the survey, and, on the other hand to secure stability control of the provided data.

In Chapter 7, *The Argumentation Stage: The Argument Scheme Rule*, the conventional validity of the *argument scheme rule* is tested. Diverse research has investigated this restriction, according to which standpoints must be defended by means of an appropriate *argument*
scheme (the combination of the argument with a proper premise) which is applied correctly. Apart from the argument scheme rule there are several other PD stipulations concerning this stage of the critical discussion which are summed up and exemplified on pages 163-166. In the PD approach to argumentation three main types of argument schemes assign different soundness criteria to discussion contributions. If these criteria are not met, in other words, if inappropriate argument schemes are used, the argument in question is unsound, like for example in the case of the argumentum ad consequentiam, where a normative standpoint and a descriptive argument are combined (or vica versa) resulting in an ill argument scheme. A distinction between a causal and a logical variant is highlighted: remarkably, the former one is judged as unreasonable, while the latter is accepted as reasonable. In the research investigating this fallacy, where fillers are set in as well, respondents were given a logical and a causal variant of the argumentum ad consequentiam. The result is that only the causal variant is positively rejected as a fallacy. Argumentum ad populum, an argument directed at the person of the discussion partner appealing to their emotions, is, again, opposed to pragmatic argumentation and investigated in contrast with two types of sound argumentation and three types of previously discussed fallacies. The fallacy of slippery slope, a type of causal relation which wrongly points to consequences, is examined in a very similar manner to the previously explained research. The name of the fallacy of false analogy speaks for itself. In the research, carried out similarly to the former ones, fragments with false and sound analogy are contrasted. The results of these tests confirm all hypotheses: respondents deem as unreasonable the discussion moves considered by the PD approach to be fallacious which supports the conventional validity of the PD discussion rules.

The title of Chapter 8 is The Concluding Stage: The Concluding Rule. The PD discussion rule pertaining to the stage in question stipulates that only a conclusive defence of a standpoint can (and must) lead to maintaining the standpoint. A typical violation of the PD rule nr. 9 is the argumentum ad ignorantiam where it is assumed that if something cannot be proven, it is automatically denied. This chapter outlines a piece of research concerning this discussion rule where, again, the fallacious moves are contrasted with two types of reasonable moves. The former are, without doubt, rejected as fallacies, while the latter are accepted with no substantial differences. Research results are in accordance with the expectations: the conventional validity of this rule is powerfully confirmed. A remarkable finding is that respondents were capable of formulating their motivations for regarding the argumentum ad ignorantiam as fallacious.

Chapter 9, Conventional Validity of the Pragma-Dialectical Discussion Rules enumerates the findings of the research performed and summarizes its consequences. With one exception (the logical variant of the argumentum ad consequentiam) all fallacies are considered unreasonable discussion moves, however, not to the same extent: some fallacies are firmly rejected, towards others respondents are more indulgent. For the benefit of a more objective view of the research findings, the experiment is repeated with realistic texts, letter fragments containing the ad hominem fallacy. The reduplication leads to more or less the same results as the
original test featuring artificial dialogue fragments. An important finding of the study is the fact that the awareness of the discussion rules does not have a crucial importance in reasonableness judgements. “The final conclusion of this comprehensive research project is that the body of data collected indicates that the norms that ordinary arguers use when judging the reasonableness of discussion contributions correspond to a rather large degree with the pragma-dialectal norms for critical discussion.” (p. 224)

The volume reviewed offers a stimulating insight into the investigation of the conventional validity of the pragma-dialectal discussion rules. The research is prepared and motivated thoroughly, its methods are comprehensible even for readers who are not competent in argumentation theory since every step is properly exemplified. Due to the rather predictable nature of the research results and the repetition of certain procedures some chapters may seem to be monotonous, but they do serve their primary objective: they give adequate reference on the research project. The book offers a prototype of linguistic empirical studies, is thought-provoking and awakens interest in further research.

References
