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## **The Methodological Approach to Argument Evaluation: Rules of Defining as Applied to Assessing Arguments**

### **1. ARGUMENT EVALUATION FROM THE POINT OF VIEW OF METHODOLOGY OF SCIENCE**

The label “argument evaluation” denotes a set of procedures employed in the study of argumentation, which are aimed at assessing arguments in order to identify their common defects. Among those procedures there are: (1) assessing the acceptability of argumentative statements, (2) checking the validity of reasoning, (3) assessing the use of typical argumentation schemes, and (4) confronting instances of argumentation with the rules of critical discussion (see, e.g., van Eemeren, Grootendorst and Snoeck Henkemans 2002, pp. 91-93). This paper discusses the methodological approach to argument evaluation which may be expressed by the following claim: argumentation can be successfully evaluated by applying tools elaborated by the general methodology of science. Among those tools there are rules of performing various knowledge-gaining procedures. In what follows I call these rules methodological, for rules for performing some typical knowledge-gaining procedures are investigated by the general methodology of science. Among these procedures the most significant are: (1) reasoning, (2) questioning, (3) defining, (4) classifying objects and (5) formulating and testing hypotheses.<sup>1</sup>

Although elements of the methodological approach to argument evaluation are present in philosophy and argumentation theory, they have not so far been systematically elaborated. By “elements of the methodological approach to argument evalua-

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<sup>1</sup> The methodological approach to argument evaluation was earlier discussed in Koszowy (2007). It is based on the idea of analysing fallacies as mistakes in performing knowledge-gaining procedures (see also Koszowy 2004; 2010).

tion” I mean claims concerning applications of various methodological rules to evaluation of arguments. Some of these claims have been advanced or examined by thinkers who belong to various philosophical traditions. Among them I should mention: Jaakko Hintikka who points out to the need of evaluating arguments within the framework of questioning (e.g., 1984a; 1984b; 1992); Douglas Walton who examines fallacies of questioning, also by means of some methodological rules of questioning and answering (1991) and analyzes some rules of formulating persuasive definitions (Walton 2001; 2005; 2008; Walton and Macagno 2009a; 2009b; 2010a; 2010b); Alvin Goldman who applies some rules of justification (which are used either by epistemology or by methodology of science) within the epistemological approach to argumentation (2003); Louise Cummings who considers the relationship between scientific norms and argument evaluation (2002). Also some Polish philosophers and methodologists from the Lvov-Warsaw School took this approach: Kazimierz Ajdukiewicz who develops the program of pragmatic logic (1974) within which methodological rules of performing various knowledge-gaining procedures are elaborated and Tadeusz Czeżowski who formulates methodological rules for the procedures of describing and defining (2000). The possibility of evaluating arguments by means of some rules of language elaborated in semiotics is shown e.g. in the works of Suchoń (2005), Budzyńska (2004; 2010), and Budzyńska & Kacprzak (2010).

An analysis of the elements of the methodological approach to argument evaluation present in writings of the thinkers listed above shows that many methodological rules are in fact used in argument evaluation. Although there exist some satisfactory descriptions of particular methodological rules (for example the rules of questioning as elaborated by Hintikka or the rules of defining and describing as formulated by Czeżowski), there is still a need to elaborate them systematically. So, the central task for the methodological approach to argument evaluation is to establish a possibly unified set of methodological rules, which can be used in argument evaluation and then to show how these rules can be applied. None of these tasks is in fact undertaken in this paper. The aim is much more limited: taking as an example the rules of defining I am going to show how preparing such a set can be started.

The application of methodological rules in argument evaluation consists in comparing them with rules that govern real life cases of argumentative practices performed either in scientific inquiry or in everyday life. I defend the claim that building the methodological approach to argument evaluation understood as systematic application of the rules elaborated by the methodology of science to evaluating arguments is a reasonable research project.

There are two reasons for claiming that the methodological approach to argument evaluation is plausible, and both concern the relationship between argumentation theory and methodology of science. The first reason is that both areas of research have a common subject: argumentation. In methodology of science elaborating rules for giving rational and reasonable arguments for theses and hypotheses advanced in

scientific inquiry is one of the most crucial tasks. The second reason is that argumentation theory and methodology of science have in fact a common aim: to establish rules for evaluating activities of some specific kinds. In the case of argumentation theory, these are speech acts performed within an argumentative discourse; in the case of methodology of science these are knowledge-gaining activities performed either in scientific research or in everyday life. Thus, both areas of research have not just descriptive but a normative character.

The choice of the procedure of defining is justified by the fact that definitions play a crucial role in argumentation. So, in order to show that the methodological approach to argument evaluation is a promising way of doing argument evaluation I start with presenting the role of definitions in argumentation, and then I consider the role of the rules of defining in argument evaluation. However, I do not aim at building a comprehensive set of rules for argument evaluation, but at giving examples of how various pieces of argumentation can be evaluated by the means of the methodological rules.

## 2. DEFINITIONS IN ARGUMENTATION

Many argumentation theorists, either in their research works or in textbooks, point out to the importance of definitions in argumentation. Some remarks on the role of definitions in argumentation can be found in works of e.g. Walton (1980; 2001; 2005), Marciszewski (1993; 1994), Viskil (1994), Govier (1997), and van Eemeren and co-researchers (van Eemeren, Grootendorst and Snoeck Henkemans 2002).

The crucial role of definitions in argumentation is revealed by the fact that redefinitions of some key terms used in science and in everyday life are necessary either in scientific or in public policy discourses (Walton 1980, p. 16; 2001, pp. 120-122; 2005, pp. 164-166; Marciszewski 1994, p. 212; Govier 1997, pp. 98-99).<sup>2</sup> Argumentation theorists also stress the fact that formulating definitions is helpful for discussion parties to proceed with a discourse. Van Eemeren, Grootendorst and Snoeck Henkemans (2002, p. 174) remark that “to ensure that they are both talking about the same thing, the participants may decide to assign *definitions* to the main terms relevant to the discussion” (van Eemeren, Grootendorst, and Henkemans’ emphasis).

However, definitions in argumentation are seldom formulated in an explicit way. In everyday life cases when at a certain stage of a discourse the parties explicitly agree: “let us now put forward definitions of crucial terms relevant to our discussion” are rather rare. Using terms without requiring to define them is much more common. Yet, it does not mean that tools for evaluating definitions are not useful, for it is al-

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<sup>2</sup> A philosophical debate which may lead to discussing applications of the rules of defining in argument evaluation concerns essentialism in the theory of definition (see Walton 2001, pp. 124-125). Still, consequences of essentialism for evaluating definitions in argumentation go beyond the scope of this paper.

ways possible to extract relevant implicit definitions, and then to evaluate them and thereby also to evaluate argumentation itself.

What are the reasons for applying rules of defining in argument evaluation? Two basic ones should be indicated.

The first of them appeals to the fact that definitions play an organizing role within an argumentative discourse (Marciszewski 1994, pp. 211-219). Definitions accepted at the beginning of a discourse may set the direction of a discussion and even the way of discussing. In some cases good definitions can form an argumentative discourse by setting the whole strategy of discussing. If one of the parties is not conscious of the role of definitions (or has no proper tools to evaluate definitions), she or he can be misled by the other party. The organizing role of definitions is revealed by the fact that good definitions formulated within a discourse help to reconstruct standpoints, and therefore to establish where the main point of disagreement lies. The consequence of assigning definitions a crucial role in argumentation is clearly expressed by Marciszewski (1994, p. 218): “the centre of gravity of intelligent arguing lies in the art of defining.”

We should here notice that evaluating a given definition is not the same as evaluating a whole discourse. However, if we accept Marciszewski’s claim quoted above, we should also agree that evaluating the definition accepted at the beginning of a discourse heavily bears on the evaluation of the whole discourse. So, evaluating definitions which are relevant for a given discourse and evaluating arguments performed within that discourse are interrelated. Moreover, as Walton (1980, pp. 16-17) shows in his analyses of real definitions (in contrast to nominal definitions) in ethical discourses, definitions can be explained by the metaphor of a target:

A good definition is a target that indicates what it is that the criteria are supposed to determine. Insofar as the target is clearly articulated, it can have a legitimate function in shifting the burden of proof in moral arguments, and should not always be lightly brushed aside.<sup>3</sup>

So, if we formulate good definitions of main objects (or terms) of our discussion, it is highly probable that our discourse turns out to be reasonable and successful.

The second reason for applying rules of defining in argument evaluation appeals to the fact that one of the fundamental conditions of resolving a difference of opinion, what is — along with the epistemic goal of achieving truth — one of the central goals of any reasonable argumentative discourse (van Eemeren and Grootendorst 1992, p. 13) — is parties’ common understanding of terms. Sometimes one’s view is expressed by means of ambiguous, vague, or fuzzy concepts. In such a situation we are entitled, or even obliged, to require definitions. This idea is expressed by Copi and Cohen (2005, p. 92): if some disputes arise only as a result of purely verbal misunderstandings, then we often need to recourse to good definitions.

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<sup>3</sup> The term “criteria” used here by Walton refers to empirical criteria that should be taken into account when formulating a real definition, i.e. a definition of an object, not a definition of a term.

Yet, if an error in defining is committed, then a discourse may turn out to be unsuccessful: the difference of opinion may not be resolved or truth may not be achieved. In such cases, definitions can be seen as obstacles for a successful argumentation (see Viskil 1994, p. 80). Thus, good definitions accepted at the very beginning of a discourse may constitute the point of departure for a successful argumentative discourse.

If we agree that definitions play a crucial role in argumentation, we may safely assume that the rules for proper defining play an important role in evaluating various pieces of an argumentative discourse.

### 3. SOME RULES OF DEFINING IN ARGUMENT EVALUATION: TWO CASE STUDIES

A discipline which investigates the procedure of defining is the general methodology of science. Among various kinds of rules, it formulates the rules for recognizing errors of definitions. Two types of such rules are important for my analysis: structural and pragmatic. Structural rules tell us what the proper structure of a given kind of definition should be. They allow to identify for example definitions which are too broad, too narrow, or viciously circular. As examples of such structural rules the following may be mentioned (see, e.g., Searles 1956, pp. 55-57; Bonevac 1990, pp. 107-109; Hoaglund 1999, pp. 251-252; Layman 2005, pp. 103-104):

(1) An explicit definition should not be circular: “in the case of an explicit definition, the word defined (*definiendum*) must not be used in the *definiens* (Kublikowski 2009, p. 233).

(2) The extensions of the *definiendum* and *definiens* of a lexical definition must not be mutually exclusive (ibid.)

(3) A definition should not be too broad: “the extension of the *definiens* of a lexical definition must not be superior to the extension of the *definiendum*” (ibid.).

(4) A definition should not be too narrow: “the extension of the *definiens* of a lexical definition must not be inferior to the extension of the *definiendum*” (ibid.).

(5) A definition should not be negative if it can be affirmative.

The pragmatic rules of defining concern the context in which definitions are used. They are applied to identify such errors of defining as *ignotum per ignotum*, or confusing various kinds of definitions.<sup>4</sup> There exists a variety of pragmatic rules. As examples of such rules the following may be mentioned:

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<sup>4</sup> These distinctions are explained in Robinson (1950) and in many textbooks of logic and methodology of science, among others in Searles (1956, Ch. 3), Ajdukiewicz (1974, Ch. 5), Marciszewski (1994, Ch. 8), Copi and Cohen (2005, Ch. 4), and Layman (2005, Ch. 3). Some of these distinctions, with more references to the literature, can be found in Viskil (1994). The difference between normal and implicit definitions is explained in Marciszewski (1994, pp. 203-206).

- (1) “A definition is flawed if the *definiens* picks out the right extension via attributes that are unsuitable relative to the context or purpose” (Layman 2005, p. 105).
- (2) Descriptive definitions should not be confused with normative ones.
- (3) Lexical definitions should not be confused with stipulative ones (Ajdukiewicz 1974, Ch. 5).
- (4) Real definitions should not be confused with persuasive ones (Ajdukiewicz 1974, Ch. 5).
- (5) In a real definition only essential (or relevant) attributes of the defined object should be included (Searles 1956, p. 56; Czeżowski 2000, p. 69).
- (6) Among the essential (or relevant) attributes we should choose the constitutive ones (those which determine the whole), and disregard consecutive attributes (those which are dependent on and determined by the constitutive attributes) (Czeżowski 2000, p. 69).

Some general rules for defining are also implicitly present in argumentation theory. Viskil (1994, p. 80) mentions three conditions of formulating proper definitions. According to him, “in order to give guidelines for formulating recognizable definitions, it is necessary to establish first what *definition* amounts to, which types of definition can be distinguished, and what their characteristic properties are” (Viskil’s emphasis). Last two conditions given by Viskil may be captured in terms of the following rules of defining: various types of definitions should not be confused; essential properties of a given type of definition should be respected. These rules can in fact be found on a list given above.

As another example of the presence of the rules of defining in argumentation theory I shall briefly consider one of ten rules for critical discussion formulated within the pragma-dialectical approach to argumentation developed by van Eemeren and Grootendorst (1992, p. 209). Rule 10 states that “a party must not use formulations that are insufficiently clear or confusingly ambiguous and he must interpret the other party’s formulations as carefully and accurately as possible” (see also Tokarz 2006, p. 164; Dębowska 2010, p. 106). Although this rule does not contain any explicit reference to defining, it can be treated as an implicit directive for the parties to apply rules of defining in discussion. For this rule clearly points to the rules of defining: one of the necessary conditions of respecting this rule requires to use terms which do not cause the other party to interpret my standpoint inaccurately. Thus, in fact, respecting this rule requires proper definitions of key terms when necessary or required.

How a general procedure of evaluating arguments by means of the rules of defining looks like? I shall briefly discuss the handbook definition of the term “bird”, which is used in Layman’s textbook *The Power of Logic* (2005), in order to show the general mechanism of how to identify an error of defining in argumentation. Some examples can be built upon Layman, who explicitly says about “using definitions to evaluate arguments” (p. 110). He gives an example of a definition which breaks the rule: “a definition should not be too narrow”:

“Bird” means “feathered animal that can fly”.

Let us develop Layman’s example by supposing that the whole discourse was built upon this definition. How to evaluate such a piece of a discourse? The discourse is based on an inadequate definition of the term “bird”, for the rule that tells us that the definition should not be too narrow is violated. The *definiens* (a phrase, which is used to define) does not apply to some objects belonging to the extension of the *definiendum* (that, what is defined). For example kiwis or cassowaries do not fall under the provided definition of the term “bird” — they are feathered but do not fly, and so conclusions of that discourse would not apply to kiwis and cassowaries. If the other party included kiwis and cassowaries into the extension of the term “bird”, she or he would be ready to dismiss the conclusions. So the discourse would be epistemically unsuccessful.

A good illustration of the procedure of evaluating definitions is given by the analysis of definitions of critical thinking made by Johnson (1996). According to Johnson, definitions of critical thinking present in literature belong to the type of definitions called “stipulative”. In his analysis of those definitions he appeals in fact to the rule of defining governing this type of definitions: that stipulative definition should broadly reflect of current practice (1996, p. 228). So, he would disregard certain definitions of critical thinking because — according to him — they violate this rule.

Case studies of definitions playing a central role in public discourses can be easily found in works of logicians and argumentation theorists. For example, Walton examines cases of evaluating persuasive redefinitions of terms which had already been defined in science and public policy usage (Walton 2001) or of formulating stipulative definitions in scientific discourses (Walton 1980; 2008). Kublikowski (2009) distinguishes three kinds of arguments which use definitions: (a) argumentation about definition — as some arguments arrive at definition, (b) argumentation from definition — as some definitions are a starting point of an argumentative discourse, and (c) argumentation by definition — as some definitions are premises of arguments. Argumentation by definitions of death, scurvy, puerperal fever, and influenza (pp. 236-238) show how arguments are evaluated by means of the rules of defining. In what follows I shall also examine two cases of argumentation by definition. My aim is to show how violations of some particular methodological rules bear on evaluating a discourse.

#### **Case one: the debate over euthanasia**

Let us suppose that two parties debate whether euthanasia should be legalized. Let us also assume that one party persuaded the other that the term “euthanasia” refers to the active help to stop somebody’s unbearable suffering. If this definition of euthanasia is accepted, then the issue is immediately solved because everybody agrees

that it is a morally noble thing to stop ones unbearable suffering and doing morally noble things should not be forbidden by law. In this case the methodological rule of not confusing the real and persuasive definitions (rule 4 on our list of pragmatic rules) is violated. Real definitions should capture the essence of the thing defined; persuasive definitions aim at changing the attitude towards a defined phenomenon:

Persuasive definitions explain the meaning of a term, but contentiously; they try to convey not only the meaning but also a certain attitude. These definitions can be extremely effective in persuading and in exposing another's misuse of a term (Bonevac 1990, p. 105).

In the discussed case the persuasive definition is claimed to be an essential definition, but it is not. So the definer may hope that the opposite party shall not notice that persuasive definition has been used as if it was a real definition, and by accepting it the party will be forced to agree to legalize euthanasia.

#### **Case two: the debate over the restriction on the use of the Internet**

Let us suppose that two parties debate whether any restrictions on the access to the Global Information Infrastructure (GII) are justified. Let us also suppose that both parties agree that the GII is the source of information. The party who is skeptical about any restrictions on the Internet, advances the following definition: the term "knowledge" in its common use refers to the sum of information. After formulating this definition the party proceeds by advancing the argument: if "knowledge" refers to the sum of information, so the more information we collect, the more knowledge we possess; and as we all know, the Internet allows us to gather various kinds of information, so it gives us an excellent opportunity to extend our knowledge of the world. Therefore the access to the GII should not be restricted.

Also here the case is solved if this definition of the term "knowledge" is accepted. Nobody disagrees that we have the right to search for knowledge. So there is no reason to restrict the access to the GII if it gives us knowledge. In this case the methodological rule to distinguish between a lexical definition of the term as commonly understood in a given language and a stipulative definition which projects the meaning of a given term (rule 3 on our list of pragmatic rules) is violated.

In both cases the definitions in fact implicitly contain what is apparently argued for. Walton remarks that persuasive definitions "are very often, in a clever and subtle way, deployed to serve the interest of the definer" (Walton 2001, p. 117). It seems that this characteristic refers not only to persuasive definitions, but also to some other practices of defining. One of such practices is putting forward question-begging definitions. Damer describes this case as follows: the question-begging definition makes a given claim true by definition, "by subtly importing a highly questionable definition of a key word into one of the premises" (Damer 2001, p. 106).

The cases discussed illustrate the general mechanism of violating the rules of defining within argumentative discourse: when — by using tricky definitions — the

definer achieves her goal, the whole discourse becomes unnecessary, because the issue is “solved” in the moment of accepting the definition. In such cases the difference of opinion only apparently disappears or truth is only apparently achieved. If one confuses definitions introduced into a discourse on purpose, i.e. if one breaks the general rule of not confusing types of definitions on purpose, we have a case of manipulation.

As the examples discussed above show, definitions employed in argumentation bear on the reasonableness of a discourse: if one defines objects or events improperly, a discourse may lead to false conclusions; if one uses persuasive definitions, a discourse may become persuasion, or even manipulation, not argumentation.<sup>5</sup> The obvious result is that the main goals of argumentative discourse — gaining truth and resolving a difference of opinion — may not be achieved. Thus, the evaluation of definitions is the very first step in evaluating the whole argumentation. So, my choice of the procedure to be considered is not accidental. Moreover, definitions in argumentation are often implicit, so usually we do not pay enough attention to them.

#### 4. PROBLEMS

The methodological approach to argument evaluation presented in the paper may raise some problems, four of which I shall mention.

The first concerns the fact that there are no sharp boundaries between the general methodology of science and other areas of inquiry into knowledge-gaining activities. Thus, it may be assumed that there are no sharp boundaries between the methodological approach and the well-known approaches to argumentation, i.e. formal approaches, the pragma-dialectical approach or the epistemological approach. However, if we assume that there is still the need of systematizing some areas of the study of argumentation, we can also agree that the general methodology of science, as the branch of inquiry, which elaborates many different rules for performing the knowledge-gaining procedures used in science, may therefore constitute one of possible normative fundaments (in the form of the set of rules), upon which systematic analysis of some fallacies of those knowledge-gaining procedures (for example questioning and defining) could be successfully conducted. There is no need to draw a sharp distinction between the methodological approach and other already well developed approaches to argumentation, or treat the methodological approach as a rival of some other approaches. On the contrary, the methodological approach could be understood as an approach complementary (and even partially overlapping) with some approaches, for example with the epistemological one.

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<sup>5</sup> There are however cases, in which — under certain conditions — the use of persuasive definitions is justified, since rational persuasion can be a legitimate goal of argumentation (see Walton 2005, p. 177). There are cases, in which persuasive definitions play a “non-manipulative role” (Kublikowski 2007, pp. 153-161).

The second problem concerns the notion of the knowledge-gaining procedures and the formal approaches to argumentation. In the present paper all well-known approaches to argumentation have been interpreted as ones that elaborate some rules that govern performing the knowledge-gaining procedures. However, in the case of formal approaches to argumentation this interpretation may not seem appropriate. If formal approaches study forms (schemes) of arguments in order to consider the validity or invalidity of those forms (schemes), how can be they seen as approaches that elaborate any rules of knowledge-gaining procedures? An answer to this question may point to the fact that logical approaches to argumentation use formal inference schemes to evaluate arguments and so they focus on “argument forms” or “patterns of reasoning” (see e.g. van Eemeren, Grootendorst & Snoeck Henkemans 2002, p. XII). Every logical inference scheme corresponds to an inference rule of a given kind. Those rules govern the process (or procedure) of reasoning. And reasoning is one of the most important knowledge-gaining procedures. So, in this sense formal approaches to argumentation are designed to investigate knowledge-gaining procedures.

The third problem may be expressed by the question: are methodological rules substantially different from the rules elaborated in other fields of research, for example from the pragma-dialectical rules for argument evaluation? According to the understanding of methodological rules accepted in this paper, there is no sharp boundary between logical, methodological or pragma-dialectical rules for argument evaluation, because all those disciplines investigate knowledge-gaining procedures. From an epistemic point of view all those rules constitute one kind.

Since there is no sharp boundary between the sets of rules formulated in argumentation theory and in methodology of science, there might be an impression that speaking about the *methodological* approach to argumentation is vague. So, there is a need of clarifying the scope of the methodological approach.

Within the methodological approach the general methodology of science is understood as a meta-discipline aimed at formulating general rules for conducting scientific inquiry, i.e. for performing various knowledge-gaining activities. Thus, by “methodological rules” I mean rules elaborated, analyzed and applied in the general methodology of science. The same rules are elaborated in other disciplines, for example in the logic of questions, and I do not exclude the possibility of using rules taken from some other disciplines for evaluating arguments. The usefulness of appealing to the general methodology of science in order to seek for those rules lies in the fact that in the methodology of science rules for various kinds of knowledge-gaining activities are systematically formulated and organized as a consistent set.

The fourth problem concerns the variety of conceptions of *methodological* rules. There are of course various conceptions of scientific method and therefore also of the methodology of science. Moreover, there are various scientific disciplines with their own specific methods (physics and history are paradigmatic examples). So, what kind of methodology of science should be taken into account when searching

for methodological rules? However, in order to have possibly well determined set of methodological rules we should turn to the general methodology of science which deals with those knowledge-gaining procedures that are used in all scientific investigations regardless of their subject-matter and aim. Thus, there are rules which should be respected in any scientific investigations. Representatives of this view are: Kazimierz Ajdukiewicz (1974) and Stanisław Kamiński (1992). Both thinkers, recognizing the variety of views on the nature of science and of the methodology of science indicate certain rules commonly accepted in scientific inquiry.

### **5. PERSPECTIVES FOR FURTHER RESEARCH**

In order to show profits of the idea of applying methodological rules in argument evaluation, further research should consist in elaborating well organized set of methodological rules and showing applications of each rule to concrete cases of argumentation. Some of the rules of analytic description formulated by Czeżowski (2000, pp. 42-51) could constitute a good point of departure.

The research should also consist in discussing more complex and specific examples of the use of methodological rules of defining in evaluating arguments taken from contemporary public discourses. The simplicity (or even apparent triviality) of the examples of possible applications of the rules of defining given in the paper is justified by the fact that I aimed to show the general mechanism of evaluating arguments by means of those rules on the level of proposing the methodological approach to argument evaluation.

So, I have here shown a possible starting point of developing the methodological approach to argument evaluation. Further research which should allow to build the methodological approach to argument evaluation may consist in elaborating:

- (1) a possibly extensive list of the knowledge-gaining procedures;
- (2) a set of methodological rules for each procedure;
- (3) concrete ways of applying those rules in argument evaluation by developing case studies.

This research could focus on the most important knowledge-gaining procedures. For example inquiry concerning applications of the rules for questioning, which is another important knowledge-gaining procedure, should be done in the future. Within such a research the heritage of the study of questions in logic and argumentation theory should be taken into account.

Further research on the topic could be also broadened by showing some substantial logico-epistemological presuppositions underlying both discussed fields of research, i.e. the general methodology of science and argumentation theory.

The idea of taking a closer look at definitions in argumentation follows Walton's remark which suggests that some case studies of the uses of persuasive definitions

show the rhetorical role of definitions (Walton 2001, p. 117). This role reveals the need of elaborating a new dialectical approach to evaluating definitions in argumentation, as proposed by Walton (2005, p. 179-184). The methodological approach I started to develop in this paper may constitute part of the new approach suggested and elaborated by Walton. For example, among ten questions listed by Walton (p. 181), that — according to him — should be answered within his project, at least three could be also considered within the methodological approach to argument evaluation. These are questions 4, 5, and 10 on Walton's list:

— Can any useful classification of the different types of definitions be given that is an improvement on the traditional method of classification?

— What criteria can be given for the evaluation of persuasive definitions?

— How are definitions used in scientific argumentation, and how are such uses comparable to other uses of definitions?

So, further research could consist in considering these questions and in comparing given answers with those elaborated within the dialectical project of evaluating definitions.

Although the task of building the methodological approach to argument evaluation is still to be realized, the perspectives for further research show that starting to develop this approach seems to constitute a reasonable research program. According to some argumentation theorists (see, e.g., van Eemeren, Grootendorst and Snoeck Henkemans 2002, p. 92), the evaluation of argumentation should be based on solid analysis. As examples given in this paper show, employing methodological perspective in argument evaluation provides a legitimate framework for such a systematic analysis of arguments.<sup>6</sup>

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<sup>6</sup> I am grateful to Prof. Agnieszka Lekka-Kowalik (John Paul II Catholic University of Lublin) for numerous helpful comments on earlier versions of this paper.

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