

Kamila Dębowska
THE PRAGMA-DIALECTICAL MODEL AND
ABDUCTIVE REASONING

Originally published as "Model pragma-dialektyczny a rozumienie abdukcyjne,"
Studia Semiotyczne 27 (2010), 217–236. Translated by Agnieszka Ostaszewska.

1. INTRODUCTION

The questions concerning rationality and the ethics of verbal occurrences are at the centre of the deliberations of social communication. The antagonistic and cooperative functions of social discourses are connected with the notion of a conflict and the capability of solving it. Argumentative discourse as one of the types of social discourse is discussed within the framework of pragmatic, dialectic and rhetorical models. This paper is an attempt at critical assessment of the pragma-dialectical model of argumentation proposed by Frans H. Eemeren and Rob Grootendorst. I defend the standpoint that the application of the pragma-dialectical model to the analysis of argumentation reliability in a naturally occurring discussion requires an expansion of the concepts introduced in the pragma-dialectical theory.

The starting point is the assumption of an error of the pragma-dialectical conviction that infringement of one of the rules of critical discussion developed by Frans H. Eemeren and Rob Grootendorst, and at the same time the expression of an argument not leading to resolution of the dispute between the discussion participants, is a proper criterion of an argument's fallaciousness assessment.

Engaging into the abovementioned issue has been dictated by two factors. The first one was the fact that the theoretical complex of critical discussion proposed by Frans H. Eemeren and Rob Grootendorst (1984, cf. also Eemeren and Houtlosser 2002b, 2002c) seems to integrate pragmatic, dialectic and rhetorical functions of argumentation, yet they are still treated selectively.

The second factor pertains to the omission of reproductive features of naturally occurring disputes in the pragma-dialectical model.¹ Although the heuristic tool enabling the analysis of the validity of the naturally occurring discussions, which contain an externalisation of a dispute, does not have to be based on a detailed description of natural communicational cooperation, yet every fallacy considered in the pragma-dialectical model cannot be perceived as an informal fallacy. Thus, in this paper we have adopted the suggestion of Walton (1995) and Jacobs and others (1991) that the variety of features of the naturally occurring discussions should be a part of the model designed for their evaluation.

The objective of this paper is two-fold: it is aimed at verification of the pragma-dialectical criteria of assessment of reliability/fallaciousness of an argument and development of criteria of assessment of reliability/fallaciousness of an argument. The purpose of the paper is however not to change the basic character of the pragma-dialectical model, but to introduce additional criteria increasing the efficiency of the assessment of arguments.

In view of the initial assumption of the work concerning the incapability of evaluation of argumentation reliability without having first determined the so-called "dispute space,"² the antagonizing function plays here a superior role. It is obvious that protagonists of a given standpoint may imagine the existence of an antagonist. The point of interest of these deliberations is however a situation in which both participants have opposing positions and in which they express arguments in favour of their positions or in which one of the participants, not expressing his own arguments, questions the arguments of the other party. Based on the result of quality research concerning argumentation reliability in naturally occurring discussions (Dębowska 2008), I support the standpoint of Eemeren and Grootendorst (1984, 1992, 2004) that the pragma-dialectical model is the proper tool for determination the "dispute space" by means of the specification of: common propositional content³ of the argumentation, the standpoints of the participants of the dispute, the type of the dispute, the stages of the dispute, as well as complex relations between the pro-arguments resulting from the introduction of counterarguments.

¹The notion of "a naturally occurring dispute" is used within the meaning proposed by Walton (1995).

²The notion of "disagreement space" is used here within the meaning proposed by Eemeren and others (1993).

³The notion of common propositional content was introduced by Eemeren and Grootendorst (1984). It refers to the notion of macro-proposition introduced by van Dijk (1997), i.e. to the basic propositional content of the discourse.

The above quality research (Dębowska 2008) has also confirmed the following features of the pragma-dialectical model and have indicated the directions of its development:

(1) the concept of "a fallacy" in pragma-dialectics is too closely connected with the traditional definitions of formal and informal fallacies;⁴

(2) the only extension of the standard approach to argumentation reliability is the assertion that each breach of the pragma-dialectical rule affects also the balance between the dialectical global goal of dispute resolution and the rhetorical global goal of carrying out the most efficient attack, and therefore it in itself constitutes an obstacle for resolution of the existing dispute;⁵

(3) assessment of argument reliability in the pragma-dialectical model should also be based on the abductive reasoning,⁶ and therefore should concentrate on determination of the pragmatic relevance of an argument, the analysis of the inference processes and their relations with various possible global and local goals of the interlocutors.

The analysis of the above points shall be preceded in this work by a theoretical description of the concept of a fallacy. Two perceptions of the concept shall be discussed in paragraph 2: a standard and pragma-dialectical approach to the reliability of an argument. We shall also present the pragma-dialectical model of critical discussion. Paragraph 3 shall pertain to evaluation of the pragma-dialectical model from the semiotic perspective; I shall explain why the pragma-dialectical perception of the reliability of the argument should be semiotically adequate. In paragraph 4, on the other hand, I will concentrate on the meaning of abduction in the semiotically adequate model frame, and I shall demonstrate why the combination of the

⁴In pragma-dialectics a breach of one of the rules of critical discussion is treated as a fallacy.

⁵The pragma-dialectical model does not consider other goals apart from the dialectical goal of dispute resolution and the rhetorical goal of carrying out the most effective attack.

⁶Abduction is one of the three methods of reasoning distinguished in modern linguistics (Hobbs 2006). The two remaining ones are induction and deduction. Hobbs (2006: 727) claims that "In deduction, from P and $P \rightarrow Q$, we conclude Q . In induction, from P and Q , or more likely a number of instances of P and Q together with other considerations, we conclude $P \rightarrow Q$. From an observable Q and a general principle $P \rightarrow Q$, we conclude that P must be the underlying reason that Q is true." Abductive reasoning refers therefore to the process of development of the most probable explanations for the set of available information. Pragmatically developed utterances, local and contextual implicatures, are according to Hobbs (2006), the products of abductive reasoning. Cf. also paragraph 4.

pragma-dialectical model frame with Hobb's "Interpretation as Abduction" system increases the effectiveness of the assessment of the argumentation reliability. In paragraph 5 I will focus on the significance of local and global goals in the semiotically adequate model frame. In paragraph 6 I will present a proposition of extension of the pragma-dialectical model, based on the interdisciplinary theory of communication, which includes the complementary approaches from the fields of rhetoric, dialectics and pragmatics; interdisciplinary theory of communication will therefore be perceived from a superior semiotic perspective (cf. Wąsik 2003: 15, 17).

2. A STANDARD AND PRAGMA-DIALECTICAL PERCEPTION OF ARGUMENTATION RELIABILITY

Standard definition of fallaciousness, referring to the apparent correctness of the argument has been recently, as observed by Eemeren (2001: 35), ousted by the pragma-dialectical definition, which describes a fallacy as a deficit move in the argumentative discourse. A fallacy is therefore placed in a complex speech act.

It is worth noticing the fact that the concept of a fallacy was already described by Aristotle in 4th century BC. Both *sophismata*, as well as deductively incorrect demonstrative syllogisms were treated by Aristotle as fallacies. He defines *sophisms* as arguments which seem to "reason from opinion" and which appear to be generally accepted but are not (1955: 17ff). What Aristotle (1955) calls a *sophism* is an argument presented to someone with the intention of misleading them. Two types of fallacies are distinguished: language-dependent fallacies (*in dictione*) and language-independent fallacies (*extra-dictionem*).

For example, equivocation, amphiboly, fallacies of conjunction and division, errors of accent and figurative speaking errors are treated by Aristotle as language-dependant *sophisms*. On the other hand, arguments in which expressions are incorrectly classified in connection with the place and manner of use, *fallacia accidentalis*, *ignoratio elenchi*, *fallacia sequendum quid et simpliciter*, *fallacia consequentis*, *petition principii*, the error of false cause, the error of many questions in one — are language-independent (Aristotle 1955, 17,25).

Aristotelian notion of incorrect demonstrative syllogism was, according to Hamblin (1970 [1993]), adopted by Cassiodorus in the 6th century and replaced by the notion of "formal fallacy". In the 20th century the concept of a formal fallacy was recognized as a collective term for the following categories: equivocation, critical errors of conjunction and division, incorrect

use of modus ponens, incorrect use of modus tollens, erroneous change of the function of the operator (cf. Walton, 1995: 69-90).

The concept of the informal fallacy, rooted also in the Aristotelian tradition, is associated above all with the name of John Locke. The concept of informal fallacy seems to be more varied than the concept of formal fallacy. The reason for this variation may be considered two-fold. Firstly, we cannot speak of a specific number of informal fallacies. Secondly, as indicated by Eemeren and others (1996), the mere term "informal fallacy" is not systematically used by all scientists engaged in the argumentation theory.

As suggested by the preceding paragraph, a substantial contribution in the development of the concept of an informal fallacy was made by John Locke in the 17th century. He made a list of the so-called *adfallacies*, i.e. methods of deceiving the opponent. However, in the 20th century one resigned from the term "techniques of deceiving the opponent" and started to define the fallacies as unreliable arguments consciously or unconsciously presented by the opponent (Eemeren *et al.* 1996).

The concept of formal and informal fallacies was in the '80s of the 20th century adapted by the Amsterdam pragma-dialectical school. Rob Grootendorst and Frans H. van Eemeren, the principle representatives of the Amsterdam school, proposed an ideal model of critical discussion with an externalisation of the dispute. The pragma-dialectical model distinguishes four stages of discussion: the confrontation stage/externalisation of the dispute, opening stage, argumentation stage and concluding stage.

Eemeren and Grootendorst (1984: 75ff; 1992: 34ff) claim that discovering certain pragmatic and dialectic features in naturally occurring discussions is possible, if the person analysing the discussion adheres to the guidelines proposed in the critical discussion model. Moreover, they emphasize that the goal of each critical discussion should be the dispute resolution (Eemeren, Grootendorst 1992). Therefore, the pragma-dialectical model focuses both on heuristic, as well as critical functions. The perception of the model as a series of guidelines emphasizes its heuristic function. Evaluation of the argumentative moves in the context of their contribution towards the resolution of the dispute concerns the critical function of the model (cf. Eemeren, Grootendorst 2004: 58f). It needs to be emphasized, however, that the gravity point of the model is not only Toulmin's concept of critical reasoning, but also "the Socratic ideal of subjecting everything one believes in under a dialectical scrutiny" (Eemeren, Grootendorst 2004: 57).

Below please find the ideal model of critical discussion proposed by

Eemeren and Grootendorst.

Confrontation stage 1.1 1.2	Confrontation / externalisation of a dispute (stage 1) Language user 1 advances a positive or negative point of view in respect of expressed opinion O Language user 2 casts doubts on this view
Opening Stage 2.1 2.2 2.3 2.4 2.5 2.6	The decision to conduct an argumentative discussion (stage 2) Language user 2 challenges language user 1 to defend his point of view with respect of O Language user 1 accepts the challenge from language user 2 Language user 1 and language user 2 decide on an attempt to resolve the dispute by means of discussion Language user 1 and language user 2 decide who is to take the role of protagonist and who the role of antagonist in the discussion Language user 1 and language user 2 agree the rules of the discussion to be followed Language user 1 and language user 2 agree when they will regard the discussion as concluded
Argumentation stage 3.1 3.2 3.4 3.5	The advancing of argumentation and reaction to it (stage 3) The protagonist advances an argumentation in defence of his view The antagonist reacts to the protagonist's argumentation by casting doubt on the constellations of statements that constitute the argumentation or on the justificatory or refutatory potential of those constellations The antagonist reacts to the protagonist's argumentation by casting doubt on the constellations of statements that constitute the argumentation or on the justificatory or refutatory potential of those constellations (etc.)
Concluding stage (a) (b) (c)	Determining how the discussion ends (stage 4) The dispute is resolved in the protagonist's favour The dispute is resolved in the antagonists favour The dispute is unresolved but the discussion is terminated (perhaps, <i>pro tem</i>)

(Eemeren, Grootendorst 1984: 88)

The model is characterised by special rules, breach of these rules is referred to by standard definitions of formal and informal fallacies:

Rule 1. Parties must not prevent each other from advancing or casting doubt on standpoints.

Rule 2. Whoever advances a standpoint is obliged to defend it if asked to do so.

Rule 3. An attack on a standpoint must relate to the standpoint that has really been advanced by the protagonist.

Rule 4. A standpoint may be defended only by advancing argumentation relating to that standpoint.

Rule 5. A person can be held to the premises he leaves implicit.

Rule 6. A standpoint must be regarded as conclusively defended if the defence takes place by means of the common starting points.

Rule 7. A standpoint must be regarded as conclusively defended if the defence takes place by means of arguments in which a commonly accepted scheme of argumentation is correctly applied.

Rule 8. The arguments used in a discursive text must be valid or capable of being validated by the explicitization of one or more unexpressed premises.

Rule 9. A failed defence must result in the protagonist withdrawing his standpoint and a successful defence must result in the antagonist withdrawing his doubt about the standpoint.

Rule 10. Formulations must be neither puzzlingly vague nor confusingly ambiguous and must be interpreted as accurately as possible.

(Eemeren, Grootendorst 1992: 208f)

Violation of rule 8. pertains to formal fallacies. Violation of rule 10. pertains only to the formal fallacy of equivocation. Violation of all the remaining rules pertains to informal fallacies. Moreover, in the pragma-dialectical theory, violation of rules 1.-9. is connected with particular stages of critical discussion. Violations of rule 1. occur at the stage of confrontation /externalisation of the dispute, violations of rule 2. occur at the opening stage, violations of rules 3.-8. occur at the stage of argumentation and violations of rule 9. occur at the stage of dispute resolution (Eemeren, Grootendorst 1992: 208f).

3. SEMIOTICALLY ADEQUATE MODEL FRAME

A semiotically adequate model frame for analysis of legitimacy of the relevance of the naturally occurring discussions should definitely not be

based on the basic concepts of particular semiotic approaches. In view of the fact that the objective of this work is to develop criteria based on the interdisciplinary theory of communication, including the complementary notions from the field of dialectics, rhetoric, and cognitive pragmatics — the point of reference here shall be those semiotic terms and categories, which belong to the systems describing international communication with regards to interpretation. The model frame understood in the above way shall be based on the approaches represented by such semioticians as: W. Morris, Ch. Peirce, J. Pele, R. Barthes, J. Greimas (cf. also Wąsik 2003, Hodge, Kress 1988).

In view of the above it seems obvious that the pragma-dialectical model frame is not based on the semiotic properties of interpersonal communication. This frame does not focus on various patterns of interaction, but is centred rather on the standard treatment of fallacies (Eemeren *et al.* 1996: 283ff; Eemeren, Grootendorst 2004: 158ff). Despite the fact that the function of the ideal pragma-dialectical model is not a reproductive description of the features of speech acts, yet, omitting the inference processes, graduality and the multi-sided character of the decisions (treated as processes and products of abductive reasoning) results in a decrease of the semiotic value of the model. Thus, increase of the semiotic efficiency of the pragma-dialectical model requires that we take into account the relativity of communicational behaviours (cf. Hodge, Kress 1988).

4. THE MEANING OF ABDUCTION IN THE SEMIOTICALLY ADEQUATE MODEL FRAME

Normative pragmatics is treated by Eemeren and Grootendorst (Eemeren *et al.* 1993) as the basis of the pragma-dialectical model. Therefore, the model takes into account: the felicity conditions necessary for the expression of speech acts with the argumentative illocutive force formulated on the basis of Searle's speech acts theory (1969, 1979), Grice's version of the cooperation principle⁷ (1975), and Jackson's and Jacobs' logical assumptions (1983). The model assumes that speech acts should be expressed in accordance with the assumptions and expectations of the other party; the basis here is Grice's cooperation principle, an account not taken of possible violations of conversational maxims.⁸

⁷Grice's cooperative principle (1975): "Make your contribution as informative as required (for the current purposes of the exchange)."

⁸I am referring to Grice's (1975) conversational maxims, included into the coopera-

Representatives of the pragma-dialectical approach are aware that discussion participants are not often perfectly rational in their assumptions and expectations, yet despite this fact they do not allow the possible blurring of the conceptual categories. For example, adopting Jackson's and Jacobs' logical assumptions, i.e. "the assumptions of mutual awareness and mutual dependency" and "the assumptions of common activity" function only as an elaboration of Grice's cooperative principle as part of the "interaction direction." "The assumption of common activity" refers to Goffman's idea concerning the "working consensus" (1959: 10), which is associated with making a common decision concerning the "direction of the interaction." In accordance with the assumption of "common activity," the interlocutors together determine the direction of the interaction, assuming the roles of the protagonists and of the antagonist. "The assumption of mutual awareness and mutual dependency" is demonstrated in the interlocutors' cooperation, who systematically strive for a common goal, i.e. the unification of opinions. As emphasized by Jackson and Jacobs (1983), logical assumptions are connected with Grice's (1975) conversational maxims, whereby the basis is considered to be composed of the following values: honesty, efficiency, relevance and clarity.

The normative structure of the pragma-dialectical model does not therefore include into the criteria of assessment of the validity of the arguments the products of abductive reasoning: pragmatically developed utterances and local and context-conditioned implicatures.⁹ "Pragmatic enrichment" is connected above all with "saturation" and "free enrichment." Saturation consists of filling a slot in the logical form of an utterance. According to Carston (2002: 186), if a slot is not filled in, then we do not get full propositional form of an utterance.¹⁰ Unlike the notion of saturation, the notion of free enrichment does not pertain to the cognitive process conditioned by the linguistic component of the utterance (Recanati). In light of the relevance

tion principle, i.e. the maxims of quantity, quality, relation and manner. These maxims have been developed in order to examine unnecessary, dishonest, unmotivated and incomprehensible speech acts.

⁹The notion of "conversational implicature" is connected above all with finding the hidden meaning of a given statement by infringement of one or more of Grice's conversational maxims, i.e. the maxims of quality, quantity, manner and relation.

¹⁰Carston (2002: 186) provides the following example of a grammatical ellipse "Jane wants apple pie and Bill [?] chocolate mousse", requires filling in the process of utterance saturation. She also presents the following example of the following utterance: "He is too young [for what]", in which the pragmatic conclusion saturates the slot "[for what?]".

theory, propositional contents are the product of the following processes (1) creation of an implicature, (2) free enrichment and (3) saturation, and are treated as being cognitively strong. In other words, these processes reinforce the contents of the utterance.¹¹

It is rather undisputable that the subjective evaluation of meanings characteristic for abductive reasoning constitutes a reason for explicit resignation from the adoption of the above concepts in the pragma-dialectical model. However, as social semioticians Hodge and Kress (1988) emphasize, making a naturally occurring discussion dependant on the configuration of the possible social, cultural or even situational meanings encourages adoption of a subjective point of view as the basis for objectivity in the research of natural discourse. It would therefore be advisable to take into account cognitive pragmatics, and not to focus solely on normative pragmatics.

Although the pragma-dialectical model constitutes, undoubtedly, an attempt at developing an interdisciplinary model of communication, it is to a considerable extent based on the coding/decoding model of communication.¹² Pragma-dialecticians have adopted as their basis the characteristic features of the coding/decoding models, such as single-directedness and invariability of meanings. Although they focus on complex relations between arguments, they still treat the effects of these relations as stable, i.e. considered only on the level of contribution effectiveness aimed at dispute resolution. On the other hand, cognitive pragmatism emphasizes the multi-directedness of effects, an account is taken of the relativity of qualification of the complex speech acts expressed by the participants of the dispute (cf. Jacobs *et al.* 1991: 58). As stressed by Walton (1995) and Jackson (2007), the complexity of naturally occurring discussions is manifested in the sequencing of the complex speech acts and the dynamics of the development of meanings (cf. also Jacobs and Jackson 1983: 286, Walton 1995: 22). These features are characteristic for the inference communication model.

Taking the above into account, we do not however question the fact that the concepts distinguished in pragma-dialectics are adequate tools for determination of the space of the dispute. They indicate the conditions necessary for externalisation of the dispute, i.e. the specification of the kind

¹¹For example: a visible cognitive reinforcement effect on the utterance "She's got a mind" in the process of free enrichment would be "She's got an excellently functioning mind."

¹²Exemplary models of coding/decoding communication models have been developed by: Lasswell (1948), Shannon, Weaver (1949), Gerbner (1956), Jakobson (1960) and Berlo (1960).

of the dispute, determination of the standpoints of the dispute participants, as well as complex relations between the pro-arguments resulting from the inference of counterarguments. However, it needs to be noted that these notions are used to designate such phenomena/products which are a result of abductive reasoning. Therefore, by contemplating these type of issues, we need to bear in mind the fact that determination of the dispute space should be connected with reasoning through implicature, both local as well as contextual. Then it is possible to analyse the reliability of the arguments, i.e. juxtapose the fallacies with real and virtual points of view of the dispute participants, the stages of the dispute and the type of the dispute.

It needs to be emphasized, however, that abduction as the indispensable cognitive backbone of the pragma-dialectic theory cannot consist in clearly simplified forms of reasoning, being the basis of the artificial intelligence models (Reed, Grasso 2007: 1ff; Reed *et al.* 2007: 87ff). Although these models are based on abduction, they do not take into consideration strong and weak implicatures, which appear in the process of meaning creation in naturally occurring discussions. This impacts on the notional and methodological rigour of the pragma-dialectical model reinforced by abductive inference, which is different from the rigour characteristic for artificial intelligence models. It is obvious here that we are not undermining the hypothesis that artificial intelligence models are focused on the analysis of various effects. Multi-agent reasoning assumes, however, possible ways of achieving the previously planned effects, by varying degrees of the probability of occurrence. In naturally occurring discussions the goals, even if previously planned, may change over the course of the discussion (cf. Jacobs *et al.* 1991: 58). Therefore, as emphasized by Jacobs and others (1991), the analysis of natural discourse should allow the existence of local and global goals, as well as the possible alterations thereof. Thus, we need to find such a system of abductive inferences investigation, which would extend the pragma-dialectical model and at the same time would take into account the degree and character of occurring interpretations in connection with the achievement of goals, which are not subject to direct inspection. Such a system, in view of its capacity, seems to be the model framework called "Interpretation as Abduction", developed by Jerry Hobbs (1993, 2006).

The "Interpretation as Abduction" (IA) model framework makes it possible to construct cohesion links in interpretation, assuming as the starting point the Gricean (Grice 1957, 1975, 1989) and neo-Gricean (Sperber, Wilson 1986, Bach 1994, 1999, Blackmore 1998, Carston 2002, Recanati 1993, 2006) interpretational distinctions and relevance theory (Sperber, Wilson 1986).

Hobbs (2006: 735) maintains that correct interpretation of an utterance requires that the conversation is perceived as "coherent segment of discourse conveying some situation." This way, he points out, the correlation of the processes of thinking is based on abductive interference in the process of recognition of the relations characteristic for the discourse, e.g. the preparatory relations. Recognition of coherent relations, as Hobbs emphasizes, requires that one takes into account both the informational, as well as the intentional contents of the discourse. The informational contents of the discourse is the product of the pragmatic reinforcement of the preposition, i.e. the emergence of the explicature, for example by means of saturation or free enrichment. On the other hand, the intentional contents of the discourse is the product of conversational implicature and presupposition.

5. LOCAL AND GLOBAL GOALS IN THE SEMIOTICALLY ADEQUATE MODEL FRAME

In comparison with the pragma-dialectical model, Hobbs's system (Hobbs *et al.* 1993, Hobbs 2006) provides for the existence of other goals than the resolution of a dispute. One pays attention to local and global goals of the participants, which emphasizes the dynamics of the character of mental operations. Jacobs and others (1991: 58) define local purposes as virtual plans and requirements emerging in a locally relevant way and indicate that global purposes are determined prior to the commencement of the discussion. Taking into account the local and global goals of the dialogue, Hobbs (2006) refers directly to Walton's persuasion dialogue (Walton 1995, cf. Walton 2004) and Sperber's and Wilson's relevance theory (1986).

Walton's persuasion dialogue adopts the pragma-dialectic critical discussion as its starting point. At this point it needs to be noted, however, that Walton's persuasion dialogue (as well as the examination dialogue being a part of the persuasion dialogue) does not function as a construct enabling the analysis of the standpoints of the dispute participants, the type of the dispute and the stages of the dispute — as is the case with the pragma-dialectical model. Moreover, according to Walton's persuasion dialogue, resolution of a dispute is not always the global goal of the disputants. Especially, when we are dealing with "a non-mixed discussion" (cf. Eemeren, Grootendorst 1984: 5), in which only one participant presents an argumentation and the other one is undermining it. Walton indicated that "a non-mixed discussion" provides only that the points of view of the participants are mutually exclusive.

Walton's persuasion dialogue suggests the existence of a multi-directional nature of the relations between local and global possibilities. For example, carrying out a most effective attack may, but does not have to, take into account the resolution of the dispute (Walton 1995, cf. also Walton, Godden 2005: 273ff). It also needs to be added that in the Walton's dialogue there has been a clear distinction marked between the common and individual goals of the participants. It therefore develops the pragma-dialectical model from two perspectives: diversity and individuality of goals.

The examination dialogue, being a part of the persuasion dialogue, assumes the existence of two goals: the goal of "extracting information" and the "goal of testing the reliability of the argumentation" (Walton 2006: 772). In the ideal clarification dialogue model one also takes into account the change of the argumentative aspect to the clarification aspect in the contributions of both dispute participants.

As the reference to the relevance theory (Sperber, Wilson 1986) is concerned in Hobb's system (2006), it is visible in the fact that it takes into account the ostensive behaviour of the dispute participants, i.e. the predictability of communication behaviours. Ostensive behaviours in naturally occurring discussions are perceivable for other dispute participants thanks to the maximisation of the multiplication effect. The multiplication effect pertains to the building of dynamic relations between the arguments expressed at a given time and the arguments expressed at an earlier stage. Sperber and Wilson (1986: 48) indicate the fact that the increase of relevance of new assumptions depends on the increase of the number of links between arguments. It is therefore obvious that in discussions in which externalisation of a dispute occurs, the linking of old and new assumptions explains the contents of a given point of view. The productivity of clarification of a point of view should be understood here as causing positive cognitive effects increasing the knowledge of the participants of the dispute, and the knowledge already possessed by the analysing person. In other words, at this point verification of the available assumption takes place.

6. A PROPOSAL FOR THE EXTENSION OF THE PRAGMA-DIALECTICAL MODEL

In this paragraph I shall discuss a proposal for the extension of the pragma-dialectical model, for the examination of reliability of the argumentation based on the interpretation process. The new model is based on the critical discussion structure, i.e. incorporates into the pragma-dialectical model those notions and categories, which make it possible to determine the

common contents of the discussion, the standpoints of the dispute participants, the type of the dispute, the stages of the dispute, as well as the complex relations between the pro-arguments resulting from the introduction of the counterarguments. As has been confirmed by quality research (Dębowska, 2008), analysis of the interpretational processes in the argumentative discourse is not possible without the externalisation of the above aspects. An additional set of criteria necessary for the assessment of reliability of an argument is characterised by fuzzy hierarchical structure, assuming the need for verification of the interpretation over the duration of the discourse, and suggests the only possible order of the analysis of the reliability argument.

The point of gravity of this set is the pragmatic relevance of an argument, determined by the specification of the optimum of the pragmatic argument, the topos of the dynamic argument and the so-called pragmatic warrant. The notion of the topic of the dynamic argument functions both in dialectics, as well as in rhetoric. On the other hand, the notion of the pragmatic warrant is connected with the notion of "critical reasoning", described by Toulmin (1958 [2003]).

Set of criteria/guidelines

(1) It is assumed that there is a relation between the point of view of the proponent or the opponent and the argument presented in defence of this point of view. No relation at the level of logical minimum¹³ requires that the degree of the pragmatic relevance of an argument is determined. Determination of the degree of pragmatic relevance of an argument is possible by means of specification of the pragmatic optimum, the argument's dynamic topos and the pragmatic warrant.

(2) Absence of pragmatic relevance at the level of point of view-argument, results in the specification of pragmatic relevance at the level of coordination, subordination or multiple relations between the arguments.

(3) At every stage of the determination of pragmatic relevance of the argument one needs to take into account possible inference processes taking place in a naturally occurring discussion as well as the effects thereof (e.g. the implicature). Let us assume that the "Interpretation as Abduction" model frame constitutes an adequate model for examination of the interpretation processes (cf. paragraph 4).

¹³The notion of logical minimum ("if p then q , where p is an 'argument' and q is a 'point of view'") and pragmatic optimum was introduced by Eemeren and Grootendorst (1992: 61-65). They assume that on this basis it is possible to verify the *ignoratio elenchi* argument, they do not allow, however, for a second assessment of the remaining fallacies.

(4) The pragmatic relevance of an argument with respect to a point of view should be considered with respect to the local and global goals of the disputants.

(5) One needs to determine the relation between the rhetorical and dialectical goals (possible relations: balance between the rhetorical and dialectical goals, predominance of the rhetorical goals over the dialectical goals and *vice versa*).

Reliability of an argument is therefore considered not only with respect to the pragma-dialectical rules. The above criteria/guidelines focus on the notion of pragmatic relevance and may also be treated as an extension of rule 5 of the pragma-dialectical model. Rule 5 assumes that there exist implicit prerequisites, yet in view of its prescriptive character, it does not propose any method of examination thereof. The notion of "pragmatic relevance" on the other hand places implicitness in the foreground, emphasizing that it is connected with the processes and effects of abductive interference connected with the goals of the persons presenting their arguments. It needs to be noted that pragmatic relevance pertains above all to the relations between the point of view and the propositional contents of the argument. According to Jacobs and Jackson (1992: 173), the propositional content of a pragmatically relevant argument justifies the point of view and refers to the common propositional content of the discussion or the common propositional content of the sub-discussion (cf. Walton 1995). Jacobs and Jackson emphasize therefore that pragmatically relevant arguments cannot be treated as fallacies. Such a standpoint is also supported by Walton (1995: 255), who added that pragmatically relevant arguments are not an obstacle for achievement of the goal(s) of the disputants. Walton (1995) indicates however that not all pragmatically irrelevant arguments should be defined as fallacies. A pragmatically irrelevant argument may simply turn out to be a weak prerequisite. Therefore, the above set allows for the graduality of pragmatic relevance.

Aiming at the creation of an interdisciplinary model for argumentation examination on the basis of the pragma-dialectical model, I have used the notions from the borderline of three disciplines dealing with the dialogue form of argumentation: pragmatics, rhetoric and dialectics. Each of these notions, i.e. "the pragmatic optimum", "the dynamic topos of the argument" and the "pragmatic warrant of an argument" concerns the determination of the pragmatic relevance of the argument. Despite the fact that they stem from various traditions examining the argument structure, each of them functions as an abductive interference, i.e. an implicit attempt at explaining

the point of view.

As we have already mentioned, the notions of the "logical minimum" and "the pragmatic optimum" were introduced into the research of the dialectic form of the argument by Eemeren and Grootendorst (1992). The logical minimum assumes the form of a modus ponens argument "If p then q , where p is an 'argument' and q is a 'point of view,'" i.e. it pertains to the explicit form of the prerequisite. "The pragmatic optimum" is based on the closest context of a given speech act, i.e. allows the externalisation of an implicit prerequisite. As opposed to Eemeren and Grootendorst, we believe that application thereof as inference rules allows for a second verification not only of the *ignoratio elenchi* argument, but also of each potential fallacy.

The concept of "topos" adopted in the above set exceeds the definitions adopted by Aristotle and Perelman and Lucie Olbrachts-Tyteca. The Aristotelian notion of "special topos" is limited to three types of rhetoric, i.e. intended rhetoric, defensive rhetoric and argument refuting rhetoric (cf. Aristotle 1959: 33, 169, 171). On the other hand the Aristotelian notion of the topos based on a definition, property, type or case is limited to the Aristotelian dialectical discussion or to specific types of rhetoric (cf. Aristotle 1966: 281, 283, 285, 19). Similarly as in Aristotle's works the notion of topos in the works of Perelman and Olbrachts-Tyteca does not function as a general inference rule. Perelman and Lucie Olbrachts-Tyteca (1969: 85) discuss only those arguments which may be analysed within the topos of quality, topos of quantity, topos of order and topos of essence.

A new set of criteria adapts the concept of a scalar topos proposed by Anscombe and Ducrot (1989: 82f, Ducrot 1996). Such a concept of the topos refers to the gradable inference rules allowing the combination of topical fields in a given context. Potentially, each argument in the spoken discourse may be referred to using the gradable inference rule (Ducrot 1996). Carel (1995, p. 169) indicates four basic forms of scalar topos: "+ P, + Q", "- P, -Q", "- P, + Q", "+P, - Q", where "P" is an argument and "Q" is a point of view. Bruxelles and others (1995: 105, 106) indicate one possible topoi of uttering "He is rich, he will invite you," namely, "the more you have, the more you will do," based on two topical fields "Possession" and the "Ability to act".

7. CONCLUSION

The starting point for this article consisted of three basic assumptions, supported by the theoretical considerations and quality research carried out by Dębowska (2008):

(1) the pragma-dialectical model in the form proposed by Eeemeren and Grootendorst cannot function as a tool adequate for the analysis of the reliability of argumentation in naturally occurring discussions;

(2) observance of the rules of critical discussion and the realisation of the dialectic goal of a critical discussion — resolution of a dispute — cannot be the only criterion of the assessment of argumentation reliability;

(3) argumentation should be treated not as a sequence of axiomatically conditioned assertions but a sequence of complex actions.

Bearing in mind the above, we have proposed criteria for evaluation of the reliability of the naturally occurring discussions. Determination of the pragmatic relevance of an argument, referring to the three rules of abductive inference, i.e. to the "pragmatic optimum," "topos of dynamic argument" and "the argument's pragmatic warrant," is the most important criterion of the assessment of the reliability of an argument. The criteria/guidelines presented in the preceding paragraph come directly and indirectly from Hobbs's model. Sketching the relation between the "Interpretation as Abduction" model frame and the persuasion dialogue model it has been demonstrated that the constant emerging of local goals may refer to the so-called embeddings of various types of dialogue models (e.g. the clarification dialogue) in the structure of the persuasion dialogue.

Bibliography

1. Anscombe, Jean Claude and Oswald Ducrot (1989) "Argumentativity and Informativity." In *From Metaphysics to Rethoric*, ed. Michel Meyer, 71-87. Dordrecht: Kluwer.
2. Aristotle (1955) *On Sophistical Refutation. On Coming-to-be and Passing Away*. Transl. E. S. Forster and David J. Furley. Cambridge (Mass.): Harvard University Press.
3. Aristotle (1959) *The Art of Rhetoric*. Transl. John Henry Freese. Cambridge (Mass.): Harvard University Press.
4. Aristotle (1966) *Posterior Analytics. Topica*. Transl. Hugh Tredennick and E.S. Foster. Cambridge (Mass.): Harvard University Press.
5. Atlas, Jay David (2005) *Logic, Meaning and Conversation*. New York: Oxford University Press.

6. Bach, Kent (1994) "Conversational Implicature." *Mind and Language* 9: 124-162.
7. Bach, Kent (1999) "The Semantics-Pragmatics Distinction. What It Is and Why It Matters." In *The Semantics-Pragmatics Interface from Different Points of View*, ed. Ken Turner 65-84. Oxford: Elsevier.
8. Berlo, David K. (1960) *The Process of Communication. An Introduction to Theory and Practice*. New York: Holt, Rinehart and Winston.
9. Blakemore, Diane (1998) *Understanding Utterances: An Introduction to Pragmatics*. Oxford: Blackwell.
10. Bruxelles, Sylvie, Ducrot, Oswald and Pierre-Yves Raccach (1995) "Argumentation and the Lexical Topical Fields." *Journal of Pragmatics* 24: 99-114.
11. Bryson, Lyman, ed. (1948) *The Communication of Ideas*. New York: Harper and Brothers.
12. Carel, Marion (1995) "Pourtant: Argumentation by Exception." *Journal of Pragmatics* 24: 167-188.
13. Carston, Robyn (1988) "Implicature, Explicature, and the Truth-Theoretic Semantics." In *Mental Representations: The Interface Between Language and Reality*, ed. Ruth Kempson, 155-181. Cambridge: Cambridge University Press.
14. Carston, Robyn (2002) *Thoughts and Utterances: The Pragmatics of Explicit Communication*. Oxford: Blackwell.
15. Carston, Robyn (2006) "Relevance Theory and the Saying/Implicating Distinction." In *The Handbook of Pragmatics*, eds. Laurence R. Horn, Gregory Ward, 633-656. Malden: Blackwell Publishing.
16. Carston, Robyn and Seijii Uchida, eds. (1998) *Relevance Theory. Applications and Implications*. Amsterdam: John Benjamins.
17. Cole, Peter and Jerry Morgan, eds. (1975) *Syntax and Semantics*, Vol. 3: *Speech Acts*. New York: Academic Press.
18. Craig, Robert T. and Karen Tracy, eds. (1983) *Conversational Coherence. Form, Structure and Strategy*. Beverly Hills: Sage Publications.

19. Dębowska, Kamila (2008) *Extending the Pragma-Dialectical Model of the Argumentation (on the Basis of Naturally Occurring Discussions in English and Polish)*. Unpublished Ph.D. Thesis, Institute of English Philology, Adam Mickiewicz University, Poznań.
20. Dijk, Teun A. van (1977) *Text and Context. Explorations in the Semantics and Pragmatics of Discourse*. London: Longman.
21. Ducrot, Oswald (1996) *Slovenian Lectures*. Ljubljana: ISH.
22. Eemeren Frans H. van, ed. (2001a) *Crucial Concepts in Argumentation, Theory*. Amsterdam: Amsterdam University Press.
23. Eemeren, Frans H. van (2001b) "Fallacy." In *Crucial Congress in Argumentation Theory*, ed. Frans H. van Eemeren, 135-161.
24. Eemeren Frans H. van, ed. (2002), *Advances in Pragma-Dialectics*. Amsterdam: Sic Sat.
25. Eemeren Frans H. van, Blair J. Anthony, Williard Charles A. and Bart Garssen, eds. (2007) *Proceedings of the Sixth Conference of the International Society for the Study of Argumentation*. Amsterdam: Sic Sat.
26. Eemeren Frans H. van and Rob Grootendorst (1984) *Speech Acts in Argumentative Discussions*. Dordrecht: Foris Publications.
27. Eemeren Frans H. van and Rob Grootendorst (1992) *Argumentation, Communication, and Fallacies. A Pragma-Dialectical Perspective*. Hillsdale, NJ: Lawrence Erlbaum Associates.
28. Eemeren Frans H. van and Rob Grootendorst (2004) *A Systemic Theory of Argumentation. The Pragma-Dialectical Approach*. Cambridge: Cambridge University Press.
29. Eemeren Frans H. van, Grootendorst Rob, Blair J. Anthony, Johnson Ralph H., Krabbe Erik C.W., Plantin Christian, Walton Douglas N., Willard Charles A., Wood John and David Zarefsky (1996) *Fundamentals of Argumentation Theory. A Handbook of Historical Backgrounds and Contemporary Developments*. Mahwah: Lawrence Erlbau Associates.

30. Eemeren Frans H. van, Grootendorst Rob, Jackson Sally and Scott Jacobs (1993) *Reconstructing Argumentative Discourse*. Tuscaloosa: University of Alabama Press.
31. Eemeren Frans H. van and Peter Houtlosser, eds. (2002a) *Dialectic and Rhetoric. The Warp and Woof of Argumentation Analysis*. Dordrecht: Kluwer Academic.
32. Eemeren Frans H. van and Peter Hourlosser (2002b) "Strategic Manoeuvring With the Burden of Proof." In *Advances in Pragma-Dialectics*, ed. Frans H. van Eemeren, 13-27. Amsterdam: Sic Sat.
33. Eemeren Frans H. van and Peter Hourlosser (2002c) "Strategic Manoeuvring. Maintaining a Delicate Balance." In *Dialectic and Rhetoric. The Warp and Woof of Argumentation Analysis*, eds. Frans H. van Eemeren and Peter Houtlosser, 131-159. Dordrecht: Kluwer Academic.
34. Gazdar, Gerald (1979) *Pragmatics. Implicature, Presupposition, and Logical Form*. New York: Academic Press.
35. Gerbner, George (1956) "Toward a General Model of Communication." *Audio-Visual Communication Review* 4: 171-199.
36. Goffman, Erving (1959) *The Presentation of Self in Everyday Life*. New York: Anchor.
37. Grice, Paul Herbert (1957) "Meaning." *The Philosophical Review* 66: 377-388.
38. Grice, Paul Herbert (1975) "Logic and Conversation." In *Syntax and Semantics*, vol. 3, eds. Peter Cole and Jerry Morgan, 41-58. New York: Academic Press.
39. Grice, Paul Herbert (1989) *Studies in the Ways of Words*. Cambridge (Mass): Harvard University Press.
40. Hamblin, Charles L. (1970) *Fallacies*. London: Methuen [1993, Virginia: Vale Press].
41. Hobbs, Jerry R. (2006) "Abduction in Natural Language Understanding." In *The Handbook of Pragmatics*, eds. Laurence R. Horn and Gregory Ward, 724-741. Malden: Blackwell Publishing.

42. Hobbs, Jerry R., Stickel Mark, Appelt Douglas and Paul Martin (1993) "Interpretation as Abduction." *Artificial Intelligence* 63[1-2]: 69-142.
43. Hodge, Robert and Gunther Kress (1988) *Social Semiotics*. Cambridge: Polity Press.
44. Horn, Laurence R. (2006) "Implicature." In *The Handbook of Pragmatics*, eds. Laurence R. Horn and Gregory Ward, 3-28. Malden: Blackwell Publishing.
45. Horn, Laurence R. and Gregory Ward, eds. (2006) *The Handbook of Pragmatics*. Malden: Blackwell Publishing.
46. Jackson, Sally (2007) "Predicaments of Politicization in Debate Over Abstinence-Only Sex Education." In *Proceedings of the Sixth Conference of the International Society for the Study of Argumentation*, Frans H. van Eemeren, J. Anthony Blair, Charles A. Willard and Bart Garssen, 679-687. Amsterdam: Sic Sat
47. Jackson, Sally and Scott Jacobs (1983) "Speech Act Structure in Conversation. Rational Aspects of Pragmatic Coherence. In *Conversational Coherence. Form Structure and Strategy*, Robert T. Craig and Karen Tracy, 47-66. Beverly Hills: Sage Publications.
48. Jacobs, Scott and Jackson, Sally (1992) "Relevance and Digressions in Argumentative Discussion. A Pragmatic Approach." *Argumentation* 6: 161-176.
49. Jacobs, Scott, Jackson, Sally, Stearns, Susan and Barbara Hall (1991) "Digressions in Argumentative Discourse. Multiple Goals, Standing Concerns, and Implicatures." In *Understanding Face-to-face Interaction: Issues Linking Goals and Discourse*, ed. Karen Tracy, p. 43-61. Hillsdale, New Jersey: Lawrence Erlbaum.
50. Jakobson, Roman (1960) "Linguistics and Poetics." In *Style in Language*, ed. Thomas A. Sebeok, 350-377. Cambridge (Mass.): MIT Press.
51. Lasswell, Harold Dwight (1948) "The Structure and Function of Communication in Society." In *The Communication of Ideas*, ed. Lyman Bryson, 37-51. New York: Harper and Brothers.
52. Levinson, Stephen C. (1983) *Pragmatics*. Cambridge: Cambridge University Press.

53. Levinson, Stephen C. (1995) "Three Levels of Meaning." In *Grammar and Meaning*, ed. Frank Palmer, 90-115. Cambridge: Cambridge University Press.
54. Levinson, Stephen C. (2000) *Presumptive Meanings: The Theory of Generalized Conversational Implicature*. Cambridge (Mass.): MIT Press.
55. Meyer, Michel, ed.(1989) *From Metaphysics to Rhetoric*. Dordrecht: Kluwer.
56. Palmer, Frank, ed. (1995) *Grammar and Meaning*. Cambridge: Cambridge University Press.
57. Perelman, Chaim and Lucie Olbrechts-Tyteca (1969) *The New Rhetoric. A Treatise on Argumentation*. Transl. John Wilkinson, Purcell Weaver. Notre Dame: University of Notre Dame Press.
58. Recanati, François (1993) *Direct Reference: From Language to Thought*. Oxford: Blackwell.
59. Recanati, François (2006) "Pragmatics and Semantics." In *The Handbook of Pragmatics*, eds. Laurence R. Horn and Gregory Ward, 442-463. Malden: Blackwell Publishing.
60. Reed, Christopher and Floriana Grasso (2007) "Recent Advances in Computational Models of Argument." *International Journal of Intelligent Systems* 22[1]: 1-15.
61. Reed, Christopher, Walton, Douglas and Fabrizio Macano (2007) "Argument Diagramming in Logic, Law and Artificial Intelligence." *Knowledge Engineering Review* 22[1]: 87-109.
62. Searle, John Rogers (1969) *Speech Acts. An essay in the Philosophy of Language*. Cambridge: Cambridge University Press.
63. Searle, John Rogers (1979) *Expression and Meaning. Studies in the Theory of Speech Acts*. Cambridge: Cambridge University Press.
64. Sebeok, Thomas A., ed. (1960) *Style in Language*. Cambridge (Mass.): MIT Press.

65. Shannon, Claude E. and Warren Weaver (1949) *The Mathematical Theory of Communication*. Urbana (Illinois): University of Illinois Press.
66. Sperber, Dan and Deidre Wilson (1986) *Relevance. Communication and Cognition*. Oxford: Blackwell.
67. Szymanek, Krzysztof (2004) *Sztuka argumentacji. Słownik terminologiczny*. [*The art of argumentation. Termination dictionary*] Warszawa: Wydawnictwo Naukowe PWN.
68. Toulmin, Stephen E. (2003) *The Use of Argument*. [First edition 1958]. Cambridge: Cambridge University Press.
69. Tracy, Karen, ed. (1991) *Understanding Face-to-face Interaction: Issues Linking Goals and Discourse*. Hillsdale, New Jersey: Lawrence Erlbaum.
70. Turner, Ken, ed. (1999) *The Semantics-Pragmatics Interface from Different Points of View*. Oxford: Elsevier.
71. Walton, Douglas (1995) *A Pragmatic Theory of Fallacy*. Tuscaloosa: University of Alabama Press.
72. Walton, Douglas (2004) *Abductive Reasoning*. Tuscaloosa: University of Alabama Press.
73. Walton, Douglas (2006) "Examination Dialogue: An Argumentation Framework for Critically Questioning an Expert Opinion." *Journal of Pragmatics* 38: 745-777.
74. Walton, Douglas and David M. Godden (2005) "Persuasion Dialogue in Online Dispute Resolution." *Artificial Intelligence and Law* 13: 273-295.
75. Wąsik, Zdzisław (2003) *Epistemological Perspectives on Linguistic Semiotics*. Frankfurt a. M.: Peter Lang.