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Pragmatics and Dialectics of Argument

Edited by KATARZYNA BUDZYNSKA,
FRANS H. VAN EEMEREN AND MARCIN KOSZOWY

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15

CONTENTS

DE GRUYTER OPEN

STUDIES IN LOGIC, GRAMMAR AND RHETORIC 36 (49) 2014

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PREFACE: FROM PRAGMATICS AND DIALECTICS TO ARGUMENT STUDIES

Abstract. Pragmatics and dialectics are two disciplines which have been amongst the first and most important partners for argument studies in the exploration of the complex realm of communication. Treating argumentation as a construct consisting of premises and conclusion allows for investigating some interesting properties of the phenomenon of reasoning, but does not capture a variety of aspects related to the usage of natural language and dialogical context in which real-life argumentation is typically embedded. This special issue explores some of the fascinating research questions which emerge when we move beyond logic into the territory of the pragmatics and dialectics of argument.

Keywords: pragmatics, dialectics, argument studies, pragma-dialectics, The Polish School of Argumentation

Introduction

This special issue on *Pragmatics and Dialectics of Argument* is the third of an argumentation series published in the journal *Studies in Logic, Grammar and Rhetoric* (SLGR). The series has been established to serve as a publishing platform of the Polish School of Argumentation (see Sect. 1, and also Budzynska et al. 2014). The previous two issues, edited by Koszowy, were dedicated to major research strands in the philosophy of argument (vol. 29, 2009; in its introduction to *Informal Logic*, the *Stanford Encyclopedia of Philosophy* says of SLGR that it has "published an important special issue on the field"), and computational approaches to argumentation (vol. 36, 2011).

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The third issue of the series is devoted to the links between pragmatics, dialectics and argument studies. Many scholars have stressed the importance of taking into account language use and dialogical context if we want to explore some specific aspects or phenomena of the complex realm of argumentation (see e.g. Hamblin 1970, Hitchcock 2006, Jacobs 1989, Johnson 1987, Moeschler 2001, Prakken 2006, Reed 2006, Reed & Budzynska 2011, Walton 1990, Walton 1994, Walton & Krabbe 1995). A similar approach has been adopted by argument studies in Poland from its early beginnings (see Sect. 1.1) to the most recent investigations (Sect. 1.2). These two perspectives have eventually achieved unification within the framework of pragma-dialectics allowing for a rich and multifaceted modeling of the process of argumentation (Sect. 2).

This issue provides a general overview of pragmatic and dialectic approaches to argumentation, but also presents some specific problems related to the speech act of arguing and argumentation in a dialogical context (see Sect. 3). It also introduces a new category of discussion papers which comment on selected contributions to previous editions of the SLGR argumentation series. We hope that these papers will become the main venue for the exchange of ideas between members of the Polish School of Argumentation and the international community.

1. The Polish School of Argumentation

The Polish School of Argumentation (Budzynska et al. 2014) is a research movement that integrates different disciplines and institutions across Poland.[1] Its members are particularly interested in understanding the phenomenon of the force of argument with a special focus on the issues of reason, trust, and cognition. The diversity of approaches to argumentation in Poland is striking – ranging from philosophy, logic, linguistics, rhetoric, social science, psychology, cognitive science, AI to law (*cf.* van Eemeren et al. 2014). One of the reasons for such diversity might be found in the strong Polish tradition of studying the phenomena of reasoning, language, and communication, which is well reflected, in particular, in the research of the Lvov–Warsaw School, and then its successors in Artificial Intelligence and legal theory, as well as in the studies of Polish rhetoricians (*cf.* Groarke 2011). For the Polish School of Argumentation, linking pragmatics and dialectics with argument studies has always been an important part of its research program: from its very early beginnings (Sect. 1.1) to the most recent developments (Sect. 1.2).

1.1. Roots

The important tradition which constitutes the roots of the Polish School of Argumentation is the logico-methodological legacy of the Lvov–Warsaw School (LWS), the Polish research movement that was most active from 1895 to 1939 (Woleński 2013). The philosophical and logical accounts of arguments within the Polish School of Argumentation may well be inspired by the works of those representatives of the LWS who attempted to solve similar problems to those present in the contemporary philosophy of argument (see Koszowy 2013, Koszowy & Araszkiewicz 2014): Kazimierz Twardowski (the founder of the School who postulated precision, rigor and clarity in philosophy); Kazimierz Ajdukiewicz (the key representative of the pragmatic movement within the LWS whose ideas are assessed as strikingly similar to the study of argumentation in North America (Groarke 2011)); and many others, e.g. Tadeusz Czeżowski, Seweryna Łuszczewska-Romahnowa, Tadeusz Kotarbiński, Klemens Szaniawski, and Józef M. Bocheński.

Amongst the crucial developments of the LWS that are linked with pragmatics and the dialectics of argument there are: (i) the rich conceptual apparatus which allows dealing with the complexity of natural language and (ii) the tools which allow one to analyse and evaluate reasoning and arguments (see Simons 2014, this issue). Some clear examples of pragmatic and dialectic accounts of argumentation in the LWS may be found in (i) Ajdukiewicz's programme of pragmatic logic and the methodology of science, (ii) Bocheński's approach to analysing typical dogmas and superstitions, and (iii) Jaśkowski's system of discussive logic.

Ajdukiewicz's programme of pragmatic logic and the methodology of science (1974) combines pragmatic and normative insights into the nature of language and reasoning (e.g. Koszowy 2010). This program is based on the idea that general (logical and methodological) rules of scientific investigation should be based upon the actual practice of researchers towards formulating methodological standards (rules, norms) of performing various knowledge-gaining procedures:

> The standards of correctness of research procedures, as formulated in methodology, are not dictated by it to researchers in advance. Such standards are derived from the practical activities of competent researchers, who approve of some procedures in research, and disapprove of others (Ajdukiewicz 1974, p. 187).

Another example of pragmatic tendencies in the LWS is Bocheński's account of authority (1974) and of "One Hundred Superstitions" (1994). The pragmatic goal of these accounts is, among other tasks, to help people

recognize typical mechanisms commonly employed in social communication and cognition; the aim of some of them is to convince someone by means of fallacious discussion moves. Bocheński's analyses of superstitions and of the concept of authority are not only in line with some contemporary accounts of argumentation schemes, but may also be employed in extending sets of argumentation schemes and critical questions for appeals to authority (see Koszowy & Araszkiewicz 2014).

Jaśkowski's system of discussive logic (1948; 1949) aims at finding a system of a sentential calculus which (i) when applied to contradictory systems would not always entail their over-completeness, (ii) which would be rich enough to enable practical inference, and (iii) which would have an intuitive justification (Jaśkowski 1948). Hence, the dialogical (and pragmatic) motivation for Jaśkowski's discussive logic lies in his interest in the study of arguments, "not in the formal logical sense of drawing conclusions from premises, but in the ordinary sense of discussions and in particular of disagreements" (Griffin 2013, p. 4). In this respect, Jaśkowski's interests are clearly in line with contemporary attempts to combine the formal and informal features of argumentation.

1.2. Today's approach

The common motif in the research of the Polish School of Argumentation is the force of argument: the logical force of validity, the rhetorical force of persuasiveness, and the pragmatic force of communicative intentions. Evaluation of the argument force is the central object of the School's interest, pioneered by logicians such as Marciszewski (1994), Hołówka (1998), Suchoń (2005), and Tokarz (2006). Polish authors, however, also stress that the importance of logical reconstruction of arguments and evaluation of their force should not be overestimated, especially when applied to everyday reasoning (Kisielewicz 2011) or juristic argumentation (Grabowski 2003, Peczenik 1988, Smolak 2003).

Natural argumentation is a highly complex phenomenon, and thus logic should be supported by other disciplines in order to have the capability of approaching issues related to argument force in an insightful and multifaceted manner. A prominent role has been cast for pragmatics and dialectics in order to help understand problems such as: *how do people express reasons in language? what types of illocutionary acts and rhetorical techniques do they use in argumentative contexts? what are the rules of rational discussion? how do we play dialogue games?*

From the perspective of pragmatics, members of the Polish School are interested in applying the elements of speech act theory when con-

sidering the illocutionary context (Malinowski 2003, Witek 2013, Budzynska & Witek 2014) and ethotic felicity conditions (Budzynska 2013, Załęska 2011) of the speech act of argumentation; the elements of relevance theory when investigating the aims and effects of persuasive dialogues (Budzynska & Debowska 2010, Debowska-Kozlowska 2014); or the elements of theory of conversational implicatures in pursuing so-called arguments appealing to conversational implicature (Puczyłowski 2012). The School is also interested in the formal aspects of pragmatic concepts such as the exploitation of a paraconsistent and nonmonotonic approach to speech acts, argumentation schemes, and dialogues (Dunin-Kęplicz & Strachocka 2013), using a 4-valued query language (Małuszyński & Szałas 2013).

From the perspective of dialectics, the Polish School of Argumentation explores various aspects of the dialogical context of argumentation, such as the identification and elimination of formal fallacies (Yaskorska et al. 2013, Kacprzak & Yaskorska 2014); the dynamics of questions in a dialogue (Wiśniewski 1996, Urbański 2001); and game-theoretic accounts of strategies in dialogues (Kacprzak et al. in review). The methods of corpus analysis and experimental studies are used to examine issues such as critical analysis of values in political discourse (Sowińska 2013, Kielar 2011), dynamics and structure of argumentation in negotiations (Jochemczyk & Nowak 2010), and argumentative skills in preschoolers' narrative discourse (Rytel 2012). A strong focus is given to practical applications of these investigations, in particular to political (Cap 2013, Skulska 2013) and legal discourse (Nieznański 2010, Stawecki 2012).

2. Pragma-dialectics

2.1. Development of the theory

The pragma-dialectical theory of argumentation was initiated at the University of Amsterdam by Frans H. van Eemeren and Rob Grootendorst (1944–2000) in the 1970s and developed over the next four decades. Argumentation is in this theory viewed from a perspective that combines a communicative angle inspired by pragmatic insights from speech act theory and discourse analysis with a critical angle inspired by dialectical insights from critical rationalism and formal dialectical approaches. As the name of the theory indicates, the integration of pragmatic and dialectical insights is the distinctive feature of pragma-dialectics.

Because people use argumentation in all spheres of life to convince others of their views regarding what to believe, think, or do, van Eemeren and

Grootendorst considered it of primary importance to create an adequate theoretical basis for improving the analysis and evaluation as well as the production of argumentative discourse. Their master plan for developing such a theoretical basis involved progressing step by step from an abstract ideal model of argumentation to the concrete reality of the various kinds of argumentative practices. According to van Eemeren and Grootendorst, the systematic combination of empirical description and critical normativity required for developing an adequate theory of argumentation calls for a multidisciplinary – and eventually interdisciplinary – approach integrating insights from philosophy and logic as well as communication studies, linguistics, psychology, and other disciplines.

In *Speech acts in argumentative discussions* van Eemeren and Grootendorst (1984) explained the philosophical and theoretical premises of their pragma-dialectical approach for the first time in English. Their conceptual framework for the analysis and evaluation of argumentation was laid out in *Argumentation, communication, and fallacies* (1992), paying special attention to the characterization and classification of the fallacies. After Grootendorst's premature death in 2000, van Eemeren published *A systematic theory of argumentation*, an overview of how their theorizing had developed further in the 1990s (van Eemeren & Grootendorst, 2004).

Van Eemeren and Grootendorst's theoretical reflections on the application of the pragma-dialectical theory to the analysis of real-life argumentative discourse, conducted together with Sally Jackson and Scott Jacobs, resulted in the monograph *Reconstructing argumentative discourse* (1993). Qualitative empirical research concerning a vital phenomenon in the reality of argumentative discourse, undertaken by van Eemeren in collaboration with Peter Houtlosser and Francisca Snoeck Henkemans, led to the publication of *Argumentative indicators in discourse* (2007). The results of experimental quantitative empirical research concerning the intersubjective acceptability of pragma-dialectical standards of reasonableness that van Eemeren carried out with Bart Garssen and Bert Meuffels were reported in *Fallacies and judgments of reasonableness* (2009).

An important extension was given to the pragma-dialectical theory when van Eemeren introduced with Peter Houtlosser (1956–2008) the notion of *strategic manoeuvring* to account for the fact that in argumentative discourse arguers may be regarded to combine, in every argumentative move they make, their aiming for (rhetorical) effectiveness with their trying to maintain (dialectical) reasonableness. Houtlosser's untimely death in 2008 prevented them from completing their project, but van Eemeren presented the theoretical framework of this extended pragma-dialectical the-

ory two years later in *Strategic maneuvering in argumentative discourse* (van Eemeren, 2010). Meanwhile Agnès van Rees (2009) had taken the extended theory as a starting point for the analysis of a conceptual technique that is frequently used in strategic manoeuvring in argumentative discourse.[2]

A great many other authors have contributed to the further development of the pragma-dialectical approach to argumentation, by means of doctoral dissertations or otherwise.[3] Most of them concentrate on examining argumentative discourse in specific communicative domains. Among them are Eveline Feteris, Harm Kloosterhuis, José Plug, and Henrike Jansen, who have been exploring the legal domain; Dima Mohammed, Corina Andone, Yvon Tonnard, Marcin Lewiński, Jan Albert van Laar, and Constanza Ihnen Jory, who have focused on the political domain; Lotte van Poppel, Roosmaryn Pilgram, Nanon Labrie, and Renske Wierda, who are engaged in research of the medical domain; and Jean Wagemans, and Eugen Popa, who are primarily examining the academic domain.

2.2. Short description of the theory

The research programme carried out in pragma-dialectics is aimed at bringing together the normative and descriptive dimensions of the approach. It consists of five interrelated components: a philosophical, a theoretical, an empirical, an analytical, and a practical component. The "normative pragmatic" rationale of this research programme instigates the meta-theoretical starting points of pragma-dialectical research as they are implemented in a theoretical model of a *critical discussion* for resolving a difference of opinion on the merits. The dialectical rules for conducting a critical discussion are conceived pragmatically as speech acts performed in the confrontation stage, the opening stage, the argumentation stage, and the concluding stage of the resolution process. The appropriateness ("problem-solving validity") of the model is demonstrated by making clear that all violations of the rules for critical discussion can be characterized as fallacies. The intersubjective acceptability ("conventional validity") of the standards expressed in the rules for ordinary arguers is tested empirically.

Analysing argumentative discourse amounts in pragma-dialectics to giving a theoretically motivated reconstruction of the discourse in terms of a critical discussion. With the help of the notion of strategic manoeuvring the extended pragma-dialectical theory explains how in argumentative discourse the rhetorical aim of achieving effectiveness and the dialectical aim of maintaining reasonableness are pursued simultaneously. In extended pragma-dialectics, the analysis is enriched by including an account of the strategic manoeuvring taking place in argumentative discourse in the recon-

struction. This enrichment requires a contextualization of the analysis by taking account of the conventionalization of the various communicative activity types and its impact on the strategic manoeuvring. In evaluating the argumentative discourse thus reconstructed, fallacies are viewed as derailments of strategic manoeuvring, overstepping the boundaries of dialectical reasonableness in a specific communicative activity type.

The incorporation of the macro-contextual dimension of the communicative activity types in the theorizing has led pragma-dialecticians to examine a great many argumentative practices in a variety of communicative domains, in particular the legal, the political, the medical, and the academic. The primary aim of this research is to find out in what ways the possibilities for strategic manoeuvring are determined in these domains by extrinsic institutional constraints ("institutional preconditions") ensuing from the conventionalization of the communicative activity types concerned. Taking into account the institutional preconditions and the consequences these preconditions have for the development of the discourse can be of help in explaining the specific (and sometimes stereotypical) *argumentative patterns* of particular types of standpoints, particular argument schemes, and the particular argumentation structure occurring in various communicative activity types.

3. The Special Issue

This SLGR special issue is a result of cooperation between the emerging Polish School of Argumentation and Frans van Eemeren (University of Amsterdam) based on common research interests regarding argument force and pragma-dialectics. The first form of these common activities was the keynote speech van Eeemeren presented at the 9th ArgDiaP Conference titled *Applied Rhetoric: Practical Perspective on Argumentation, Dialogue and Persuasion*, which was held in Warsaw on 26 May 2012 (http://argdiap.pl/). Since this cooperation revealed a number of crucial affinities between the Polish School of Argumentation and the world's contemporary argumentation studies, it has recently led to various very successful projects, such as a chapter on developments in Polish argumentation theory in the new *Handbook of Argumentation Theory* (which van Eemeren co-authors with B. Garssen, E.C.W. Krabbe, A.F. Snoeck Henkemans, B. Verheij and J. Wagemans; to be published by Springer in 2014) and a special issue of the journal *Argumentation* which van Eemeren serves as Editor-in-Chief (this special issue will be published by Springer as vol. 3 in 2014). These

and other initiatives have led to our work on this special issue devoted to "Pragmatics and Dialectics of Argument".

This issue builds upon the success of two previous volumes of the SLGR argumentation series dedicated to informal logic and argumentation theory (vol. 29, 2009) and argument and computation (vol. 36, 2011). The submissions show the interests of many authors representing many different research centers and disciplines. We accepted 26 contributions of 34 researchers from the US, Canada, UK, The Netherlands, Italy, Spain, France, Portugal, Belarus, and Poland – authors who represent a variety of approaches such as philosophy, linguistics, computer science, and rhetoric. This volume is built around two chapters concerning the most general and important topics in pragmatics and dialectics of argument: "Speech Acts and Argument" (Part I), and "Argumentation in a Dialogue" (Part II). Since the main motivation of establishing our argumentation series was to foster and inspire the mutual exchange of ideas, we decided to introduce a new platform and thus, in Part III we solicit "Discussion Papers" that comment on works previously published in the SLGR argumentation series.

The first part of this volume, "Speech Acts and Arguments", discusses key affinities between argumentation theory and speech act theory. The first two papers are devoted to the most general and theoretical issues. In his introduction to the inquiry into the overlap between philosophy of language and argumentation theory, John. R. Searle presents an exposition of the main problems regarding the nature and structure of language from the viewpoint of speech act theory. In line with the speech-act point of view on argumentation, Francisca Snoeck Henkemans presents a systematic account of main links between speech act theory and argument studies. These two contributions lay the foundations for more domain-specific issues. Corina Andone employs the link between speech act theory and argumentation theory to examine the burden of proof in the argumentative confrontations taking part in practices of political accountability. The paper authored by Jean Goodwin refers to van Eemeren, Grootendorst, Jackson, & Jacobs' idea that argumentation theorists should continue to take speech act theory seriously, if they want to claim a fit between their theories and the conceptions of argumentation as employed in everyday argumentation. As a clear example of a study which is in line with this claim, Goodwin analyses the discussion among scientists in natural resource fields concerning the appropriateness of the speech act of advocating in policy settings.

The second part of the special issue explores topical themes devoted to "Argumentation in a Dialogue". The first three papers analyze general issues regarding the roots of contemporary study of linguistic (especially

dialogical) approaches to argumentation. Peter Simons explores two areas of employing the tradition of the Lvov–Warsaw School in the study of language (i.e. the complexity of language) and argumentation (i.e. argumentative unity). Jim Mackenzie discusses another important tradition in argumentation studies by giving an introduction to formal accounts to dialogue understood as a game. The dialogue approach to argument manifests itself in Dale Jacquette's analyses of the concept of a dialogue in terms of its referential presuppositions and collective intentionality. The following three papers discuss these topics by analysing more specific issues regarding argumentation in a dialogue. David Botting continues the issues concerning the complexity of language by proposing a linguistic approach to the fallacy of *secundum quid* (which was traditionally classified by Aristotle as an extra-linguistic fallacy). Simon Wells goes along the line of dialogue approaches to argumentation by exploiting argumentation schemes within dialogue games. In the final paper of this section, Marcin Lewiński draws a unique line of inquiry aimed at making a transition from dialogical approaches to fallacies towards the new polylogical perspective.

The third part, "Discussion papers", contains three contributions: Jan Albert van Laar comments on Douglas Walton's theory of criticism and shows the possibility of elaborating a new way of criticizing arguments by motivating an opponent's doubts. Krzysztof Szymanek discusses Lilian Bermejo-Luque's conception of epistemic justification in the study of arguments. Finally, Gábor Forgács comments on Frans H. van Eemeren's views on strategic manoeuvring between the dialectical reasonableness of argumentation and its rhetorical effectiveness.

This special issue consists of 13 excellent papers, the selection of which was made on the basis of scholarly reviews by the members of the international Review Board (see the list of reviewers at the end of the *Preface*). We thank them all for their hard work, fruitful discussion and strong support at all stages of the editing process. We also gratefully acknowledge the support of the Polish National Science Center for Budzynska and Koszowy under grant 2011/03/B/HS1/04559.

NOTES

[1] The School's Manifesto (Budzynska et al. 2014) is a statement of over 50 scholars representing a variety of disciplines from 20 Polish institutions.

[2] Some of the monographs mentioned were translated (van Eemeren & Grootendorst, 1984, into Russian (1994) and Spanish (2013); van Eemeren & Grootendorst, 1992, into Bulgarian (2009), Chinese (1991), French (1996), Romanian (2010), Russian (1992b) and Spanish (2007); van Eemeren & Grootendorst, 2004, into Bulgarian (2006), Chinese

(2002), Italian (2008) and Spanish (2011); van Eemeren, 2010, into Italian (2014) and Spanish (2013) [Chinese and Japanese translations are in preparation]).

[3] Since 2010 they are all part of the International Learned Institute for Argumentation Studies (ILIAS).

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PART I:

SPEECH ACTS AND ARGUMENTS

DE GRUYTER OPEN

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THE STRUCTURE AND FUNCTIONS OF LANGUAGE[1]

Abstract. This paper will discuss the nature of language. I find the present state of the subject, the Philosophy of Language, and the present state of Linguistics to be both, for different reasons, unsatisfactory. The problem with the Philosophy of Language is that its practitioners tend to lose sight of the psychological reality of language, i.e. of speaking and writing. Historically this is because the Philosophy of Language began with Frege's logic and has continued to the present day to be heavily influenced by considerations of formal logic. Logicians need not be interested in the psychological reality of logical systems. Frege's logical system is much more powerful than Aristotle's, but for all I know Aristotle may be closer to the way people actually think. It does not matter to logicians.

Keywords: meaning, intentionality, language, speech acts, commitment

Philosophers of language have tended to assume that the mapping of some linguistic phenomenon onto a formal system will give a solution to a philosophical problem and give us great insight of the operation of language. Russell's Theory of Descriptions is one of the most famous cases of this, but there are numerous contemporary examples as well. Possible worlds semantics seems to be a classic case: one domain that seems puzzling is mapped onto another domain, and if some type of formal equivalence is achieved, i.e., the truth conditions are the same, then this is assumed to provide an explanation. In my opinion this is incorrect. An adequate philosophical insight cannot be obtained merely by means of a mapping that provides an equivalence. This would be akin to suggesting that in order to properly understand the sentence, 'all ravens are black', one must realize that what it really says is, 'all non-black things are non-ravens.' The two sentences are logically equivalent in that they are true or false in exactly the same set of circumstances, but the second does not give you an analysis of the psychological reality of saying 'all ravens are black.' Much contemporary Philosophy of Language seems to operate in this manner. For example, let us

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consider Russell's famous Theory of Descriptions. How does Russell achieve uniqueness of reference? In Russell's example, to say that the King of France is bald is to say that there is at least one x such that x is *a* King of France and for each thing y, y is a King of France only if y is identical with x. This, however, is psychologically unrealistic. Our notion of an object is already one of a unique object. It is not necessary to consider the entire universe, or even the domain under discussion, in order to achieve uniqueness. The problem with much of the contemporary Philosophy of Language has been the supposition that it is sufficient to obtain an equivalence, i.e., that if the truth conditions on each side of a biconditional are the same, then an adequate explanation has been achieved. In general, however, I do not believe this to be the case; psychological reality ought to play a much greater role. Perhaps surprisingly, it seems that Frege, the inventor of contemporary logic, was more "psychologically real" than his successors, such as Russell, because he attempted to reach an intuitively plausible distinction between *Sinn* and *Bedeutung.*

Putting aside the question of philosophers' work with formal mechanisms, let us consider linguistics. The work of Chomsky and his entire movement have, in my opinion, been disappointing as well. This disappointment can be illustrated by the fact that after 50 years of searching for an adequate system of generative grammar, no system has yet been produced that has satisfied all or even most competent linguists. It is a remarkable sociological fact that, at least in the United States, Chomsky continues to dominate the field – not in the sense that everybody agrees with his answers, but that in general they accept his questions, which is a much more profound influence. Linguists continue to respond to his questions and to his answers, and it may seem surprising that no "Young Turks" have come to overthrow him. Perhaps this is because Chomsky is his own Young Turk, in the sense that every few years he changes direction entirely and overthrows much of his previous work.[2]

Neither the philosophy of language nor technical linguistics offers what I believe an account of language should provide. Let us try to answer the question, put very broadly, of what language is. Standard textbook accounts of language state that language has three components: a phonological, a syntactical, and a semantic component. The phonological and syntactical components are idiosyncratic, i.e., the words in the syntactic structures of one language are not the same as in another language, although perhaps if one could observe them through a sufficiently distant telescope they would appear alike. Chomsky has said that if a Martian linguist came to Earth it would seem to him that we all speak the same language; the vocabularies

differ, but essentially it is all one language. While this may or may not be fully accurate, it is an interesting idea that all languages do share some commonalities.

It is worth noting that the idiosyncrasies of the syntactical and phonological components of different languages are not supposed to apply to the pragmatic component, which is considered to be a further necessary component, in addition to syntax, phonology and semantics. This fourth component has to do with how the language is used. The rules of the pragmatic component are presumed not to be specific to any particular language, but rather are very general rules of rationality. The most famous statement of the principles of the pragmatic component would be Grice's Maxims of Conversation. These are not supposed to be specific to any language, but rather apply generally to all forms of human communication because they are supposed to be very general principles of rationality.

Thus, according to the orthodox conception of language, it consists of phonology, syntax and semantics, to which a pragmatic component may be added that is presumably universal, not confined to any one language. A crucial feature of language is absent from these accounts, namely the notion of commitment. Human languages are characterized by a type of commitment which is not found in other forms of human and animal interactions. If such commitment exists among animals, it would appear to be present in a far lesser degree than in human languages.

The method I will use to develop an account will be a kind of genetic account, in which we will imagine how language might have evolved. It is a remarkable fact that there was a time in the history of our planet when beasts that looked very similar to human beings today did not have language, but sometime later their descendants, beasts of similar appearance, did have language. We do not know, and may never know, what led to this change, because there is no fossil evidence. Most anthropological prehistories rely on fossil evidence, e.g., the examination of a jaw bone, but fossil evidence does not reveal how language evolved. Physical anthropologists rely to an enormous extent on fossils. For instance, the anthropologists have claimed that the human community living in Tautavel four hundred fifty thousand years ago must have had language because their brains were large enough to support Broca's area and Wernicke's area. This inference appears to be quite fragile, as these people left no visible signs of having had a language. In contrast to this approach, I will ask how language might have evolved. While this may appear to be an attempt at a speculative history of the development of language, in fact it is a sort of logical analysis, in which we ask what pre-linguistic animals similar to ourselves possess,

and what they additionally require in order to attain a language more or less like human language. Thus we will treat the question as a genetic one, but it is not speculative historical biology because we do not know how language did in fact evolve; despite numerous interesting speculations, hard evidence is lacking. We can, however, raise an interesting logical question: what would hominids with pre-linguistic intentionality need in order to attain language?

It should first be noted that pre-linguistic intentionality in animals is in fact quite rich, as the pre-linguistic animal can discriminate and remember a wide variety of features of its environment, and even make short-term plans regarding its future contact with or behavior in the environment. In other words, the pre-linguistic conscious animal with a certain degree of intellectual capacity has a fairly large number of cognitive categories both in perception and thought. Many of the traditional (Aristotelian and Kantian) categories, including the category of an object, of a property, of change, of identity, of causation, and of time and space exist in large numbers of conscious animals. We can see this by observing our own pet dogs, for example, with which we can carry on "conversations" of a pre-linguistic kind. While some philosophers may claim that animals cannot think, it is clear that dogs have thoughts, with different degrees of intelligence. Davidson claims that animals cannot have beliefs, as they cannot distinguish between a true belief and a false belief. That seems to be plainly false. Anyone who owns a dog will be aware that the dog sometimes changes from holding a false belief, for example, that the cat is up the tree to the true belief that the cat has gone to somebody else's yard. It annoys animal ethologists that philosophers typically appeal to their household pets rather than to the best research, so if you want to see some research, there are several useful books on animal cognition.[3]

Let us assume that there are conscious animals that have many of the Aristotelian categories and Kantian categories. They can recognize causal relations because they cause things themselves. They can identify other consciousnesses: a dog behaves differently towards people or other dogs than towards stones or trees. Even as a puppy it does not bite its owner or another puppy as hard as it bites a bone. Thus it seems that animals have an awareness of other minds. What must be added to this pre-linguistic intentionality in order that the animal can develop a language? It must be kept in mind that this has actually occurred; it happened in the case of human beings, and to a lesser extent with certain other animals as well. Perhaps the most famous example is bee language, which is interesting because it appears to have a type of syntax; there appear to be syntactical differences

in the varying amounts of information conveyed by the waggle dance, as the bee communicates to its fellow-bees in the hive.

Now let us imagine these humanoids to be developing a language. They already have a rich system of consciousness and human intentional states. These typically have a structure that includes both a propositional content and a psychological mode. For example, the belief that it is raining, the intention to move over there and the fear that an intruder is approaching. It has these states in a psychological mode which I represent by the letter "S" and the propositional content I represent with the letter "p." So a typical psychological state, such as a belief that it is raining, would be of the form S(p). One psychological mode can be perception, e.g., the animal sees someone approaching. Then, on the basis of seeing someone approaching, the animal comes to believe that someone is approaching. The pre-linguistic animal biology already contains structures that are intentional states having both a psychological mode and a propositional content.

Furthermore, biology allows for a distinction between the way the mind relates to reality when the task of the mind is to determine how reality actually is (perceptions and beliefs), and how the mind relates to reality when the task is to change reality to make it come to match the contents of the mind (intentions and desires). I refer to these two cases as different "directions of fit."[4] Belief, whose task is to match how things are, have the "mind-to-world" direction of fit, represented by a downward arrow, while desires and intentions, whose task is to change the world to match the contents of the mind, have the "world-to-mind" direction of fit represented by an upward arrow. Thus we can contrast desire and intention on the one hand with belief, perception and memory on the other. This is crucial, because human languages have these features; they have propositional contents with what Austin called a certain illocutionary force. The structure of the speech act is going to be very like the structure of the intentional state. Thus one can believe that it is raining, can see that it is raining, and can state that it is raining. We can use the letter "F" to represent the illocutionary force. The speech act thus have the structure F(p).

There is a crucial difference between intentional states and speech acts, in that the former are actual, biologically given, mental phenomena, while the latter are actions; one must do something in order to produce a speech act. How does the animal get from possessing intentional states to being able to perform speech acts? What does the animal need, in addition to what it has by virtue of its psychology, in order to make a statement, make a promise, or ask a question? Let us assume not only that the animal has many of the Aristotelian and Kantian categories built into its consciousness,

but that the structure of its mental life is able to distinguish between the content of the states and the type of states that they are. The animal must also be able to coordinate these; if it desires food then it must be able to recognize food when it encounters it, to eat the food intentionally, and to recognize that it has eaten the food.

This introduces an additional notion: when a propositional content in a psychological mode has a direction of fit, the intentional state can be said to represent – or in the case of perception, to present – its "conditions of satisfaction", where truth conditions are one kind of condition of satisfaction, and obedience conditions or fulfillment conditions are other kinds. Whenever one of these S(p) structures has an entire propositional content, there is a representation of how reality is or how the animal would like to, or intends to, make it. The task of the sensory nervous system is to achieve the mind-to-world direction of fit, while the task of the motor nervous system is to achieve the world-to-mind direction of fit. The sensory nervous system presents reality, and the motor nervous system changes it. Our basic psychology recognizes this distinction, which is necessary but not sufficient for having language.

The mental states whose task is to represent how world is are belief, perception and memory, while those whose task is to change the world, are typically desires and intentions. These two types of mental state correspond to the distinction between the aspect of our biology that describes how things are and the aspect that changes reality. It is essential that there are two basic ways in which we relate to reality: perceiving and believing how things are on the one hand, and wanting and intending them to be in a different way on the other. Much of life is a matter of coordinating these. For example, one desires to drink water, one intends to drink water, one perceives water – a different direction of fit with the same content – and so one intentionally drinks water. Thus far, none of this is unique to humans. I believe it is clear that primates have this apparatus, as do most mammals, although this has been challenged by certain philosophers.

Furthermore, human beings and some animals have a strong capacity to communicate the state of reality to other animals by making certain gestures or movements. Bees are the most well-known example, because they perform quite sophisticated waggle dances which convey information to other members of the hive. The vervet monkeys are said to convey three types of information by making three types of noises, corresponding to different types of danger, such as a leopard, a hawk overhead, or a snake in the grass. This could be thought to suggest that they have some kind of syntax. A crucial distinction should be made here between expression and representation.

Animal communication is often merely expressive. For instance, when a dog barks angrily at another dog, nothing is being represented; it is only an expression of hostility. Which animal cries are expressive and which are representational is unknown, but the theoretical difference is that expression, as the etymology of the word suggests, is merely a "pushing out" of one's mental state, whereas representation is semantically evaluable, i.e., it can be true or false. If a dog barks angrily, the bark is neither true nor false. But if a human being says, "Rain!" that can be true or false. Although a one-word sentence such as "Rain!" appears to be similar to a one-word sentence such as "Ouch!", they are in fact vastly different. The one-word sentence, "Rain!", represents the state of affairs that it is raining, while "Ouch!" is not a representation, but merely an expression of one's pain. It is, of course, possible to construct a situation in which "Ouch!" would be a representational statement; for example, we can imagine that a dentist says, "If it hurts too much, say 'Ouch!'" Such situations, however, are clearly exceptions. Expressions must be distinguished from representations, and this distinction is crucial for language. From what does human language derive its capacity to represent? As established earlier, if the S(p) structure has a direction of fit and conditions of satisfaction, they are all representations. Intentional states that have a propositional content and a direction of fit are the raw material of language. The question is, what does the animal additionally require in order to produce a speech act, i.e., an illocutionary act? Here I will make my first major theoretical claim, which is that we need to introduce the notion of a "speaker meaning", referring to the situation in which the speaker says something and means something by it. I contend that the speaker meaning in an action always involves producing some movement, sound or gesture with a certain intention. It is a complex intention, unlike ordinary intentions, such as the intention to move across the room; it is the intention to represent.

What constitutes the intention to represent? Let me propose a thesis which captures the essence of speaker meaning. In the case of speaker meaning, the speaker intentionally imposes conditions of satisfaction on conditions of satisfaction. If one raises one's hand, that movement is the condition of satisfaction of the intention to perform it. The intention to raise one's hand will be carried out only if one does in fact raise one's hand. However, if one raises one's hand by way of signaling to another person that he should come, one gestures in the particular way that one typically does to indicate that someone should come. This entails a complexity to the raising of the hand that was absent when it was simply a case of raising one's hand. The raising of the hand, which was the condition of satisfaction of one's intention

to do so, itself has conditions of satisfaction, namely obedience conditions. Or, if a state of affairs is being represented, the conditions of satisfaction are truth conditions. Thus the crucial step in the development of language from pre-linguistic intentional phenomena is the development of speaker meaning, where speaker meaning involves the intentional imposition of conditions of satisfaction on objects, states of affairs, or movements. The difference between saying something and meaning it and saying it without meaning it is a question of imposing conditions of satisfaction on conditions of satisfaction. Consider, for example, the difference between saying something in a foreign language in order to practice pronunciation, and actually meaning it. In the first case one may say repeatedly, "il pleut, il pleut, il pleut", without meaning to say that it is raining. If, however, one says, "il pleut" in order to state that it is raining, then something is meant by it. The difference between saying something and meaning it and saying something without meaning it is that in the first case the utterance is semantically evaluable. It can be true or false, because the speaker has intentionally imposed conditions of satisfaction on conditions of satisfaction, which in this case are truth conditions. It is an intentional act to say "il pleut" even when the speaker does not mean it, but when the speaker means it, he says it with the intention that it should represent the state of affairs, truly or falsely, which is a case of intentionally imposing conditions of satisfaction on conditions of satisfaction. This is the key to speaker meaning. Grice, in his famous analysis of meaning,[5] stated that meaning is a matter of intending to produce beliefs, or other types of perlocutionary effects, in a hearer. I believe that this is mistaken as an analysis of *meaning*, but is instead an analysis of the *communication of meaning*. When there is speaker meaning, with a propositional content having a certain illocutionary force such as that as of an assertion, then the speaker can convey this to the hearer. He does this by causing the hearer to recognize that he was making an assertion, that he was intending to impose certain conditions of satisfaction, and furthermore, that he was intending that his intention should be recognized.

Gricean self-reflexivity requires an intention that the hearer will recognize one's intention but the key concept in Grice's analysis was not meaning, but communication. The meaning of an utterance is created by imposing conditions of satisfaction, and that meaning is communicated by causing the hearer to recognize one's intention to impose conditions of satisfaction on conditions of satisfaction and to recognize one's intention and to recognize that he is intended to recognize the intention. Yet this basic structure and speaker meaning, by which the speaker can intend to produce a meaningful utterance by intending that conditions of satisfaction be imposed on condi-

tions of satisfaction, is still far from sufficient to achieve language. There is no inner structure here. There is, however, a distinction between representation and expression, and the key to understanding language in the human sense is not expression but representation. There are expressive speech acts, such as "ouch!" or "damn!", but the key speech acts are the representational ones, which invariably impose conditions of satisfaction on conditions of satisfaction.

The next crucial element I will introduce is the notion of a procedure. If animals have a procedure whereby they can represent the same type of state of affairs on different occasions, then that procedure can reasonably be called a convention. If animals have standard ways of behaving such that other animals can recognize those standard ways of behaving, then in a particular situation a convention is being invoked, in order to create not simply an act of meaning but an act of communication, where what is communicated is the meaning. The introduction of conventions is the next crucial element of language.

When we have basic intentional structures together with an intentional act, speaker meaning, which is a matter of imposing conditions of satisfaction on conditions of satisfaction, and standard procedures for doing so, which I am calling conventions, these introduce a crucial new element, namely a speaker's capacity to lie. In order to be committed to the truth, one must at least potentially be able to lie. Nietzsche said that what is remarkable about human beings is that they can make promises. I would add that it is also remarkable that they can make deliberately false statements and insincere promises, and that in general they can lie. Animals in general cannot lie; they can deceive, for example when a bird behaves as though it is wounded in order to distract predators from its young, but this is not lying, it is merely deceit. Lying is performing an intentional act which has the mind-to-world direction of fit when in fact the speaker believes it to be false. Frege invented the assertion sign $\vdash$ and we can use it to mark the assertive illocutionary force. Performing one of these acts which represent states of affairs commits one to truth, but it is possible to be committed to the truth of a proposition which in fact one believes to be false. This is what we call a lie.

Given conventional devices for imposing conditions of satisfaction on sounds, movements, and utterances, what more is needed to achieve language? As mentioned above, the traditional Aristotelian and Kantian categories are largely instantiated in human and animal consciousness. The animal has the ability to break up its experiences into objects and their properties, including spatial and temporal relations, movement, and causal rela-

tions. I am supposing that in this device which the animal uses to represent, a distinction can be made between the referring element and the predicating element, i.e., between something corresponding to the noun phrase (NP) and something corresponding to the verb phrase (VP).

We know from experience and from animal studies that animals have the capacity to discriminate objects, to discriminate the same object in different circumstances, and to discriminate the same object as having one property at one time and then a different property at another time. For example, a dog can see that its owner was once in one place, but now is in another place. I believe that the distinction between properties and objects, and the fact that objects possess properties, is given by the biology of animal consciousness. Now let us suppose that the humanoid is capable of performing a speech act of the form F(p); it can make a distinction between the noun phrase and the verb phrase in the syntax of this particular device that expresses the proposition. This is a stunning advance, because in language, unlike pre-linguistic forms of consciousness and intentionality, there are not only representations, but representative devices that can be manipulated. It is the free manipulation of these symbolic devices that gives language its enormous expressive power, because these elements that make up the representation introduce something that corresponds to the inner syntax of a sentence.

Thus we have an utterance with a certain illocutionary force built into its meaning and a distinction between reference and predication, i.e., the difference between referring to an object and saying something about that object, which is now built into the syntax. For example, while a dog can believe that someone is approaching the door, it is not clear how he might believe that the door is approaching someone, or that there might be a thousand people approaching the door, or that he wishes fewer people were approaching the door, because such thoughts require syntactical devices. Inner syntax introduces three components which are absolutely crucial in language: discreteness, compositionality and generativity.

Discreteness

What is significant about these devices is that they preserve their identity under permutations and transformations. Words and morphemes corresponding to reference and predication preserve their identity under changes. A sentence may have eight or twelve words, but it cannot have nine and one half words, as half-words do not exist. An early objection to generative grammars was that generativity was trivial, because, for example, a recipe for baking a cake can be called generative: "add a cup of sugar", "add a cup

of flour." A recipe, however, lacks the property of discreteness, as the sugar, butter and flour lose their identity when they are baked in the oven and are no longer sugar and flour. Words and morphemes, however, remain the same, despite undergoing various transformations.

Compositionality

The feature of compositionality is also crucial because it enables the animal to produce and understand sentences solely in terms of understanding the meanings of the words or morphemes and the way in which they are combined and recombined. For instance, English speakers understand the difference between "John loves Mary" and "Mary loves John" because although the words are the same, the sentences are composed differently.

Generativity

The feature of generativity is the capacity to constantly produce new sentences in which rules are applied repeatedly. These rules are known as recursive rules. Thus we can have not only a relative clause, but a relative clause attached to a relative clause, and then another relative clause attached to that relative clause, e.g., "I met a man who knew my mother when she lived in Kansas City, where they have a large baseball team..." The number of relative clauses that can be added is indefinite. Owing to these three features, syntax, i.e., the inner syntax of a sentence, is an enormously powerful addition which provides an expressive power inconceivable to animals that can have only representations. The morphemes preserve their identity under transformation, the total unit is compositional, i.e., the meaning of the sentence can be computed from knowing the meanings of the parts in the structure, and normal human language is generative, in the sense that it has recursive rules that can be applied repeatedly. We do not know how it occurred that these three crucial elements appeared so that human beings began to have language. We do know that the following must have evolved in some order: speaker meaning (which some animals have); speaker meaning in representations, not merely expression; conventions; and an inner syntax, i.e., a set of elements which enables us to distinguish between reference and predication and which has discreteness, compositionality, and for fully developed human languages, generativity.

For the mere existence of basic human language, the crucial feature is compositionality. Language users must be able to determine the meaning of new sentences based on the meanings of the elements. Also necessary for human language is an element corresponding to the logical constants. The

animals we have been describing are close to attaining these, because if they have "p" and "q," they will need something that is equivalent to "p and q". At some point a negation symbol must be introduced as well, and once they have conjunction and negation they are close to having logical constants.

This is far from quantified modal logic or proofs in second-order logic, but it is a basic conception of how language could be structured from essentially pre-linguistic elements. The following notions should be remembered here: conditions of satisfaction, pre-linguistic forms of representation, as opposed to merely expression (several animals do have these) and conventions, i.e. standard procedures.

This is a powerful apparatus, because intentional acts performed using a convention introduce a crucial element, namely the notion of a commitment. There are types of commitment for which a language is not necessary, in which one sees someone doing something and counts on his doing it. However, the true commitments that arise from truth claims or promises require conventions. These must be explicit or be made explicit. These require language. The existence of the apparatus described thus far, together with conventions, seems to offer the possibility of types of commitments that are unknown in the animal kingdom, such as promises and various undertakings of obligations.

Human beings have the possibility of an explicit commitment. But they also have another possibilitity; and thus another possibility only known to exist in human languages: to represent something as being the case and to make it the case if others accept those representations. The most famous examples of these are Austin's performatives, in which, for example, one represents the meeting as being adjourned by saying, "the meaning is adjourned," or a clergyman represents a couple as being husband and wife by saying, "I pronounce you husband and wife." What is interesting about these utterances is that they have both directions of fit at once. Someone saying "the meeting is adjourned," thus represents the meeting as adjourned, but if the speaker is the authority and does this properly, then he or she changes reality, thus achieving the upward, or world-to-word, direction of fit by representing the world as already having been changed. Speech acts of this type, in which one makes something the case by representing it as being the case, can be called Declarations. These seem to be unique to human beings. This is significant because it concerns the difference between human civilization and animal societies. Animals have a wide variety of forms of social organization, for example they have alpha males and alpha females, but they lack such phenomena as money, government, football games, private property, cocktail parties, universities, or taxes. This

is because these require the capacity to create a certain type of reality, and this requires language. Human beings, as well as many other animals, have the capacity to use things, where the use is a function imposed by human intentionality. A chimpanzee, for example, may use a stick to extract ants from a hole, birds may use twigs to build a nest, or beavers may use wood to build a dam. Thus the imposition of function is not unique to human beings. Yet there is a certain type of function which cannot be performed in virtue of physical structure, or in virtue of physical structure alone. Human beings have created a wide variety of these functions. One example of these is money. It is money not because of its physical structure but because human beings accept and recognize it as money. This is a type of function that can only be performed in virtue of the collective acceptance of a person or an object as having a certain status. We can call these "Status Functions." This is the distinguishing feature of human civilization. The examples mentioned above, which animals do not have – private property, taxes, cocktail parties, income tax, universities – are all Status Functions.

These functions are created by a special class of Declarations and are maintained by continued representations that have the logical form of a Status Function Declaration. They are initially brought into existence, and then maintained in existence, by representations that have this form. This need not be explicit. For instance, a person in a group can become the boss of the group simply because its members treat her as the boss, recognize her as the boss, and continue to represent her as the boss. This behavior plays the role of the Status Function Declaration. She becomes the boss as a result of repeated representations that accord her these rights.

Human beings create Status Functions because they are sources of power, in order to create power relations. The powers created by Status Function Declarations have names such as (in English) "rights," "duties," "responsibilities," "obligations," "authorizations," and "permission." A general name for these is "deontic powers," from the Greek word for "duty." Deontic powers are significant because they lock into human rationality, in that they provide reasons for acting that are independent of one's desires. Thus the Status Function Declarations create Status Functions, which in turn create deontic powers, and these provide desire-independent reasons for acting. For example, if I make a promise to do something, then I have a reason to do it even if I have no desire to. Innumerable elements of daily life are Status Functions, such as property, money, credit cards, bank accounts, citizenship, or the professions of doctor or lawyer. We can refer to this as institutional reality.

The creation of institutional reality a sense requires language, specifically a certain kind of language that enables the performance of Status Function Declarations. Our intellectual history is characterized by a major error in its theories of social reality, because all of the great thinkers, beginning with Aristotle, took language for granted; their analysis of society assumed the existence of language. Social contract theorists have suggested that human beings with language at some point chose to have a social contract. In fact, if people have a language capable of creating Status Functions, they already have a social contract, because it is built into communication in a common language.

NOTES

[1] This article is pretty much a verbatim transcript of the talk I gave in Warsaw at the 10th ArgDiaP Conference: "Speech Acts and Arguments" (18 May, 2013). It is the continuation of an argument I began in an earlier article, *The Nature of Language*. A more accurate title would have contained the phrase "Some Functions" to avoid any implication that I will discuss all the functions of language.

[2] This was pointed out to me by Robert van Valin.

[3] For example, Vauclair, Jaques. *Animal cognition: an introduction to modern comparative psychology*. Harvard University Press, 1996.

[4] I believe the first person to use this expression was J.L. Austin.

[5] Grice, H. Paul. "Meaning." *The philosophical review* 66.3 (1957): 377–388.

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SPEECH ACT THEORY AND THE STUDY OF ARGUMENTATION

Abstract. In this paper, the influence of speech act theory and Grice's theory of conversational implicature on the study of argumentation is discussed. First, the role that pragmatic insights play in van Eemeren and Grootendorst's pragma-dialectical theory of argumentation and Jackson and Jacobs' conversational approach to argumentation is described. Next, a number of examples of recent work by argumentation scholars is presented in which insights from speech act theory play a prominent role.

Keywords: adjacency pair, conversational argument, conversational implicature, felicity condition, pragma-dialectical, maxim, Principle of Communication, speech act, strategic manoeuvre

1. Introduction

Insights from speech act theory (Austin 1962; Searle 1965, 1969, 1975, 1979) and Grice's theory of conversational implicature (1975) play a crucial role in two prominent approaches to the study of argumentation. First, speech act theory is a theoretical starting point in the pragma-dialectical approach to argumentation developed by Frans van Eemeren and Rob Grootendorst (1984, 1992, 2004)[1]. Second, it is used as an analytical tool in the conversational approach to argumentation advocated by Scott Jacobs and Sally Jackson (1981, 1982, 1989). In 1993, these four authors together published the monograph *Reconstructing Argumentative Discourse*, in which insights from both their approaches are combined. With the works of these four authors as a starting-point, other researchers have been inspired to make use of speech act theoretical insights in their analyses of crucial concepts of argumentation theory and in their reconstructions of argumentative discourse.[2]

In this paper, I shall first discuss the role speech act theory plays in van Eemeren and Grootendorst's pragma-dialectical approach and in Jackson

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and Jacobs' conversational approach to argumentation. Next, I shall give some examples of recent publications by other argumentation scholars in which insights from speech act theory are put to good use.

2. The role of speech act theory in the pragma-dialectical approach

In the pragma-dialectical approach to argumentation, argumentation is viewed as a means of resolving a difference of opinion on the merits by means of a critical exchange of argumentative moves between two parties. Van Eemeren and Grootendorst (1984, 2004) have developed a theoretical model of a critical discussion in which it is specified which moves by which party in different stages of the discussion can contribute to resolving the dispute. Two perspectives on argumentation are combined in developing this model of a critical discussion: a dialectical perspective inspired by the critical-rationalist ideal of reasonableness, and a communicative perspective based on speech act theory and discourse analysis. Van Eemeren and Grootendorst explain the two-fold character of their model of a critical discussion as follows:

> The theoretical model of a critical discussion is dialectical because it is premised on two parties who try to resolve a difference of opinion by means of a methodical exchange of discussion moves. The model is pragmatic because these discussion moves are described as speech acts that are performed in a specific situation and context. (van Eemeren & Grootendorst, 2004, p. 22)

Van Eemeren and Grootendorst (1984, p. 3) chose to make use of speech act theory for their theoretical and practical analysis of the language used in argumentative discussions because they regarded speech act theory as the best analytical instrument available in descriptive pragmatics. Nonetheless, applying speech act theory to the analysis of argumentative discussions, required in their view a number of amendations of the Searlean standard speech act theory.

A first problem encountered by van Eemeren and Grootendorst in their attempt to give a description of argumentation as a specific type of language use was that it is not exactly clear what type of speech act *argumentation* should be considered to be, and what conditions can be taken to be fulfilled when this speech act is performed. According to van Eemeren and Grootendorst (1982, pp. 4–7; 1991, p. 154) argumentation is a complex type of

speech act that differs in the following three important respects from Searle's characterization of prototypical speech acts:

1. Unlike speech acts such as asserting and requesting which can consist of one sentence, argumentation always consists of at least two sentences, neither of which can stand as a complete argumentation on its own (although one of them may have been left implicit). An example would be the following argumentation for the standpoint: "She'd better not take driving lessons": "She panics easily, and panicky people shouldn't get a driver's licence". Even though the second part of the argumentation will often be left unexpressed, it still forms part of the complete argumentation.
2. Unlike Searle's prototypes, argumentative utterances always have a dual illocutionary force: taken individually they are assertives, but together they form an argumentation.
3. Unlike most of Searle's examples of speech acts, the speech act argumentation cannot stand by itself but can only be regarded as argumentation if it is linked to another speech act which expresses a standpoint. The utterances constituting the argumentation can only function as such if they serve as a defence of a particular standpoint.

As a solution to these problems, van Eemeren and Grootendorst (1984, pp. 34–35) propose to make a distinction between illocutionary forces at the sentence level and illocutionary forces at a (higher) textual level. At the sentence level argumentation can then be seen as composed of elementary speech acts belonging to the category of assertives. At the textual level, the complete constellation of elementary speech acts constitutes the complex speech act of argumentation. It is at this higher textual level that the speech act complex of argumentation is – through a relation of justification or refutation – connected to the speech act of putting forward a standpoint.

After having made it possible to analyse argumentation as a speech act by characterizing it as an illocutionary act complex composed of elementary illocutions, van Eemeren and Grootendorst complete their analysis of the speech act argumentation by specifying the felicity conditions for this speech act (1984, pp. 43–45; 1992, pp. 31–33). As a starting point, they take the situation in which a speaker has also performed another speech act in which a standpoint is advanced with respect to a proposition *p*. The speaker is then addressing the listener with utterances 1, 2, ..., n. These utterances can only be considered a performance of the complex speech act of argumentation, if the following two conditions, which van Eemeren and Grootendorst call 'identity conditions' have been met (1992, p. 33):[3]

IDENTITY CONDITIONS

1. *Propositional content condition*:
   Utterances 1, 2,..., n constitute the elementary speech acts 1, 2,..., n, in which a commitment is undertaken to the propositions expressed.
2. *Essential condition*:
   The performance of the constellation of speech acts that consists of the elementary speech acts 1, 2,..., n counts as an attempt by the speaker to justify *p*; that is, to convince the listener of the acceptability of his standpoint with respect to *p*.[4]

Apart from the identity conditions, there are also a number of conditions that a speaker needs to fulfil in order for the performance of the illocutionary act of argumentation to be correct:

CORRECTNESS CONDITIONS

3. *Preparatory conditions*:
   a. The speaker believes that the listener does not accept (or at least not automatically or wholly accept) his standpoint with respect to *p*.
   b. The speaker believes that the listener is prepared to accept the propositions expressed in the elementary speech acts 1, 2,..., n.
   c. The speaker believes that the listener is prepared to accept the constellation of elementary speech acts 1, 2,..., n as an acceptable justification of *p*.
4. *Responsibility conditions*:[5]
   a. The speaker believes that his standpoint with respect to *p* is acceptable.
   b. The speaker believes that the propositions expressed in the elementary speech acts 1, 2,..., n are acceptable.
   c. The speaker believes that the constellation of elementary speech acts 1, 2,..., n is an acceptable justification of *p*.

In the essential condition of the speech act *argumentation*, the illocutionary point of the speech act is formulated: argumentation is analysed as an attempt to convince the listener of the acceptability of a standpoint. Van Eemeren and Grootendorst thus link the illocutionary act complex *argumentation* with the perlocutionary act of *convincing* (1984, p. 48). They define *convinced* as "being prepared to accept the standpoint supported by the argumentation" (1991, p. 155). In this way they avoid giving a definition of the perlocutionary effect of 'being convinced' in which this effect is perceived as an internal mental state: "Acceptance can be part of controllable

and rule-governed behaviour, which is not the case with being convinced in the internal sense" (van Eemeren & Grootendorst, 1989, p. 369). Van Eemeren and Grootendorst regard acceptance of the argumentation as the perlocutionary effect that is by convention associated with argumentation. According to them, this effect is intended by the speaker, requires an understanding of the speech act of argumentation, and depends on rational considerations of the listener (1991, p. 155).[6]

Another modification of the standard theory of speech acts is made by van Eemeren and Grootendorst to make it possible to explain that in practice arguing is not the same as convincing (1982, p. 12). Even though the verbal means used in arguing and convincing are the same, the happiness conditions of these acts are different. To account for this difference, van Eemeren and Grootendorst differentiate between the correctness of a speech act from the *speaker's* point of view and from the *listener's* point of view. They explain this distinction by using the speech act of making a proposal as an example:

> Seen from the first perspective, for example, it is sufficient that the speaker who makes a proposal believes that his proposition is in the interest of the listener, but seen from the second perspective, for a 'happy' proposal, it is also required that the listener thinks likewise. (van Eemeren & Grootendorst, 1989, p. 369)

A further adaptation of standard speech act theory is that van Eemeren and Grootendorst have integrated the Searlean conditions for the performance of speech acts with general conversational rules such as Grice's maxims (van Eemeren & Grootendorst 1989, pp. 159–160, 1992, pp. 49–52). To this end, they replace the Gricean *Co-operative Principle* by a general *Principle of Communication.* This principle requires language users to be clear, honest, efficient, and to the point. Next, the Gricean maxims are formulated as rules for the performance of speech acts in such a way that each maxim corresponds with one or more of the identity or correctness conditions (1989, p. 159):

1. Perform no incomprehensible speech acts (corresponds to Searle's propositional content and essential condition).
2. Perform no insincere speech acts (corresponds to Searle's sincerity condition)
3. Perform no unnecessary speech acts (corresponds to one of Searle's preparatory conditions).
4. Perform no pointless speech acts (corresponds to one of Searle's preparatory conditions).

5. Perform no new speech acts that are not an appropriate sequel or reaction to preceding speech acts (has no counterpart in the Searlean conditions since it refers to connections *between* speech acts).

By integrating Gricean maxims with Searlean conditions, it becomes possible to specify what it means for a particular speech act to be in accordance with the maxims: it should be recognizably and correctly performed. The speech act conditions can thus be seen as specifications of more general communication rules (van Eemeren & Grootendorst, 1989, p. 159). Another advantage of this integration is that the rules, unlike the Gricean maxims, do not just apply to assertives, but to all kinds of speech acts.

On a theoretical level, opting for a speech act perspective has made it possible to develop a model for critical discussion in which not just the move of putting forward argumentation, but all moves that contribute to the resolution of a dispute are described as speech acts (van Eemeren & Grootendorst, 1984). The model for critical discussion consists of a specification of the speech acts in the four stages (i.e., confrontation stage, opening stage, argumentation stage and concluding stage) that the resolution of a dispute should pass through:

> The rules of the model indicate what sorts of speech acts in the four stages of a critical discussion can serve the purpose of resolving a dispute. They prescribe when the discussants are entitled, or indeed obliged, to perform a particular speech act. The ideal model is elaborated in rules for critical discussion that specify who may perform what type of speech act with what intention at what stage of the discussion. (van Eemeren & Grootendorst, 1991, p. 157)[7]

By formulating the rules for critical discussion as rules for the performance of speech acts, it becomes possible to establish a connection between the normative dialectical rules and argumentative practice:

> The main point is that by formulating the rules like this, the normative rules for carrying out speech acts in a critical discussion are linked in a natural way to the descriptive conditions of performing elementary and complex speech acts. In turn, these are closely connected with all kinds of more general descriptive rules for conducting everyday discourse and conversation [...]. To put it more bluntly, our normative discussion rules can partly be seen as dialectical regulations of the rules that already apply in ordinary conversations. (van Eemeren & Grootendorst, 1991, p. 158)

Making use of a pragmatic perspective on argumentation has also proved to be fruitful for dealing with problems concerning the reconstruction of implicit and indirect elements in argumentative discourse. When

analysing unexpressed premises, for instance, van Eemeren and Grootendorst propose to carry out an analysis both at a pragmatic and at a logical level:

> At the pragmatic level, the analysis is directed toward reconstructing the complex speech act performed in advancing the argumentation, while at the logical level, the reasoning underlying the argumentation is reconstructed. In practice the logical analysis is instrumental for the pragmatic analysis. (van Eemeren & Grootendorst, 1992, p. 60)

Van Eemeren and Grootendorst see unexpressed premises as a special sort of indirect speech acts. Taken literally, an argument in which a premise has been left unexpressed is invalid. This would mean that a rule of communication has been violated, because the speaker would have put forward a speech act for which the third responsibility condition and the third preparatory condition are not fulfilled:

> Because of the responsibility condition the speaker may be assumed to believe that the argument underlying his argumentation is valid, and because of the preparatory condition he may be assumed to believe that the listener will believe this too. (van Eemeren & Grootendorst, 1992, p. 62)

The pragma-dialectical procedure for reconstructing unexpressed premises is as follows:

> The first step [...] is to determine what the "logical minimum" is that makes the reasoning in the argumentation logically valid. Taking "If premise, then conclusion" as the starting point the next step is to determine the "pragmatic optimum" that may be regarded as the unexpressed premise. The pragmatic optimum is determined by finding out if and how, given the context, specific and general background knowledge, and common sense, the "if-then" statement can be made more informative and appropriate in the case at hand. (van Eemeren & Grootendorst, 2004, pp. 117–118)

The following example may be used to illustrate how this procedure would work (van Eemeren & Grootendorst, 1992, pp. 63–67):

(1) Bart must be at home, because his landline is busy.

The logical minimum would be:

(2a) If Bart's landline is busy, then Bart must be at home.

This addition renders the reasoning valid, but pragmatically speaking this is not enough. The logical minimum contributes nothing new, but only

states explicitly that it is permitted to infer the conclusion of example (1) from the premise. Since this was already clear from the fact that the speaker assumes that the conclusion follows from the premise that has been provided, adding (2a) would be superfluous. If this logical minimum were seen as the unexpressed premise, a violation of the efficiency rule of communication would be ascribed to the speaker. In order to prevent such a violation, and in view of our general background knowledge about phones (in particular that if people are using their landline, they must be at home to be using it), it seems justified to reconstruct a more generalized version of the logical minimum as underlying the argument. Hence, adding (2b) as the pragmatic optimum seems to be justified:

(2b) People whose landline is busy are at home.[8]

The pragmatic optimum is thus the premise that makes the argument valid and also prevents a violation of a rule of communication. Reconstructing the pragmatic optimum amounts, according to van Eemeren and Grootendorst (1992, p. 64) to the following:

> Predominantly, this is a matter of generalizing the logical minimum, making it as informative as possible without ascribing unwarranted commitments to the speaker and formulating it in a colloquial way that fits in with the rest of the argumentative discourse.

An advantage of using a speech act perspective in the reconstruction of unexpressed premises is that the phenomenon of unexpressed premises is not treated in an ad hoc way, but is placed within the general framework for the analysis of indirect language use that a speech act perspective (in combination with Gricean insights) offers.[9] Analysing unexpressed premises (and unexpressed standpoints) as conversational implicatures, not only makes it possible to provide an explanation for the fact that ordinary language users are generally prepared and able to fill in the unexpressed elements, but also provides the analyst with (pragmatic) criteria for the selection of a particular unexpressed premise (van Eemeren & Grootendorst, 1984, p. 135).

3. Jackson and Jacobs' pragmatic analysis of conversational argument

Closely related to the pragma-dialectical functional and procedural view of argumentation is Jackson and Jacobs' pragmatic and discourse analytic

approach to argumentation. In this approach, argument is not seen as a process whereby a single individual arrives at a conclusion, but as "a procedure whereby two or more individuals publicly arrive at agreement" (Jacobs & Jackson, 1982, p. 215). Arguments are treated as "interactionally emergent structures organized around the function of managing disagreement" (Jacobs & Jackson, 1992, p. 161). Jacobs and Jackson (1982) give the following description of argument as a disagreement managing device in conversations:

> Argument regulates in important ways the shape and occurrence of other conversational events. It can be used to obtain and avoid agreement, acceptance, or affiliation for a wide range of conversational acts. (p. 206)

An example presented by Jacobs and Jackson of such a conversational argument is (3):

(3) (01) S: Hey, you wanna go to La Baguette for breakfast and have some Danish?
(02) C: Don't we have to leave for the airport by 9:30?
(03) S: Yeah, but there's plenty of time before we have to go.
(04) C: Yeah, well, it's okay with me if it's okay with my parents. We'll have to see what they wanna do. (1989, p. 157)

In this example, S's proposal made in turn (01) meets with an objection by C in turn (02): they may not have time to go for breakfast at La Baguette since they have to be at the airport by 9.30. In turn (03), S defends the proposal by countering this objection, and in turn (04) the disagreement is resolved, since C accepts the proposal on the condition that it is acceptable to his parents as well.

Jackson and Jacobs distinguish three different levels of discourse organization that are relevant to the analysis of conversational argument. The first level is that of the *structural* organization of conversation. For the description of this level, they make use of the sequencing rules model developed by conversation analysts (Sacks, Schegloff, & Jefferson, 1974; Schegloff & Sacks, 1974).[10] In this model the concept of adjacency pair (two turns by different speakers that together form a pair, consisting of a first and a second pair part, such as "question-answer", or "request-grant/refusal") plays an important role. Argumentation in conversation takes the form of expansions of adjacency pairs, in such a way that different patterns are produced:

> adjacency pairs can be *sequentially expanded* in three ways: through pre-expansion, which involves prepositioning a subordinate adjacency pair to "lead

> up" to the main pair (A: *"Do you believe that women have the same rights as men?"* B: *"Sure."* A: *"Then why don't you do half of the housework and child-rearing?"*); through embedded expansion, which involves inserting a subordinate pair between the first-pair part and the second-pair part of the main pair (A: *"Would you come here and clean up this milk I spilled?"* B: *"Can't you get it?"* A: *"I've gotta peel these carrots."* B: *"Okay.")* and through post-expansions, which involve following up the main pair with a subordinate pair (A: *"I think you should do grocery shopping and laundry once in a while."* B: *"That is women's work."* A: *"That is a wholly unacceptable response."* B: *"Okay, okay, I was just joking. Boy!"*). (Jacobs & Jackson, 1982, p. 222)

An important characteristic of adjacency pair organization is that it exhibits a structural preference for agreement (Pomerantz, 1978). First-pair parts like requests, for instance, can be followed up by two different second-pair parts, a grant or a refusal. The first of these second-pair parts is the preferred pair part, since it amounts to an acceptance of the perlocutionary effect associated with the speech act that functions as the first-pair part. A respondent reacting with a dispreferred pair part, such as a refusal, is required to provide a reason or excuse. It is thus in consequence of the preference for agreement that conversational argument "takes the form of disagreement relevant expansion" (Jacobs & Jackson, 1982, p. 224). The structure of conversational argument is analysed by Jackson and Jacobs as resulting from the occurrence of disagreement in a rule system built to prefer agreement (1992, p. 681). Arguments are seen as "subordinate speech acts issued in support or in objection to some main, superordinate act" (Jacobs, 1989, p. 348).

A second level of discourse organization is *functional* in nature, because it concerns the connections between speech acts that are established via the felicity conditions for those acts:

> Felicity conditions provide us a very powerful device for examining the relationships among individual speech acts in conversations because they specify a range of beliefs to which a speaker is committed in performing any given speech act. Thus it becomes possible to assess the bearing of one utterance on another through an inferential network supplied by the felicity conditions (...). (Jacobs & Jackson, 1982, p. 221)

For argumentation in particular, the felicity conditions of a speech act determine which lines of argument are relevant:

> We argued that when people made or implied arguments that these sequential expansions were substantively connected to the main adjacency pair by virtue of addressing the felicity conditions for that pair; digressions and irrelevancies

> occurred where no such connection could be found. In this way, the felicity conditions could be seen as "stock issues" for conversational argument. (Jacobs & Jackson, 1989, p. 183)

Due to their general disagreement regulating role, arguments in conversations are, according to Jacobs and Jackson, often about speech acts other than assertives and are often conveyed by means of non-assertive speech acts (Jackson, 1992, p. 260). For the purpose of laying bare the structure of the argument presented by each of the arguers concerned individually, it is possible to reconstruct those non-assertive speech acts as assertives. Jacobs and Jackson emphasize, however, that the character of the speech acts by means of which the argument was originally presented and the practical activity context in which these acts were performed should still be taken into account in the analysis (Jackson, 1992, p. 260). The commitments of the speaker that are reconstructed in the form of assertions depend on the speech acts actually performed in the dialogue in the following way:

> The fact that speakers are already committed to the acceptability and relevance of the speech acts they are intendedly performing means that those speakers will also be committed to the acceptability and relevance of any assertions that can be reconstructed from that speech act, as say, pragmatic presuppositions, felicity conditions, or implicatures (Jackson, 1992, p. 260).

Every speech act thus implies a large set of associated beliefs that could be treated as standpoints. If that happens, they are termed *virtual* standpoints to emphasize that they are not put forward *as* standpoints, but only start functioning as such because they concern commitments of the speaker that have been problematized by the interlocutor and therefore require defense (van Eemeren, Grootendorst, Jacobs & Jackson, 1993, pp. 95–96). In this way, the speech act performed can be said to be decisive for what may become arguable:

> Every speech act performance creates a structured but indefinitely expandable disagreement space, an open-ended set of virtual standpoints, any one of which, on being "called out," might require defense. (van Eemeren, Grootendorst, Jacobs & Jackson, 1993, p. 95)

A third level of discourse organization that plays a role in conversational argument according to Jacobs and Jackson is the *rational* level: at this level conversational contributions are viewed as "the result of a problem-solving process whereby people generate and infer means to achieve ends

according to principles of cooperative action and practical reasoning" (Jacobs & Jackson, 1989, p. 165). Speech acts are then seen as conventional means for achieving (perlocutionary) goals that may themselves be sub-goals in a higher order plan. According to Jacobs and Jackson, in conversations language users often do not respond directly to the speech act that is performed as a first main pair part, but instead to the higher order aim that they can identify as underlying this speech act (Jacobs & Jackson, 1989, p. 164). Example (4) may illustrate this type of cooperative respondent behaviour:

(4) Customer: What's the chicken marsala like?
Waiter: I'm sorry, we're all out of that tonight.

According to the analysis given by Jacobs and Jackson (1989, p. 164) of this example, the waiter is not responding to the utterance of the customer as a question, nor as an indirect request ("Could you bring me some chicken marsala?"), but as part of a plan of what to order: "The waiter's response serves to indicate only that chicken marsala need not be taken into account in the decision-making process" (Jacobs & Jackson, 1989, p. 164). The virtual standpoint ascribed to the customer ("The chicken marsala is one of the dishes that I should consider in deciding what to order") is thus determined by the waiter by identifying the customer's question as a means of achieving the higher aim of arriving at a decision about what to order.

In the analysis of conversational argument, all three levels of discourse organization come together: arguments are seen as expansions of adjacency pairs, which are related to the main adjacency pair by virtue of addressing the felicity conditions for this pair, and are designed "to establish or cancel a precondition necessary for the valid performance of some higher-order action within a plan" (Jacobs & Jackson 1989, p. 166).

4. Recent applications of insights from speech act theory to the analysis of argumentative discourse

The analysis of argumentation from a speech act perspective undertaken by van Eemeren and Grootendorst and by Jacobs and Jackson in the 1980s has provided argumentation scholars with a basic framework for the application of pragmatic insights to problems of analysis in argumentative discourse. In this section, I will discuss two types of such applications. In the first type, an analysis of the conditions of a particular (argumentatively

relevant) speech act is given on the basis of which it can be established which textual clues may be used for the identification and reconstruction of that speech act. The second type of research is concerned with the analysis and evaluation of strategic manoeuvres in particular argumentative activity types.[11] In this type of research, speech act theory is used to give an analysis of speech acts which play a central role in the activity concerned, thereby providing a starting-point for the analysis and evaluation of particular strategic manoeuvres.

An example of the first type of research is Peter Houtlosser's (1995, 2002) work on the identification and reconstruction of points of view. Analogously to van Eemeren and Grootendorst's analysis of the complex speech act of argumentation, Houtlosser (2002) gives a specification of the felicity conditions for the speech act of advancing a standpoint (or point of view). According to Houtlosser, these felicity conditions, in particular the correctness conditions, provide useful clues for identifying standpoints in cases that have not been explicitly advanced as such:

> In particular the first preparatory condition, which states that a speaker who advances a point of view must presuppose doubt on the part of the interlocutor, provides a useful clue. Apart from being a necessary condition for treating a speech act as a point of view, it is also almost a sufficient condition. If a speaker has performed a particular speech act while anticipating (or even knowing) that this speech act is not acceptable to his interlocutor, he must justify the performance of that speech act – at least if he wants it to have the intended interactional effect. (Houtlosser, 2002, p. 172).

Since the condition that the speaker must presuppose doubt as to the acceptability of his speech act plays such a central role in the identification of a point of view, Houtlosser subsequently identifies a number of textual clues or 'indicators' of anticipated doubt that may be used by the analyst to make a well-founded decision on whether a speaker can be held responsible for maintaining a point of view.[12]

An example of the second type of research is Corina Andone's monograph on strategic manoeuvring by politicians in their responses to accusations of inconsistency in political interviews (Andone, 2013). Andone defines accusations of inconsistency in speech act terms by giving an analysis of both the identity and the correctness conditions of accusations of inconsistency. As a point of departure she takes the analysis given by Kauffeld (1986, 1998) of the speech act of *accusing*. Andone further specifies these general speech act conditions so that they can be applied to the particular accusation at issue: the accusation of inconsistency.

The identity and correctness conditions formulated by Andone not only make clear what is understood by the act of accusing someone of an inconsistency, but also help in identifying 'analytically relevant' responses to such an act. The essential condition connects the performance of an accusation of inconsistency with the effect of 'securing a response that answers the charge'; i.e., a response which is intended by the speaker that is based on rational considerations and shows understanding of the accusation of inconsistency. In a critical discussion, only two such responses can be identified: maintaining one of the inconsistent standpoints or retracting it. Accepting the charge as correct is the preferred response, which requires the protagonist accused of the inconsistency to withdraw a standpoint.

Another example of the second type of research is Lotte van Poppel's (2012, 2013) analysis of the use of different variants of pragmatic argumentation as a strategic manoeuvre in health brochures. In order to explain that the choice for pragmatic argumentation in health brochures can be seen as contributing to the resolution of the dispute at issue, and thus as dialectically relevant, van Poppel makes use of the speech act theoretical perspective. This perspective is suitable, according to van Poppel, since the argumentative discussion in this context "resolves around the acceptability of the main speech act 'advising"' (2012, p. 102). In anticipation of doubt or criticism, writers of health brochures can attempt to justify their advice by arguing that certain felicity conditions are fulfilled. Pragmatic argumentation can be a means to show that the preparatory condition for advising is fulfilled:

> An important preparatory condition for accepting health advice advocating an action is that the writer believes that the action is in principle advantageous for the reader's health. For accepting advice that discourages an action, the action should be considered disadvantageous for the reader's health. (van Poppel, 2012, p. 103)

By removing anticipated doubt with respect to the fulfillment of the preparatory condition of advising, pragmatic argumentation contributes to the resolution process.

5. Conclusion

The use of pragmatic insights in the pragma-dialectical theory of argumentation has enabled development of a model for critical discussion in which the constitutive moves are described as speech acts: the basic units

of communication. This, in turn, has made it possible to use pragmatic insights concerning indirect speech acts and conversational implicatures to solve problems of analysis with respect to argumentative discourse. Jackson and Jacobs' analysis of conversational argument has made it clear that argumentation in ordinary discourse can be seen as a 'repair mechanism': a means of regulating disagreement over all types of speech act. Their work has shown the importance of taking into account in the reconstruction of argumentation which speech act functions as the arguable speech act, and in which context of practical activity argumentation takes place. Recent publications in argumentation theory bear witness to the fruitfulness of a speech act perspective to the analysis of argumentative moves made within particular argumentative activity types.

NOTES

[1] David Hitchcock (2007, p. 102) is an example of an informal logician who also considers arguing as a speech act.

[2] Another important tradition in which a pragmatic perspective on argumentation is taken is that of the Polish School of Argumentation (Debowska-Kozlowska, 2014; Koszowy & Araszkiewicz, 2014).

[3] Van Eemeren and Grootendorst (1984, pp. 40–42) split up Searle's felicity conditions into two categories of conditions: identity (or recognisability) conditions which have to be met in order for an utterance to count as a particular speech act, and correctness conditions, which need to be fulfilled for a correct performance of the speech act. The essential condition and propositional content conditions of a speech act are its identity conditions. The correctness conditions consist of the preparatory and responsibility (or sincerity) conditions. The reason for distinguishing between identity and correctness conditions is that violations of these two types of conditions have different consequences. If one of the identity conditions has not been fulfilled, no performance of the illocutionary act of argumentation has taken place. If one of the correctness conditions has not been fulfilled, the speech act of argumentation is in some respect not wholly happy (van Eemeren & Grootendorst, 1982, p. 11).

[4] Van Eemeren and Grootendorst (1992, p. 31) list conditions for both 'pro-argumentation', i.e. argumentation aimed at justifying a standpoint, and 'contra-argumentation', i.e. argumentation aimed at refuting a standpoint. Only the first type of conditions are presented here.

[5] Van Eemeren and Grootendorst prefer the term 'responsibility' condition to Searle's term 'sincerity' condition, since for their purpose it is what the speaker can be held accountable for that counts, not what the speaker privately thinks (1992, p. 32n).

[6] By defining the perlocutionary effect of argumentation in this way, van Eemeren and Grootendorst make it possible to distinguish the type of perlocutionary effect that lends itself to systematic research in a speech act theoretical framework from the diverse category of other possible consequences of speech acts that are mentioned in the speech act literature. To this end, they also introduce a terminological and conceptual distinction between *inherent* perlocutionary effects (consisting solely of the acceptance of the speech act by the listener) and *consecutive* perlocutionary consequences (all other consequences of the speech act) (van Eemeren & Grootendorst, 1984, p. 24).

[7] Since the model specifies which speech acts can contribute to resolving the dispute in each of the stages of the resolution process, the model also serves as a heuristic or guide for the analysis of argumentative discourse (van Eemeren & Grootendorst, 2004, p. 96).

[8] A more defensible pragmatic optimum would be: "People whose landline is busy are generally at home." In this formulation the possibility of exceptions to the rule is not excluded. The strong modality used in the presentation of the standpoint ("must be at home"), however, justifies ascribing a stronger premise to the speaker.

[9] The same applies to unexpressed standpoints, which may also be seen as indirect speech acts (van Eemeren, 1986; van Eemeren & Grootendorst, 1991, pp. 162–163).

[10] Some conversation analysts have criticized speech act theory as an instrument for the analysis of ordinary conversations. Van Rees (1992) defends speech act theory against such criticisms.

[11] This type of approach is based on the extended pragma-dialectical theory (van Eemeren, 2010) in which rhetorical insights have been integrated within the dialectical framework by making use of the concept of 'strategic manoeuvring': arguers' attempts at being reasonable and effective at the same time.

[12] Clues for a point of view may also be found in the fact that an arguer provides an argumentative follow-up to his assertive. Since such argumentative follow-ups may in practice be difficult to distinguish from explanatory follow-ups, Houtlosser also contrasts the felicity conditions for arguments with those of explanations to clarify the conceptual difference between arguing and explaining. The differences in felicity conditions can subsequently provide clues to the analyst for distinguishing between argumentation and explanation (Houtlosser, 2002, pp. 178–179).

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MANEUVERING WITH THE BURDEN OF PROOF: CONFRONTATIONAL STRATEGIES IN DEALING WITH POLITICAL ACCOUNTABILITY

Abstract. In this paper, the author examines the burden of proof in the argumentative confrontations taking part in practices of political accountability. She does so by explaining how politicians maneuver strategically with the burden of proof in an attempt at winning the discussion in which they are involved. After making clear the role of the burden of proof in defining the difference of opinion in argumentative confrontations, the author outlines the constraints imposed by practices of political accountability on the burden of proof. Finally, she analyzes in detail a concrete case in which a politician maneuvers in such a way that his burden of proof is significantly diminished.

Keywords: argumentative confrontation, burden of proof, dialectical route, material and procedural starting points, political accountability, strategic maneuvering

1. Introduction[1]

In 1999 the European Commission led by Jaques Santer resigned following harsh criticism from a parliamentary committee of inquiry which examined alleged fraud and mismanagement. During the inquiry, the Commissioners had to provide information about their financial activities as well as explain and justify their decisions to the critical investigators appointed for this purpose. This process is viewed as a typical case of political accountability: An account-holder (the investigators) challenges an accountor (the Commissioners) to account for his political conduct.

The obligation to justify certain actions – known in argumentation theory as the 'burden of proof' – involves a commitment to argue if the acceptability of the actions is doubted. In practices of political accountability the burden of proof is a hallmark of such practices: In all cases politicians are expected to argue in response to critical scrutiny. Therefore, it is pertinent

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and important to understand from an argumentative perspective the role of the burden of proof in dealing with political accountability.

In this paper, I concentrate from a pragma-dialectical perspective on argumentation on the burden of proof in the argumentative confrontations taking place in the practices at issue. My aim is to explain how politicians maneuver with their burden of proof in an attempt at winning the discussion when they have to give an account of their performance. In the first section, I will make clear the role of the burden of proof in defining the difference of opinion and the possibilities which exist in an argumentative confrontation of doing so favorably. In the second section, I will demonstrate that the burden of proof is subject to a number of constraints imposed by the conventions characterizing practices of political accountability. Finally, I will analyze a concrete case in which a politician maneuvers in such a way that his burden of proof is significantly diminished.

2. The role of the burden of proof in argumentative confrontations

The burden of proof – originally a legal concept from Roman law often referred to by the Latin term *onus probandi* – is in the pragma-dialectical approach to argumentation viewed as part of a critical testing procedure aimed at resolving a difference of opinion on the merits. To achieve this aim, a critical exchange of argumentative moves needs to take place between the protagonist of the standpoint at issue and an antagonist who has doubt as to the acceptability of this standpoint or even rejects it (van Eemeren & Grootendorst 1984, 2004).

The critical view of reasonableness advocated in the pragma-dialectical approach involves subjecting the standpoints to a regimented critical discussion. A critical discussion in the pragma-dialectical theory is given shape in an ideal model in which an outline is given of the moves that can make a contribution towards the envisaged purpose of the discussion at every stage of the resolution process. In the confrontation stage the discussion is initiated, and the difference of opinion manifests itself through the opposition between a standpoint and the non-acceptance of this standpoint. In the opening stage the discussion roles of the protagonist and antagonist are divided and the substantive and procedural commitments of the discussion are identified. In the argumentation stage the protagonist defends his standpoint against the critical responses of the antagonist. In the concluding stage the protagonist and the antagonist determine whether the

protagonist's standpoint has been successfully defended against the critical responses of the antagonist.

The burden of proof plays a vital role at every stage of the critical testing procedure. Despite what the name may suggest, the burden of proof is not pertinent only to the argumentation stage in which the actual 'proving' takes place, but to realizing the goals of all stages.[2] According to van Eemeren and Houtlosser (2002), the burden of proof is acquired in the confrontation stage, distributed over the parties and taken up in the opening stage, met by advancing argumentation in the argumentation stage, and finally discharged in the concluding stage.[3]

The pragma-dialectical approach to argumentation embraces a procedural view of the burden of proof (van Eemeren & Houtlosser 2002, van Eemeren 2010) in which this concept is regulative for the conduct of argumentation: it functions as "a procedural principle of rationality" (Rescher 1977) with the help of which the probative obligations in a discussion can be specified. Just like Rescher (1977, 2006), the pragma-dialecticians are of the opinion that the concept of burden of proof is a methodological tool for showing how the discussion unfolds in all stages. Whether he is engaged in defining the difference of opinion, agreeing on the starting points of the discussion, advancing arguments, or establishing the result of the discussion, the protagonist deals with certain aspects of the burden of proof in order to eventually resolve a difference of opinion on the merits.[4] In what follows, I will explain the role of the burden of proof in the confrontation stage in the simplest case of a non-mixed dispute, in which there is only one protagonist who advances a standpoint.

The goal of the parties in an argumentative confrontation is to reach a definition of the difference of opinion on the merits in agreement with the procedural and material starting points agreed upon in the opening stage. Doing so is vital to the rest of the discussion, because without such a definition the discussion cannot proceed adequately to the next stages. The burden of proof is one of the most important means used to contribute towards fulfilling the goal of this stage: It is an obligation that arises as a consequence of the need to respond to criticism against the standpoint if the protagonist is challenged to give such a response (van Eemeren & Grootendorst 1984, Houtlosser 2002).[5]

According to its essential condition, "advancing a standpoint counts as taking responsibility for a [...] position in respect of [an expressed opinion] O, assuming an obligation to defend the [...] position in respect of O if challenged to do so" (Houtlosser 2002: 171).[6] By taking on a burden of proof at the confrontation stage, the protagonist of a standpoint contributes to the

critical testing procedure, because in this way he helps define the difference of opinion.

In order to define a difference of opinion in the confrontation stage, arguers can follow various dialectical routes that lead to achieving the goal of this stage. A dialectical route represents the sequence of moves and countermoves instrumental to resolving ultimately a difference of opinion on the merits. All moves forming a dialectical route are analytically relevant, i.e. they are pertinent to resolving the difference of opinion at issue on the merits.[7]

Starting from the distribution of speech acts playing a role in an ideal critical discussion (van Eemeren & Grootendorst 1984: 105, van Eemeren 2010: 11), all possible dialectical routes of an argumentative confrontation can be determined. In this distribution, assertives are put forward to advance and maintain a standpoint, and illocutionary negations of assertives are used to retract a standpoint. Commissives and illocutionary negations of commissives are performed to indicate acceptance or non-acceptance of the standpoint, respectively. In case the protagonist's position is not fully clear, directives may be advanced to request 'usage declaratives' demanding clarifications, precizations, amplifications, etc. Finally, usage declaratives are advanced in reaction to the antagonist's directives.

In principle, unless the protagonist has already successfully defended the same standpoint against the same antagonist on a previous occasion, and unless he has given up his standpoint, three dialectical routes involve a burden of proof in an argumentative confrontation. These routes are outlined in Figure 1:

	Protagonist	Antagonist
Dialectical route I	Advances a standpoint	Doubts the protagonist's standpoint
Dialectical route II	Advances a standpoint Advances a usage declarative	Requests a usage declarative
Dialectical route III	Advances a standpoint Maintains a standpoint	Doubts the protagonist's standpoint

Figure 1. Dialectical routes involving a burden of proof in a non-mixed discussion

By following *dialectical route I*, the protagonist of a standpoint takes upon himself an obligation involving a burden of proof which consists in a commitment to substantiate the standpoint and thus engage in a discussion over its tenability. If the protagonist refuses to take on such an obligation, the

discussion cannot be conducted: The difference of opinion that is at issue can only be resolved if the protagonist accepts to defend his standpoint after being criticized. This obligation holds until the protagonist retracts his standpoint or until the antagonist no longer doubts it.

By following *dialectical route II*, the protagonist makes clear which issue is at stake in the standpoint after a request for clarification has been issued. In providing a clarification of his standpoint, the protagonist maintains his commitment to defend his standpoint pertaining to the issue concerned if challenged. Although clarifying the standpoint is not an argumentative move in the strict sense, doing so plays a role in defining the difference of opinion because by creating clarity a proper critical testing procedure is ensured. After all, the dialectical goal of the confrontation stage is to define the difference of opinion clearly (van Eemeren & Houtlosser 2002: 22), and this goal can be achieved only if the standpoint and the attitude towards the opinion expressed in the standpoint are made clear. The obligations related to the burden of proof can be fulfilled only if clarity is obtained in this regard.

By following *dialectical route III*, the protagonist upholds the obligation involving a burden of proof because, by maintaining his standpoint, he wishes to make explicitly clear that despite the antagonist's doubts he regards himself as still committed to the acceptability of the proposition expressed in his standpoint. Because he believes this to be the case, the protagonist shows that he is ready to defend his standpoint and thus live up to his obligation with regard to the burden of proof. By maintaining his standpoint, the protagonist makes explicitly clear that he has not retracted his standpoint and thus emphasizes his commitment to remain engaged in a discussion in which the tenability of his standpoint is tested. As will be shown in the case study, such emphasis plays a role in the protagonist's attempt at winning the discussion. Unlike in dialectical route I, in following this route the protagonist reinforces his belief in the acceptability of his position and thus foregrounds that he is ready to defend it.

Unlike in an ideal argumentative confrontation, in argumentative practice arguers strive not only to satisfy their dialectical obligations related to the definition of the difference of opinion. They also have a rhetorical interest in defining the difference of opinion to their own advantage in order to win the discussion in which they are involved. In trying to achieve a balance between their dialectical and rhetorical interests – necessary in order to resolve the difference of opinion *on the merits* – participants engage in *strategic maneuvering* (van Eemeren & Houtlosser 2002, van Eemeren 2010). This view suggests that in an argumentative confrontation the protagonist always ma-

neuvers with the burden of proof in order to increase his chances of winning the discussion in which he is involved.

In order to understand how the protagonist of a standpoint maneuvers to his own advantage, it needs to be determined how the three dialectical routes involving a burden of proof can be realized strategically in practice. Dialectical routes I and III – in which the protagonist advances a standpoint and maintains it – can be followed strategically in such a way that the defense of the standpoint will be made easier. Van Eemeren and Houtlosser (2002) point out that in such a case the protagonist can maneuver by either limiting or broadening the scope of the standpoint in a certain way, depending on what is most beneficial at that point in the discussion. By doing so, the defense of the standpoint will be easier or – even more to the protagonist's advantage – no defense will be necessary at all. Viviane Reding, for example, the Vice President of the European Commission, did not have to defend her standpoint that "All European citizens can contribute to maintaining democracy by taking part in elections" when she was interviewed in 2009 on EuroNews. Although in principle she had a burden of proof for her standpoint, the obligation to defend her view about *all* European citizens could not be imposed on her. The scope of the standpoint was so broad that no one expected her to argue for each and every European citizen. Moreover, a defense of the standpoint is not expected because no reasonable person can deny the importance of voting in a democracy. This idea is generally accepted and would not be criticized by the citizens of Europe.

Dialectical route II – in which the protagonist makes his standpoint clear after a request for clarification has been issued – involves strategic maneuvering which concerns the way in which the information demanded by the antagonist is quantified. This route can be followed strategically by offering either too little or too much information that provides the required clarification. In both cases, the commitment to defend a standpoint is weakened and the burden of proof is hence limited. For example, in 1999 when they were asked to make clear their political activities, members of the European Commission led by Jacques Santer provided a huge amount of information to the parliamentary committee of inquiry looking into alleged fraud and mismanagement of the Commission. In this way, the parliamentary committee was led into confusion and could not ask critical questions related to all aspects pertinent to the Commission's performance. As a consequence, the Santer Commission had no burden of proof for the adequacy of some of their decisions and policies. A similar outcome was obtained in the same year when the British Department of Health had to clarify the

measures taken to prevent 'mad-cow disease.' Unlike the Santer Commission, which gave too much information, the British Department of Health provided too little information about the measures they had taken, claiming that they wanted to protect consumers from knowing all possible negative effects of the disease. In this way, the acceptability of some of their measures could not be put to the test by the relevant authorities, and those responsible could avoid fulfilling the burden of proof arising from taking certain measures.

Rhetorical choices such as those outlined are made with a view to obtaining success in the specific context in which the discussion takes place. Such choices are often dictated by the institutional conventions characterizing the specific argumentative practice (van Eemeren 2010). In the next section I will determine how realizing the dialectical goal of defining the difference of opinion and at the same time its rhetorical counterpart of doing so favorably are constrained by the characteristics of the practices of political accountability.[8] The question I will answer is: what are the possibilities for confrontational maneuvering with the burden of proof in practices of political accountability?

3. Possibilities for maneuvering in dealing with political accountability

As their name already suggests, practices of political accountability consist of discussions in which a political actor (the accountor) gives an account, i.e., explains and justifies his conduct to a forum (the account-holder) (Bovens 2006: 9). Political discussions in which an account is provided may occur in a variety of settings, ranging from highly formalized and institutionalized practices – such as meetings of parliamentary committees of inquiry – to informal and less strictly institutionalized practices – such as political interviews.

The *institutional point*[9] of all practices of political accountability is to offer those who have a political function – such as ministers, parliamentarians, and party members – an opportunity to discuss the quality of their actions, decisions, and policies, and the reasons for carrying out an action in a certain way.[10] Such accountability discussions take place with a view not only to check the adequacy of political actions but also, and more importantly, to explain and justify them.[11] Eventually, in cases of malperformance sanctions are imposed on the actor, or he is rewarded in the case of adequate performance (Bovens 2006: 9). Sometimes, when the account-holder

does not have the full authority to do so, he prepares the ground for sanctions being imposed by others who have the required authority. For instance, a journalist cannot ask a politician to resign because it turns out in an interview that the politician has acted improperly, but the politician's peers may do so afterwards, based on the interview.

In practices of political accountability argumentation plays a fundamental role because this is the only acceptable means available to fulfill the obligation to justify the political performance. Preceding the actual arguing, the political actor has to inform the account-holder about the way in which he carried out his tasks, about the results obtained and about the procedures followed. All studies dealing with such practices written from a political and legal perspective emphasize that providing information needs to be complemented by reason-giving, so that political discussions count as true instances of accountability (e.g., Strøm 2000, Mulgan 2003, Bovens 2006, Verhey 2009). In what follows, I will outline how certain characteristics going with the informative and argumentative nature of political accountability constrain the maneuvering allowed to the participants with regard to the burden of proof. These characteristics pertain to the propositions for discussion, the roles adopted by the parties, the kind of difference of opinion at issue and the starting points regulating accountability practices.

At the main level of the argumentative exchange, the propositions for discussion usually vary depending on the politician's role, position and political portfolio. They can range from descriptive propositions about a factual state of affairs ('The decision I took last week is in accordance with Article 110 of the Parliamentary Rules of Procedure'), to evaluative propositions in which a quality judgment is made ('This policy is very good'), and prescriptive propositions in which a proposal is made ('This measure should be taken'). In practice, the propositions presented for discussion in political accountability practices usually pertain to more than one issue and to various aspects of the same issue. Depending on the circumstances, politicians are expected to explain and justify their actions from a political perspective as well as from a legal, administrative, and social viewpoint, so that the demands of all people possibly affected by their conduct are taken into account. Although in theory just one issue can be the subject of discussion, in practice this is rarely, if ever the case. Account is almost always rendered to many people at once, such as voters, political parties, courts, auditors, peers, interest groups, and other stakeholders in view of 'the problem of many eyes' (Bovens 2006: 15–17). As a rule, various aspects of the same issue – such as the consequences of an action and the means employed to

carry it out – are under discussion. Thus, discussions in which politicians are held to account for their conduct originate, more often than not, from a multiple dispute.

Irrespective of the proposition at issue, a difference of opinion always arises in accountability practices because of doubt on the part of the account-holder as to whether the politician has acted properly. It is precisely the role of the account-holder to ask critical questions that require the politician to explain and justify his performance. In response to such doubt, the politician is supposed to advance argumentation, thus supporting his standpoint concerning one or more of the propositions discussed. For example, when the Members of the European Commission had to account for the measures they took concerning mad-cow disease, they did so against a background of doubts and criticisms about the adequacy of their measures. Various account-holders (e.g., journalists, stakeholders, committees of inquiry) advanced critical questions which the politicians had to answer by explaining the necessity and appropriateness of their measures.

The account-holder imposes sanctions on the political actor and usually motivates these sanctions. The sanctions are presented in the form of a standpoint (such as 'Person X needs to resign') which is supported by the reasons motivating the sanctions (such as '[Because] person X has acted illegally'). For example, the committee of inquiry of the European Parliament investigating the mad-cow disease advanced a standpoint according to which 'European Commissioners responsible for taking measures to protect citizens have to resign.' This sanction was supported by the argument stating that 'The measures taken to protect the citizens were inappropriate although the Commissioners have been asked three times to revise their measures.'[12]

This presentation of the positions of the parties in an accountability discussion suggests that in most cases the dispute is qualitatively multiple and mixed.[13] Nevertheless, although it is rare, a single non-mixed difference of opinion that does not take the shape of a full disagreement but remains basic in the sense that the politician is the only party advancing a standpoint is not excluded. Despite this possibility, to do justice to argumentative reality I will analyze all discussions as mixed for two reasons. First, if he wants to impose sanctions that will not be disputed later, the account-holder supports his point of criticism with arguments which justify the negative evaluation of the politician's performance. In so doing, he advances a standpoint against the politician's standpoint and in this way a mixed dispute arises. Second, analyzing disputes as multiple mixed – instead of as single mixed and single non-mixed – does not affect in any way the politician's burden of proof.

Political accountability is practiced in accordance with a number of material and procedural starting points which apply to all stages of the discussion.[14] These starting points constrain the politician's obligations related to his burden of proof as well as the account-holder's rights and obligations in criticizing the politician's standpoints and arguments. For the purpose of this paper, I concentrate on the starting points affecting the politician's account-giving.[15]

In terms of the material starting points, politicians adhere to the democratic and constitutional principles underlying their political activity (e.g. popular control, equilibrium of power, openness, integrity, etc.).[16] The procedural starting points regulating the politician's account-giving can be divided into two categories: (1) starting points which specify the politician's obligations pertaining to his standpoints; and (2) starting points which specify the politician's obligations in countering criticisms advanced against his standpoints and arguments. The following outline is the presentation of these starting points as given in Andone (2014: 10):

I. *Material starting points*

(1) The participants adhere to democratic and constitutional values.

II. *Procedural starting points*

The politician's obligations pertaining to his standpoints

The protagonist of a standpoint pertaining to a proposition p

(2) should provide information to the account-holder requesting so. This means, in principle, that the information is provided timely, that it should be reliable and sufficient for the purpose of the discussion.[17]

(3) should explain his political performance (decisions, actions, policies) by making clear his motives, approach and purposes if requested to do so.[18]

(4) should be able to show that his political performance is adequate when requested to do so.[19]

The politician's obligations in countering criticisms advanced against his standpoints and arguments

The protagonist of a standpoint pertaining to a proposition p

(5) should provide extra information if requested to do so.

(6) should, in principle, maintain his standpoints and arguments criticized by the antagonist.

(7) should face consequences (a) if they are imposed upon him, and (b) if the consequences are not a matter of collective responsibility.

The rules specified under starting points (4) and (6) need further clarification. They relate to the politician's burden of proof in establishing the adequacy of his political performance. Rule (4) imposes on the politician an obligation to defend the adequacy of his performance when requested to do so. Nevertheless, the probative obligation imposed by this rule does not hold in all cases. It can be applied only in case the issue for discussion is not at the same time a *sub judice* matter (Verhey 2009). In the latter case it is perfectly legitimate for the politician to refrain from publicly providing a justification. Certain administrative matters too cannot be explained publicly if they involve secret financial details, just like matters that could have a negative impact on the public. This explains the strategy adopted by Members of the European Commission during the inquiry into the mad-cow disease: They justified concealing certain information concerning the quality of beef meat by mentioning possible risk perception by consumers.

Rule (6) obliges politicians to maintain their standpoints and arguments concerning the adequacy of their political performance during the account-giving. Politicians need to support and maintain a position claiming the adequacy of their actions even in cases when they are not fully convinced of the alleged adequacy. Such is the case when politicians give an account on behalf of their political party or the government. In Great Britain, for example, the politicians' actions are constrained by the collective responsibility which "all ministers in the government (whether members of the Cabinet or not) must take [...] for all government policy" (Tomkins 2008: 247). The consequence of violating this constitutional convention can even be that the politicians are forced to leave office. A sense of such collective obligation applies very often to politicians serving in European institutions. On the one hand, they have to act in line with the integrationist policy driven by the interests of the Community by defending European policies, independently of any government (Wonka 2007: 170). On the other hand, politicians have to pursue policies in line with the regulatory *status quo* in their country, even when they disagree with the national views. This is so because more often than not politicians are appointed at the European level by their national governments with an eye for setting the agenda on which they vote and act (Wonka 2007: 174).[20]

The material and procedural starting points such as those outlined dictate to a great extent the maneuvering with the burden of proof in an argumentative confrontation when dealing with political accountability. These starting points impose institutional constraints on the way in which the dialectical and the rhetorical goal of the confrontation stage are realized in practice. They require that certain argumentative moves be advanced by

the politicians, but this can be exploited to the politician's favour. I will now determine the strategic possibilities for maneuvering with the burden of proof in an argumentative confrontation in the three dialectical routes presented involving a burden of proof outlined in Figure 1 in Section 2.

In following dialectical route I – in which the protagonist advances a standpoint which is afterwards doubted – a politician who wants to have a chance of obtaining a favourable outcome of the discussion needs to act in line with starting points (1), (3), and (4). Starting point (1) obliges the politicians dealing with political accountability to adhere to democratic and constitutional values in order to be perceived as credible and trustworthy. Although acting in line with this starting point is most probably not enough for winning the discussion, doing so creates the background for an advantageous meeting of the burden of proof. Practice shows that politicians who want to convince the public of the appropriateness of some of their measures, for instance, will always underline the legal and democratic character of their decisions (Mulgan 2003).

Starting point (3) imposes an obligation on the politicians to justify the motives, approach, and purpose of their political conduct. Although only one of these aspects is usually explicitly criticized by the account-holder, in practice it is often the case that account is rendered about all three aspects. A politician who wants to maneuver to his own advantage almost always needs to do so in such a way that all 'eyes' are likely to be satisfied. For example, when the President of the European Commission is involved in account-giving with the European Parliament, he addresses the parliamentarians and at the same time the Commissioners and the public for whom decisions are taken (Bovens 2006: 22). Because of the varied audience, the President usually defends the motives, approach, and purpose of his performance in trying to respond to as many doubts as possible of the various account-holders.

Starting point (4) requests politicians to defend and maintain at all times the adequacy of their political decisions, actions, and policies. Although concessions in which wrong-doing is admitted are certainly sometimes made, this needs to be done in a way that does not seem damaging. The Santer Commission, for instance, admitted some lack of clarity regarding their financial operations, but they did not withdraw their position in which they advocated proper political conduct. If they had admitted mismanagement, they would have lost the discussion immediately and would have been sanctioned.

In following dialectical route II – in which a usage declarative is advanced after the politician's standpoint is criticized for being unclear – the

strategic maneuvering with the burden of proof is mainly affected by starting point (2). This starting point imposes the provision of information that is timely, reliable, and sufficient for the purpose of the discussion. The obligation imposed on political actors by this starting point can be strategically exploited in various ways. The European Commission, for instance, exploited it when they were held to account by a European parliamentary committee of inquiry investigating the implementation of the European Directive 92/96/EEC regarding financial undertakings by its competent authorities in the UK. This investigation came after various British financial institutions were accused of misconduct. When the Commission provided information about the implementation of the directive, this information proved unreliable because it concerned the immediate transposition of the directive, whereas it should have covered a longer period in which the implementation of the directive had been evaluated over time. In the same case, the European Commission claimed to have provided all available information, but this proved insufficient because it was based on conclusions drawn by contracted consultants who carried out an incomplete and poor quality study.

Finally, in following dialectical route III – in which the standpoint is maintained after being criticized – starting point (6) plays an important role. It requests politicians to uphold their obligation concerning the burden of proof. Therefore, the strategies to which politicians can resort are similar to those in following dialectical route I involving advancing a standpoint after being criticized. The burden of proof related to maintaining a standpoint is not different than the burden of proof acquired in advancing a standpoint, except that the protagonist underlines that he still believes his standpoint to be acceptable despite the antagonist's repeated criticism.

4. Maneuvering with the burden of proof in practice

Having clarified the procedural view of the burden of proof and the strategic possibilities for confrontational maneuvering with the burden of proof in dealing with political accountability, I will analyze a concrete example in which a politician tries to win the discussion with an interviewer. I have chosen a fragment from a political interview because these practices are a typical instance of political accountability: An interviewer (i.e., account-holder) questions a politician (i.e., accountor) by advancing criticism concerning the legitimacy of his performance (Montgomery 2007, Andone 2013). The politician is expected to explain and justify the acceptability of his political conduct. Although in such practices sanctions are not

imposed by the interviewer, a background is created for facing consequences later from those with the required authority (Mulgan 2003).[21]

The exchange is taken from an interview in July 2012 by a journalist from the English version of *Spiegel Online* with the German European Commissioner Günther Oettinger.[22] The interview instantiates a qualitatively multiple dispute in which the participants hold standpoints on several issues concerning financial aspects of the European Union. In the fragment the central issue concerns Eurobonds, a highly controversial solution for the European sovereign debt crisis:

> *Spiegel*
>
> You yourself said some time ago that euro bonds should be "considered as a final component of the euro rescue."
>
> *Oettinger*
>
> I think that euro bonds are conceivable, provided all other necessary conditions are met. As a member of the European Commission, I support the draft proposal for various types of euro bonds that we published at the end of last year. But first we have to transform the common economic and currency zone into a real political union.
>
> *Spiegel*
>
> To that end, the presidents of the European Council, the European Commission, the Euro Group and the European Central Bank have made extensive proposals. However, the German government promptly criticized the document, saying it was biased.
>
> *Oettinger*
>
> I feel that the proposals are an outstanding basis for engaging in the structural debate about tomorrow's Europe at all levels in the coming weeks. We are talking about a banking union, common economic policy, more democracy and democratic control and, ultimately, the founding of the United States of Europe.

At the time of the interview, discussions in the European Union about Eurobonds were common due to the controversy surrounding them: these bonds allow indebted states to borrow funds at good conditions with the support of richer states. Germany for one is not enthusiastic about this proposal of the European Commission to solve the financial problems of poorer countries.[23]

In his first remark, the interviewer quotes Oettinger's position on Eurobonds when he was a politician in his own country: "Eurobonds are a final component of the euro rescue." Because as a European Commissioner Oettinger is known to support Eurobonds, the interviewer suggests with this

remark that his current position is apparently inconsistent with the skeptical attitude manifested before. Therefore, the journalist's words constitute an indirect challenge imposing two kinds of commitments on Oettinger. The first is a commitment to explain and clarify his standpoint, because by accusing Oettinger of being inconsistent, the journalist intends minimally to obtain a clarification of Oettinger's positions on the issue of Eurobonds and an explanation for his change in view.[24] The procedural starting points (2), (3), and (5) make clear that information and clarification are required when dealing with political accountability, because they make up the background against which the critical testing of standpoints can take place. The second commitment imposed on Oettinger, grounded in procedural starting point (4), involves a burden of proof consisting of the obligation to provide a justification of his support for the introduction of Eurobonds.

In response to the interviewer's challenge, under the restrictions imposed by starting points (4) and (6), Oettinger maintains his support for Eurobonds, because acting differently exposes him to criticism and sanctions from other European Commissioners. At the same time, Oettinger cannot diverge from the contrary German view, because national interests need to be defended. In order to balance his European with his national interests, Oettinger defines the difference of opinion on Eurobonds in a way that makes his burden of proof as clear as possible and also easier to meet later. First, he makes clear that his standpoint is limited, so that no burden of proof can be put on his shoulders that exceeds this scope: *As a member of the European Commission, I support the draft proposal for various types of euro bonds that we published at the end of last year.* With this formulation, the support for Eurobonds is limited to "the draft proposal for various types of euro bonds," and Germany's opposition which the journalist mentioned earlier in the interview is left aside. Second, Oettinger conditions his support in the following way: *But first we have to transform the common economic and currency zone into a real political union.* The initial assertive *I think that euro bonds are conceivable* involving a strong commitment to support Eurobonds is weakened by *provided all other necessary conditions are met.* By implying that his position should not be discussed before all other conditions are satisfied, such as *transforming the common economic and currency zone into a real political union*, Oettinger suggests that he only has a burden of proof at a later stage of the discussion.

In reply, the journalist explains that efforts have already been made to create "a real political union," because *to that end, the presidents of the European Council, the European Commission, the Euro Group and the European Central Bank have made extensive proposals.* He also reminds

Oettinger that Germany had opposed all these proposals. In order to avoid taking on a burden of proof for a position for which he does not have strong arguments, Oettinger counters the journalist's remark by qualifying all efforts for a political union as a 'basis' for further actions. His individual responsibility involving an obligation to support Eurobonds is turned into a collective obligation (*we are talking here*), which obviously he cannot fulfill alone.

In his maneuvering, Oettinger follows the three dialectical routes involving a burden of proof in the confrontation stage: (I) he advances a standpoint supporting Eurobonds, which is afterwards criticized by means of an accusation of inconsistency; (II) he clarifies his position after a request for clarification is advanced implicitly in the accusation; and (III) he maintains his support for Eurobonds. In following dialectical route I, Oettinger shows a strong commitment to defend his standpoint after being challenged (*I think that; I support*), and in taking dialectical route II he makes clear that the scope of his standpoint is restricted (*I support the draft proposal*). In following dialectical route III, conditions are imposed and a collective sense of responsibility is underlined (*first we have to; we are talking here*). By maneuvering in this way, Oettinger strategically moves from a strong burden of proof to a weakened commitment to defend his standpoint and finally to showing that he has no burden of proof yet because other conditions need to be fulfilled first. Oettinger exploits the various constraints imposed on him by the starting points regulating practices of political accountability so that his chances of being perceived as credible and trustworthy, and ultimately win the discussion in which he is involved, are considerably increased.

5. Conclusion

This paper explains the possibilities for confrontational maneuvering with the burden of proof in dealing with political accountability. The pragma-dialectical procedural view of the burden of proof has served to understand the role it plays in defining the difference of opinion, and the possibilities for doing so favorably. The conventions characterizing practices of political accountability have been shown to constrain the maneuvering at issue. Finally, the analysis of a fragment from a political interview has illustrated how the maneuvering takes place in practice.

Because the burden of proof plays an integral part in confrontational maneuvering, identifying its role at this stage is a precondition for understanding practices of political accountability. With a view to determining

the role of the burden of proof in maneuvering in other discussion stages, the insights provided here need to be taken as a point of departure. The institutional constraints on the maneuvering can serve to specify more concretely which limitations are imposed in each case in which political accountability is at issue. The analysis of the politicians' maneuvering with the burden of proof can be extended by providing a sustained assessment of its quality. To this purpose, precise criteria need to be developed that indicate when certain norms of reasonableness have been violated.

NOTES

[1] I would like to thank Frans van Eemeren for his detailed and careful comments on an earlier version of this paper. I am moreover grateful to two anonymous reviewers for their useful remarks.

[2] Based on van Eemeren and Houtlosser (2002), I explain elsewhere (Andone 2014) in detail the methodological role of the burden of proof in every discussion stage.

[3] Tseronis (2009: 81–104) explains this view of the burden of proof by comparing the pragma-dialectical view with other approaches to argumentation.

[4] Rescher (1977, 2006) shows that the concept of burden of proof is fundamental to reaching the goal of a process of controversy. He makes a distinction between 'the probative burden of an initiating assertion' (Rescher 1977: 27, later referred to as 'the probative burden of an original assertion' (Rescher 2006: 15)) and 'the evidential burden of further reply in the face of contrary considerations' (Rescher 1977: 27, later called 'the dialectical burden' (Rescher 2006: 16)). In Rescher's view, the second type of burden of proof takes the argument forward in the light of evidence and counterevidence.

[5] Unlike authors such as Rescher (2006) and Kauffeld (2007), who believe that a burden of proof reflects an obligation that a speaker incurs as a consequence of making an assertion, pragma-dialecticians favor a view according to which simply putting forward an assertive is not enough. In their account, in line with the Searlean view (1969), only assertives which are met with doubt or criticism – and thus become standpoints – involve probative obligations.

[6] Following the principle of externalization – according to which judgments are to be made on the basis of the externalized commitments – only those objections need to be dealt with by the protagonist that are advanced in the discourse, whether explicitly, implicitly or indirectly (van Eemeren & Houtlosser 2002: 18).

[7] A sequential representation of the argumentative moves indicating the dialectical routes that can be followed at a particular stage of a critical discussion takes the form of a dialectical profile (van Eemeren, Houtlosser & Snoeck Henkemans 2008). For an outline of the dialectical profiles of all discussion stages, see van Eemeren, Houtlosser & Snoeck Henkemans (2007).

[8] In Andone (2014) I discuss in detail the characteristics of practices of political accountability. This section is based on the conclusions drawn in this earlier article.

[9] The institutional point is understood as defined by van Eemeren (2010: 140).

[10] Sometimes the subject of discussion is the politicians' lack of action (Mulgan 2003).

[11] Curtin and Nollkaemper point out that accountability is traditionally understood as "a retrospective process that involves giving an account of prior conduct. However, this

view of accountability is being increasingly challenged by approaches that argue for a more participative and ongoing process of accountability" (2005: 8). More attention is currently paid to connecting past and future conduct, especially in cases in which the purpose of holding to account is to prevent certain things from happening. Curtin (2007: 525) refers also to *dumque* accountability, which involves holding an actor to account during the process of taking a decision or action. There are certain institutional contexts in which only one such form of accountability is allowed. In some parliamentary committees of inquiry in the European Union, for example, politicians only have retrospective probative obligations, because they have to explain and justify what they have already done (Shackleton 1998).

[12] The account-holder advances his own standpoint especially in cases of political accountability taking place publicly. Usually, he then acts on behalf of the public – a journalist for instance is supposed to always ask questions that the public would like answered (Andone 2013) – and takes a more critical attitude in order to ensure that the public's concerns are dealt with. It should be clear that practices of political accountability are in most cases public, but they may remain 'behind closed doors,' for example when courts or auditors act as account-holders (Mulgan 2003, Bovens 2006).

[13] For a detailed account of this and various other types of disputes, see van Eemeren, Houtlosser and Snoeck Henkemans (2007: 53–62).

[14] For the distinction between material and procedural starting points, see van Eemeren and Houtlosser (2002) and van Eemeren (2010).

[15] See Andone (2014: 10) for a detailed overview of the account-holder's rights and obligations in criticizing politicians.

[16] For a more detailed discussion of the importance of democratic and constitutional values and how they can ensure accountability, see Bovens (2006: 27–29).

[17] Starting point (2) is derived from the characteristic of political accountability which concerns 'the proper provision of information' (Mulgan 2003, Bovens 2006). Such information can be provided before the politician is held to account, for example by sending information in advance in the form of reports.

[18] Starting point (3) is formulated in line with the feature of political accountability which imposes the provision and demand of explanations in 'the information phase' before 'the debate phase' can start (Bovens 2006).

[19] Starting points (4) and (6) are based on the view that a politician who has carried out an action has done so because he believes that his action is adequate. He can be held committed to this belief because he has allegedly acted in line with the democratic and constitutional values. By arguing that his political performance is adequate, the politician should be able to show also that the consequences of a particular action are adequate.

[20] Oliver (2009: 19–20) discusses the responsibility of a political body not to reveal disagreements among its members, which means that decisions made by that body are supposed to have been unanimously supported. Van Eemeren and Garssen (2011) show by means of 'the European predicament' how European Parliamentarians argue in trying to reconcile the possible tension between supporting national interests and European interests at the same time.

[21] A famous case in point is the 1997 interview on the BBC *Newsnight* program in which Michael Howard, former Home Secretary, denied any involvement in the decision to fire a prison official made after someone escaped from prison. After repetitive questioning, Howard had to admit wrongdoing and resigned the day after the interview. Montgomery explains that "not only may the interviewee be held to account within the interview for actions and words prior to it; but it is also the case that the interview may generate material that can be used subsequently in its aftermath for accountability purposes" (2007: 155).

[22] In Andone (2014) I analyzed this fragment to illustrate how a burden of proof is taken on in a political interview. In this article, I concentrate on the strategic maneuvering involved in this case.

[23] The information about the background of the discussion on Eurobonds is provided in the part of the interview preceding this fragment.

[24] In Andone (2013, Chapter 2), I show that the minimal perlocutionary effects of accusations of inconsistency are to obtain an understanding and clarification of the views of the person accused.

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CONCEPTIONS OF SPEECH ACTS IN THE THEORY AND PRACTICE OF ARGUMENTATION: A CASE STUDY OF A DEBATE ABOUT *ADVOCATING*

Abstract. Far from being of interest only to argumentation theorists, conceptions of speech acts play an important role in practitioners' self-reflection on their own activities. After a brief review of work by Houtlosser, Jackson and Kauffeld on the ways that speech acts provide normative frameworks for argumentative interactions, this essay examines an ongoing debate among scientists in natural resource fields as to the appropriateness of the speech act of *advocating* in policy settings. Scientists' reflections on advocacy align well with current scholarship, and the scholarship in turn can provide a deeper understanding of how to manage the communication challenges scientists face.

Keywords: argumentation; metadiscourse; speech acts; science-policy interface; advocacy; advice

Speech act theory may appear to be one of the most abstruse approaches to conceptualizing argumentative activities. The theory has a deep base in the philosophies of J.L. Austin (1962), Paul Grice (1957) and John Searle (Searle, 1969)—a literature characterized by dense lists of recursive intentions and felicity conditions. In this paper, I hope to show that far from being an esoteric domain accessible only to argumentation theorists, conceptions of speech acts are conspicuous in ordinary argumentative practice. Arguers in practice understand, explain and defend what they are doing by reference to speech acts. And this convergence between theory and practice opens space for a conversation that both sides may find fruitful.

To explore the convergence, I develop in this essay a case study of the conceptions that emerged in the course of a debate among scientists about how they should participate in policy-making. I show that the scientists focused on the speech activity of *advocating* in order to identify the responsibilities they undertake when giving reasons in controversy-laden situations. Speech act theories developed by argumentation scholars, and in particular Fred Kauffeld, do not serve to replace these practitioners' sense

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of what they are doing. Rather, academic speech act theory can help clarify scientists' debates over appropriate participation, and can also offer them additional practical options. In turn, theorists have much to learn from conceptions of speech acts that have proved sufficiently robust to survive the challenges of practice.

As an investigation of practitioners' own theories of argumentation, this paper adds to a growing literature that attempts to bridge the "*abyss*" between theorists' and practitioners' conceptions (Plantin, 2002) by recognizing instead a theory/practice *continuum* (Craig, 1996). Scholars on both sides of the Atlantic have long noted that arguers in practice deploy a sophisticated metadiscursive vocabulary as they try to regulate their own and each other's conduct (Craig, 1999; Plantin, 1996). Indeed, "argument" is itself a technical term that practitioners use to organize and explain what they are doing (Craig, 2011; Craig & Tracy, 2010; Doury, 2008; Goodwin, 2007b; Plantin, 1996). Such metadiscursive commentaries on ordinary practice may become particularly prominent when the practice is under dispute (Philipsen, 1992). This case study of a debate about appropriate practice establishes that speech acts provide an important interpretive resource for arguers. Argumentation theorists should therefore continue to take speech act theory seriously, if they want to claim "conventional validity" (Eemeren, Grootendorst, Jackson, & Jacobs, 1993), i.e. fit between their theories and the conceptions of argumentation at play in ordinary argumentative practice.

In the following pages, I begin with a survey of approaches to speech acts developed within the interdisciplinary argumentation theory community. I then turn to an examination of how U.S. natural resource scientists invoke speech acts in the course of a debate about their appropriate participation in public life. Finally, I close by bringing theory and practice into conversation.

1. Speech acts in argumentation theory: An overview

Central to several contemporary approaches to argumentation is the idea that an arguer's initiating speech act creates an obligation to produce arguments with definite characteristics—e.g., arguments *for* a certain proposition, *of* a certain amount, *with* certain qualities. An arguer's initiating speech act, in other words, helps regulate the interaction between people who disagree (an argument-2, in O'Keefe's [1982] terms) by establishing a local normative framework that requires the making of argument-1s that are good in specified ways. Thus in contrast to approaches which derive norms

of argumentation from types of interactions or *dialogues* (e.g., Walton, 1998) or from a general *practice* (Johnson, 2000), the speech act approach posits that it is the *arguers' own activity* which provides part of the framework for a productive exchange of arguments (Goodwin, 2007a).

This core idea has long been embedded in the theory associated with the U.S. tradition of forensic debate. Ehninger and Brockriede's seminal textbook *Decision by Debate* (1963) uses an analogy of one person trying to seize a piece of ground—a position—currently held by another. Physically pushing the person off the ground would both have force and run a risk, namely a risk of reprisal. Similarly, *asserting a claim* to the position "is an agitating force; it has the effect of stirring up and throwing into turmoil what had previously been a static and ordered situation." At the same time, "although less direct physical danger may be involved in the verbal declaration than in the shove," the assertor "still takes a risk when he asserts that [the position] by rights belongs to him, for, unless his claim is to be idle talk, he must be able to prove the necessity, expediency, or justice" of his claim, with good arguments (p. 82). An arguer who asserts a claim thus undertakes the obligation to defend that claim with good arguments.

In a series of essays, Peter Houtlosser works within the pragma-dialectical framework put forward by van Eemeren and Grootendorst (1984), providing a considerably more sophisticated account of the initiating speech act as it occurs not only "in formalised, regimented" interactions such as a forensic debate, but also "in informal, non-regimented discussions" (Houtlosser, 1998, p. 397). In Houtlosser's Searle-inspired analysis, the speech act *advancing a standpoint* cannot be identified simply with the performance of an assertive (Houtlosser, 2002); Houtlosser would find the hoary maxim "he who asserts must prove" to be fundamentally misguided. *Advancing a standpoint*, first of all, functions at a "higher textual level" (Houtlosser, 1994); it establishes the point around which an entire interaction will revolve. The felicity conditions require that the act be done in a specific interactional context, namely one in which the speaker believes that the listener does not accept the proposition being put forward (Houtlosser, 1998). And the essential condition establishes that that *advancing a standpoint* "counts as taking responsibility for a positive position in respect of [a proposition], i.e. as assuming an obligation to defend a positive position in respect of [that proposition] if requested to do so" (Houtlosser, 1998, p. 390). The speech act *advancing a standpoint* thus initiates an argumentative interaction in which the speaker ought to, intends to, and believes he can, justify his position.

Sally Jackson has provided additional elaborations. In work that has also contributed to the pragma-dialectical program (Eemeren, Grootendorst, Jackson, & Jacobs, 1993), Jackson has shown how many different speech acts can create frameworks for argumentative interactions. Whereas in the speech act *advancing a standpoint* (and in assertive speech acts generally) the focus is on the propositional content asserted, Jackson points out that in fact, a speaker is also committed to defend the legitimacy of *all* the felicity conditions of his act. As she puts it:

> the single most useful contribution of speech acts theory is in explaining how certain things come to be at issue in an argument. In the theory of speech acts, the performance of any act is seen as committing the speaker, in principle, to the set of beliefs and intentions embodied in the felicity conditions. Thus, the performance of a request, promise, or other act carries with it a package of commitments, expressible as propositions, and representing the beliefs associated with felicitous acts of that type. The speaker does not advance this series of subordinate propositions on their own merits, but incurs responsibility for them by virtue of performing an act for which they are rational or conventional prerequisites. Conversational argument is full of bizarre little interludes whose bearing on what might be called the issue can only be understood as depending on the preconditions of some superordinate speech act (Jackson, 1985, pp. 128–129).

In complaining that a co-worker keeps showing up late, for example, a speaker not only takes responsibility for the truth of his statement about his colleague; he also takes responsibility for the bearing of the lateness on his own concerns, for the sincerity of his distress at the conduct, and for the legitimacy of his right to demand attention to his complaint from his addressee. Although a speaker does not expressly advance such "virtual standpoints," they can potentially be called out by the addressee; together, they constitute the "disagreement space" of propositions that (under the right circumstances) a speaker can be obligated to defend (Jackson, 1992).

Fred Kauffeld provides a final set of nuances to our understanding of how speech acts serve to initiate and frame argumentative interactions. Like Jackson, Kauffeld recognizes that many speech acts are relevant to argumentation theory. But working in a Gricean tradition (Kauffeld, 2001, 2009), Kauffeld focuses less on the diversity of the *propositions* to which speakers are committed and more on the diversity of the *commitments* themselves. In the basic act of *saying something seriously*, a speaker makes evident her intention to induce her addressee to believe her; in doing so, she openly undertakes a commitment to veracity, a commitment that in turn justifies her addressee's trust (Moran, 2006; Stampe, 1967). To meet the pragmatic chal-

lenges of specific situations, a speaker can expressly *enhance* or *restrict* this basic commitment to the truth of what she is saying, and thus also enhance or restrict her commitment to justify it with good arguments. Patterns of such commitments that meet recurrent situational demands are given names and recognized as distinct speech acts. For example, in *proposing* a speaker wants to secure tentative consideration from an addressee who likely has better things to do than lend her an ear. To earn her addressee's attention, the speaker undertakes an obligation to answer all doubts and objections to the proposal; in other words, she undertakes a substantial burden of proof. Her addressee can then reason that the speaker would not do this unless she was confident that her proposal could withstand critical scrutiny, and thus further that his attention is unlikely to be wasted (Kauffeld, 1998, 1999, 2002). On the opposite extreme, in order to allow a free flow of potentially important social information, in *gossiping* a speaker expressly waives a commitment to veracity and even sincerity (Kauffeld & Fields, 2003); gossipers thus undertake no obligation to make good arguments. Nor is it just the speaker who finds herself subject to obligations to make arguments of a certain quality; in some circumstances, the speaker's conspicuous fulfillment of her argumentative obligations exercises a legitimate force on her addressee, imposing on him in turn an obligation to respond appropriately (Kauffeld, 1995, 2009). Speech acts in Kauffeld's view are thus sophisticated tools through which arguers craft a local "normative terrain" (Goodwin, 2007a) binding them both throughout their entire argumentative interaction.

Houtlosser, Jackson and Kauffeld each demonstrate how an initiating speech act can provide part of the normative framework necessary to coordinate a productive argumentative interaction between people who disagree, perhaps deeply. The speech act serves to pick out the point being argued about and to establish the nature and extent of arguers' specific responsibilities to make good arguments. Especially in the approaches of Jackson and Kauffeld, many different speech acts can be used to accomplish these tasks. In any given case, arguers thus have a choice of the speech act to use to initiate their interaction. I turn now to a case study of how one community of argument practitioners is reasoning about that choice.

2. Speech acts in argumentative practice: the debate over advocating by scientists

There is a recurring problem in civic life about how experts can productively contribute their knowledge to debates over public policy. Dealing with

this general problem has been a special concern for U.S. scientists working in natural resource-related fields such as ecology, conservation biology, invasion biology, marine biology, wildlife management and forestry. These fields produce knowledge that is actively sought out by the resource managers and regulators (Mills & Clark, 2001; Steel, List, Lach, & Shindler, 2004). Their love of the natural world also propels these scientists into policy arenas, especially when they perceive the biodiversity and ecosystems they cherish under imminent threat (Barry & Oelschlaeger, 1996; Myers, 1999). So it is not surprising that scientists in these fields have long been struggling with how best to participate in public life (Nelkin, 1977), and that the issue has been subjected to repeated discussions in dedicated fora at the fields' conferences and in the fields' journals (e.g., *Conservation Biology* 10.3, 1996; 21.1, 2007; *Human Dimensions of Wildlife* 6.1, 2001; *BioScience* 51.6, 2001).

A variety of topics have been raised in the course of this debate. There are discussions about whether science is a value-laden or value-free activity (Barry & Oelschlaeger, 1996; Tracy & Brussard, 1996) and about whether participating in policy-making hinders scientists' careers (Foote, Krogman, & Spence, 2009; Nelson & Vucetich, 2009). Of interest for us here is a question this community of scientists persistently asks about the kinds of speech acts appropriate for scientists in policy controversy, and in particular, whether scientists should *advocate*.

What do these scientists mean when they talk of "advocacy"? At times, scientists use the term very broadly to refer to any sort of intervention in the policy process (e.g., Brussard & Tull, 2007). As one scientist commented, however, this usage is likely the result of excess wariness over possible politicization of their work (Blockstein, 2002). More commonly, the focus of the discussion of *advocacy* is on a particular speech activity: communication intended to increase adherence to some specific policy proposal. Explicit definitions of the speech activity of *advocating* by scientists include:

> Policy advocacy: active, covert, or inadvertent support of a particular policy or class of policies (Lackey, 2007, p. 13).

> Simply defined, advocacy means to write or speak in support of something (Gill, 2001, p. 22).

> Advocacy is, first, comparing the most plausible of a collection of possible propositions, explanations, or descriptions of an issue, and then lending one's active support to the ideas, policies, or proposals that are interpreted by the researcher to offer the most compelling match between the existing conditions and policy to address or improve it (Foote et al., 2009, p. 581).

Examples of advocacy mentioned in the debate include calling for passage of legislation protecting endangered species (Nelson & Vucetich, 2009, p. 1091), speaking out for action to stop climate change (Lovejoy, 1989), and intervening in governmental decisions about clean water standards (Karr, 2006). Such advocacy is not carried out exclusively by making arguments; scientists understand that the term also embraces activities like "camping out in the canopies of redwoods or lying down in front of bulldozers" (Gill, 2001, p. 19). But as one scientist noted, "the word advocacy...has other important connotations: of responsibility; of support; and of bearing witness to the evidence that, as a scientist, one has gathered and weighed" (Karr, 2006, p. 288). Throughout the debate, scientists recognize that advocates paradigmatically proceed by making arguments. For example:

> Advocacy occurs when, during the process of communicating research results, ecologists use scientific facts to shape an argument relevant to a particular policy goal (Morrison & Ayres, 2010, p. 50)
>
> Advocacy involves advancing the most convincingly reasoned suggestions for change, informed by defensible, rigorous evidence (Foote et al., 2009, p. 584)

Scientists thus perceive the speech activity *advocating* as providing an overall framework within which they offer arguments in policy controversies. Is that speech activity appropriate? I now review some of the arguments scientists give on both sides of this question, as a way of elucidating this community's implicit conception of the relationship of speech acts to argumentative responsibilities.

Defenders of the legitimacy of advocacy point out that scientists' expertise positions them to be outstanding advocates. "Science is central to the decisions" contemporary policy-makers must make, one comments,

> and scientists are uniquely qualified to apply that science to the decision-making process. Scientists do more than collect data. Their training, and the day to-day practice of their profession, centers on gathering evidence for and against hypotheses, weighing that evidence, and drawing conclusions based on the evidence. Their analytical expertise, coupled with detailed knowledge in particular fields of study, equips them to understand and explain scientific conclusions and describe how that information is relevant to a specific policy context or situation.... The training that scientists receive—to question the assumptions and conventions of science—also equips them to challenge the assumptions of public policy, the law, and implementation of the law (Karr, 2006, p. 287).

In many cases, scientists are thus both "the best arbiters of whether a premise is objective and true," and also, "given their high level of skill and

training in rational thought,... better prepared than many citizens to construct and assess arguments representing policy" (Nelson & Vucetich, 2009, p. 1085). For some, scientists' expertise not only equips them to be better at making arguments, it actually obligates them to do so. "Indeed it is our *responsibility*," one scientist insists, "as those who understand best what is happening and what alternatives exist, to sound the tocsin about environmental deterioration and conservation problems in all their variety" (Lovejoy, 1989, p. 330). Scientists share the general obligation of all citizens to advocate for what they believe within the deliberative process, and even more, since "scientists are distinctive among citizens because they possess a distinctively valuable understanding of objective analysis and descriptive facts about the world" they have "a strong obligation" to do so (Nelson & Vucetich, 2009, p. 1099). And if they don't live up to this obligation, others with less knowledge and understanding—special-interest groups, lawyers, religious leaders, legislators, and judges" (Foote et al., 2009, p. 582)—will step in to fill the gap, to the detriment of the policy process. As an article by a particularly trenchant pair of scientists concluded,

> ultimately it is a perversion of democracy to muffle the voice of the most knowledgeable among us, and consequently amplify the voice of those with the greatest ignorance. Silencing scientists who wish to be just and transparent advocates promotes mob rule or despotic rule by special interests (Nelson & Vucetich, 2009, p. 1099).

On the other side, opponents argue that advocacy by scientists will undermine the special respect that the public grants them. Some point out that advocacy will have an unfortunate impact on scientists' objectivity, with confirmation bias distorting scientists' judgment of what to study, how to study it, and how to interpret the results (Nielsen, 2001; Wiens, 1997). Others point out that even if the scientist remains psychologically objective, he will not *appear* objective to public audiences because the norms that structure the activity of advocacy and the practice of science are incompatible. As one scientist explains, science and advocacy are orthogonal "dimensions" which lead in different directions:

> Many conservationists are proudly zealous about being environmental advocates, and they see science as an excuse by some to be apathetic. Actually, science requires an open-minded approach that can accept new models of what is known, supported by new data and analyses. Thus, it is difficult for a scientist zealously to advocate singular solutions to environmental problems except under the simplest of circumstances. It also follows that it would be difficult unswervingly to advocate a particular solution to a complex environmental

> problem without depending upon a certain amount of dogma as a source of knowledge. Thus, in the extreme, the knowledge and advocacy dimensions interact such that objective scientists cannot ordinarily be zealous activists, and zealous activists cannot be constrained by objective science as a sole source of knowledge (Tracy & Brussard, 1996, p. 918)

Another scientist makes a similar point, differentiating between the commitments undertaken by advocates and scientists:

> [Advocates] have made a commitment to a particular idea, philosophy, perspective, value, person, place, and so forth. Having made such a commitment, they work to convince others to accept their viewpoint and make the same commitment. Scientists and professionals, in contrast, write or speak in support of nothing. The only commitment scientists and professionals have made is to their current understanding of the truth (Nielsen, 2001, pp. 40–41).

Scientist-advocates will thus likely display the same passion, selective use of evidence, and character attacks that political advocates ordinarily do (Aron, Burke, & Freeman, 2002). But as they do so, they will be conspicuously abandoning the normative standards that gave them authority in the first place. Thus the "environmental advocate loses power to persuade because the advocate is seen as not being open-minded and objective about solutions to environmental problems" (Tracy & Brussard, 1996, p. 918). One scientist termed this a "paradox," explaining that

> when professionals decide to use the power of their expert knowledge to control policy outcomes, the public image of professionalism subtly metamorphoses. It transforms the professional's role from reliable expert into competing interest, and credibility erodes. The erosion of credibility reduces political power and a paradoxical futile cycle ensues. The paradox lies in the fact that the political power of professionals can be retained only if it is not exercised (Gill, 2001, pp. 22–23).

In this view, scientists can advocate; but if they do so, they will stop being perceived as scientists.

The concern that advocacy by scientists erodes scientific credibility is a significant one, mentioned by practically every scientist who contributed to the debate. Scientist-advocates appear to face what climate scientist Stephen Schneider famously termed the "double ethical bind" (Schneider, 1988) that plagues science communication generally. Advocacy and the practice of science are both normatively structured. But the norms of the two activities conflict. What it takes to be good at one of the activities is incompatible with what it takes to be good at the other, so scientists

are constantly confronting choices like whether to be up front about uncertainties (good science, poor, overly-complex public communication) or to simplify uncertainties (good public communication, poor science). This dilemma, like perhaps all the dilemmas that underpin communication practices, cannot be resolved; but it can be managed (Craig & Tracy, 1995). The central issue in the debate thus becomes not *whether* scientists should advocate in either the general or specific sense, but *how* they should do so:

> How should we as citizen-scientists participate in the arena of public policy, as individuals and as a professional scientific society? How do we best meet the simultaneous demands of science and citizenship? How can scientists promote the timely and responsible use of scientific information and concepts in the policy-making process (Meine & Meffe, 1996, p. 916)?

Two main strategies for managing this dilemma are evident within the debate. Proponents of advocacy aim to integrate the two sets of norms into a new approach to communication; opponents of advocacy aim to identify other speech acts whose norms are less in tension with the norms of science.

Consider the first strategy: the proposal that advocacy and science should be integrated. In this approach, the central question that needs to be addressed is "what general qualities should characterize [scientists'] advocacy?" (Nelson & Vucetich, 2009, p. 1091). Proponents argue that scientist-advocates should take on additional responsibilities in order to preserve their authority while also defending their position. They variously call such advocacy-plus "responsible advocacy" (Foote et al., 2009), "honest advocacy" (Noss, 2007), or "justified, transparent advocacy" (Nelson & Vucetich, 2009); its special obligations are said to include:

1. Scientist-advocates should change their public positions when the evidence demands it (Meyer, Frumhoff, Hamburg, & de la Rosa, 2010; Nelson & Vucetich, 2009; Noss, 2007).
2. Scientist-advocates should not (like "sophists"—Nelson & Vucetich, 2009) use the most effective arguments for their policy positions; they should use only the best available, peer-reviewed, data-supported science to make their cases (Blockstein, 2002; Foote et al., 2009; Meyer et al., 2010; Nelson & Vucetich, 2009).
3. Scientist-advocates should be fully open about uncertainties, margins of error, caveats and limitations (Blockstein, 2002; Meyer et al., 2010).
4. Scientist-advocates should bring forward counter-considerations that weigh against the policies for which they advocate (Foote et al., 2009; Lach, List, Steel, & Shindler, 2003; Nielsen, 2001)

These and other supererogatory commitments bring the normative structure of advocacy closer to that of science, reducing or eliminating the conflict that threatened to undermine the credibility of the scientist-advocate.

By contrast, critics of advocacy by scientists frame the central question of how scientists should participate in policy controversies as one of choice between multiple options:

> There are many ways to express and act upon values, and the most effective are not necessarily the most visible or audible. Values express themselves differently among different people, and our chosen modes of expression necessarily change from time to time and according to circumstances. ...Where one can best devote one's energies, what points one choses to advocate, and when one should shift strategies are matters of personal conscience, insight, and choice (Meine & Meffe, 1996, p. 917).

In this approach, scientific credibility can be reconciled with full participation in the policy process by directing attention to the many ways scientists can contribute, over and above advocacy. In a recent editorial, two leading scientists urge going beyond the oversimplified debate about advocacy:

> We suggest it is time to shift the question from whether conservation professionals should be advocates to how the expertise of scientists and professional societies can be given greater weight in ongoing discussions regarding policies and management actions that affect biological diversity.... The notion that a scientist is either an advocate or does nothing at all to shape policy is a false dichotomy that has muddied the debate about science and advocacy. We agree that doing nothing to help shape environmental policy is irresponsible. We do not believe, however, that our choices are either advocate or do nothing (Scott & Rachlow, 2011, pp. 2–3)

One of the earliest lists of options included the speech activity of *advocating* along with four alternative acts/activities:

- *reporting* scientific results that others use in making decisions on natural resource management issues,
- reporting and then *interpreting* scientific results for others who are involved in natural resource management decisions,
- working closely with managers and others in *integrating* scientific results into management decisions
- actively *advocating* for specific and preferred natural resource management decisions, and
- *making decisions* about natural resource management and policy (Lach et al., 2003, p. 174).

Related lists of potential speech acts by scientists include "Data, Interpretation, Advice, Counsel, Advocacy" (Blockstein, 2002, p. 92); *reporting, answering questions, evaluating options, advocating* (Scott, Rachlow, & Lackey, 2008p. 867, borrowing from Pielke, 2007); and *educating, promoting,* and *advocating* (Minnis & Stout McPeake, 2001).

Although the debate among scientists over how to contribute to policy-making continues, my survey of it cannot. I have discussed the way that scientists frame the debate as one over the appropriateness of a particular speech activity—*advocating.* Proponents of advocacy by scientists argue that advocacy is permissible—even obligatory—and that in a modified form, is compatible with the norms of good science. Opponents of advocacy by scientists argue that the norms of advocacy and science are incompatible, and that it is best to seek alternative speech acts for public participation. It is now time to step back and bring theorists and practitioners into conversation, asking how the conceptions of speech acts articulated by scientists in the debate, and by argumentation scholars in their theories, align.

3. Aligning conceptions of speech acts in theory and practice

Many issues turned up in scientists' debate over appropriate means of public participation: the nature of scientific practice (e.g., objective v. subjective), the cognitive functions relevant to public policy (e.g., analyzing, integrating), and possible institutional arrangements (e.g., scientist/manager collaborations, advisory committees). Nevertheless, it should be seen as remarkable that a major focus throughout the debate has been a speech activity, *advocating.* In close alignment with the argumentation theory reviewed in the first section of the paper, scientists take this speech act as providing an overarching framework for the complex, ongoing interactions they seek to have with members of the public and policy-makers. Furthermore, scientists like theorists recognize that the speech act has an intimate connection with argumentation; one of the key tasks of the scientist-advocate is precisely to make good arguments. Based on the evidence of this case, we can therefore conclude that speech act approaches have a strong "conventional validity" as a theory of argumentation.

Among the three specific approaches discussed in the first section of this paper, it is that of Fred Kauffeld which seems to resonate best with scientists' own way of conceptualizing *advocating.* In their discussions of the speech act, scientists do not focus on *what* the advocate is advocating—on the specific propositions that the advocate is committed to defend, as

would be predicted by both Houtlosser and Jackson. Instead, scientists are attending closely to the *extent* of the advocate's commitment, and in particular whether as scientists they have enhanced commitments, over and above those of ordinary advocates. As we saw, in the debate scientists are concerned with questions like: Ought the scientist-advocate report uncertainties, caveats, limitations? Ought she reveal strong arguments against her view? Ought she select arguments on the basis of their scientific strength, or on the basis of their persuasiveness with the given audience? And ought she give up her position when the science tends against her? In debating these points, scientists, like Kauffeld, take the speech activity of *advocating* to be a particular package of commitments, and in particular commitments to make arguments of a certain quality.

Scientists' understanding of the specific obligations undertaken by the advocate also aligns well with recent work that follows Kauffeld. In a paper reviewing the codes of conduct developed by professional advocates in law and public relations (Goodwin, 2013), I have advanced a preliminary account of the obligations that constitute *advocating*. In agreement with scientists' basic definitions of the speech activity, I argued that an advocate's primary commitment is to the zealous support of a particular proposition, person, or cause. At the same time, advocates also undertake an obligation to maintain the integrity of the communication system within which they communicate. For example, advocates must avoid known falsehoods and be able to defend what they do put forward with at least minimally plausible arguments; otherwise their statements would be completely untrustworthy. Although scientists do not discuss the obligations of *advocating* in this level of detail, their understanding of the conflicts between *advocating* and the practice of science reveal just these areas of concern. Whereas the practice of science requires telling "the whole truth" about uncertainties and counter-considerations, scientists rightly recognize that advocates do not have this obligation, and indeed will work hard to suppress such information if it hurts their overall cases.

The account of *advocating* that I have proposed also tends to reinforce the legitimacy of scientists' concerns about the impact of advocacy on scientific credibility. On the one hand, an advocate is obligated to show zeal *for his cause*, investing much more effort and passion than speakers are ordinarily obliged to use in defending their statements. From this perspective, advocacy for wilderness preservation or biodiversity can be seen as noble and inspiring. But it is also the case that an advocate owes a much weaker obligation *to his audience* than is ordinarily the case. So from the perspective of the audience, advocates are viewed with legitimate suspicion, and

their statements subjected to careful scrutiny—if they are listened to at all. Scientists are thus rightly cautious about joining the ranks of lawyers, publicity agents, lobbyists and other advocacy professionals.

Is it possible to integrate the advocate's zealous defense of a cause with the scientist's heightened commitments to truth? Can there be an advocacy–plus—a *responsible* advocacy, as some scientists argued? Within a Gricean approach to speech acts, there is in principle no problem with combining various commitments. A speech act is in part a bundle of commitments; there are many more ways of going about acting with language than are picked out and given names, and language users are constantly creating new options. So there is no reason that (for example) one could not undertake both to advocate and to do so using only sentences found in the first edition of *The Sorrows of Young Werther*. The question is not whether such a novel bundling of commitments is *possible*, but rather whether it is *pragmatically plausible*: whether this bundle would give the addressee of the act a reason to respond as expected. Unfortunately, scientists proposing to undertake the extra obligations of a responsible advocate will likely encounter a routine pragmatic difficulty. As above, addressees rightfully are suspicious of what an advocate says, since the advocate owes *them* little more than the avoidance of outright lying. This attitude of distrust will extend to any metadiscursive comments that the advocate tries to provide. This means that although a scientist-advocate may be sincerely committed to telling the "whole truth," he will likely find it hard to persuade his addressees that this is the case. Absent special reasons for trust, they will dismiss his statements about his extra commitments as just more advocacy—rather like they would dismiss a used car salesman's promise of a special deal, just for them.

From the point of view of speech act theory, a more pragmatically plausible way out of the science/advocacy normative dilemma can be found by taking the other route suggested in the scientists' debate: by looking for other ways for scientists to participate in policy controversies. There are many speech acts and activities through which scientific knowledge might be communicated, and many of them involve commitments that are more compatible with the norms of science. Scientists in the debate occasionally mention *educating*, for example; a cluster of speech acts pragmatically designed to convey knowledge. *Reporting* is another commonly used option; in Kauffeld's recent account, reports are "designed to facilitate their critical appropriation by self-reliant lay [i.e., non-expert] addressees" (2012, p. 238). Perhaps most promising of the alternatives is the speech act *advising*. In fact, the term is often used in the debate interchangeably with "advocacy" (e.g., Meyer et al., 2010). Advice is generally given where there is

an asymmetry of knowledge—where one person is trying to make a decision, while another knows more about case. The expert would like to help, but is correctly afraid that her intervention might appear to be presumptuous meddling with her addressee's concerns. The commitments undertaken in the act of *advising* are expressly intended to manage this pragmatic difficulty. Turning to Kauffeld again: "where a speaker gives advice, (i) she tells the advisee something which she at least purports to believe he needs to know, and (ii) she openly takes responsibility for trying assist him in determining what to do about his concerns" (Kauffeld, 1999). In *advising*, in other words, the speaker openly undertakes to promote *her addressee's interests*, not *her own policy decision.* Since both the scientist and her addressee presumably share an interest in the best scientific knowledge available, it should be less normatively stressful to be a scientist-advisor than a scientist-advocate.

Thus far, I have noted convergences between scientists' and argumentation theorists' conceptions of speech acts, and also several ways in which the theorists might contribute to clarifying the debate. Let me close by acknowledging one area in which theorists might learn from practitioners. As the overview of the debate in Section 2 of this paper showed, some proponents of advocacy by scientists argue strongly that such advocacy is in fact normatively required. All citizens have the duty to advocate for what they believe; scientists, being uniquely positioned both with respect to knowledge and reasoning abilities, have a higher responsibility to do so. Although argumentation theorists have devoted significant attention to the obligations that are undertaken in speech acts, they have given less thought to possible obligations to commit a given speech at all. Houtlosser, Jackson and Kauffeld all take the speech acts which initiate argumentative interactions as in some basic way conditional on other interests or activities: *if* you want to enter into a critical discussion, *if* you want to keep the conversation going, *if* you want to address one of a number of recurrent interpersonal difficulties, *then* you use the appropriate speech act, which obligates you to be ready with arguments. But *why* should you do so? Fabio Paglieri (Paglieri & Castelfranchi, 2010) is perhaps the only argumentation theorist who has addressed this problem, but even he examines only the costs and benefits of initiating an argumentative interaction, not the possible obligation to do so. Argumentation theorists interested in developing any of the speech act approaches further may want to add to their research agendas the question of why the initiating speech acts *ought* to get made.

This essay has attempted to advance our understanding of the speech activity of *advocating* and its usefulness in communicating science in controversial policy contexts. Independent of this particular aim, however, I hope

it has also served as a demonstration of the usefulness of working along a theory-practice *continuum*. Theorists can help practitioners better articulate, organize, ground and critique the conceptions of speech acts that are already partially articulate in their practice. Practitioners, in turn, can offer theorists a chance to see how (or whether) their abstract conceptions of speech acts play out when confronted with the pragmatic challenges of maintaining good argumentative interactions among people who disagree. Since there are many speech acts of interest to argumentation theorists, and many communities of arguers facing pragmatic challenges, we can look forward to many future conversations between theorists and practitioners of argumentation.

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PART II:

ARGUMENTATION IN A DIALOGUE

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LINGUISTIC COMPLEXITY AND ARGUMENTATIVE UNITY: A LVOV-WARSAW SCHOOL SUPPLEMENT

Abstract. It is argued that the source of complexity in language is twofold: repetition, and syntactic embedding. The former enables us to return again and again to the same subject across many sentences, and to maintain the coherence of an argument. The latter is governed by two forms of complexification: the functor-argument structure of all languages and the operator-bound-variable mechanism of familiar formal languages. The former is most transparently represented by categorial grammar, and an extension of this can adequately describe the syntax of variable binders. Both developments have roots within the work of the Lvov-Warsaw School.

Keywords: categorial grammar, complexity, cohesion, definition, functor, operator, proof

This whole volume is one long argument
Charles Darwin, *The Origin of Species*

Revenons à ces moutons!
Anonymous, *La Farce de Maître Pathelin*

1. Introduction: Linguistic Complexity and Argumentation

Humans are the only animals to possess language. Other animals have communication systems but none can match the complexity of human language. It is the principal claim of this paper that the engine of this complexity is syntax, and that it is most transparently captured by categorial grammar, which of course was first formulated within the Lvov-Warsaw School of logic and philosophy. However a single sentence or a chain of semantically connected sentences needs devices for keeping track of subject matters as complexity increases. In formal languages the indispensable device to this end is the repetition of constants, symbols with fixed meaning

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used in different equiform tokens of one type, and of variables, as exemplified in the bound variables of expressions in logic and mathematics. The approach of categorial grammar can be extended to apply to such bound variables, and the paper briefly indicates how.

In natural languages, the devices for maintaining coherence within and across sentences are more varied, and include not just repetition but also pronouns, paraphrases, synonyms and the like. It is through such connecting devices that the processes of conversation, dialogue, discussion and argumentation may remain connected in such a way as to count as a single discourse. When in the course of an argument or other discourse we return to a previous subject, or are asked to "keep to the point", as in the medieval French comedy the judge enjoins the confused plaintiff to get back to talking about his stolen sheep, we have to be able to pick up from parts of the foregoing discourse, no matter how deeply embedded. That we are able to do so is determined by the limited and surveyable number of devices for building complexity and yet maintaining connection or cohesion of discourses. In logical argumentation, in proofs, a sequence of formulas "keep to the point" by similar forms of repetition, and also by linking diverse expressions through formal definitions. These facts, usually taken for granted, are taken seriously in the metalogical investigations of Stanisław Leśniewski, and exploited in the formalization of proofs from assumptions by Stanisław Jaśkowski, which are mentioned in the final section. So the Lvov-Warsaw tradition not only lies deep in the history of twentieth century logic, but also at the origins of modern argumentation theory.

2. Ontological versus Linguistic Complexity

Consider the following entry in Samuel Pepys' diary for Tuesday 25 September 1660:

> To the office, where Sir W. Batten, Collonell Slingsby, and I sat a while; and Sir R. Ford coming to us about some business, we talked together of the interest of this kingdom to have a peace with Spain and a war with France and Holland – where Sir R. Ford talked like a man of great reason and experience. And afterwards I did send for a cup of tee (a China drink) of which I never had drank before) and went away.
>
> Then came Collonell Birch and Sir R. Browne (by a former appointment) and with them from Towre-wharf in the barge belonging to our office we went to Deptford to pay off the ship *Successe*. Which (Sir G. Carteret and Sir W. Penn afterwards coming to us) we did, Collonell Birch being a mighty busy man and

> one that is the most indefatigable and forward to make himself work of any man that ever I knew in my life. At the globe we had a very good dinner, and after that to the pay again; which being finished we returned by water again. And I from our office with Collonell Slingsby by Coach to Westminster (I setting him down at his lodgings by the way) to enquire for my Lord's coming thither (the King and the Princesse coming up the River this afternoon as we were at our pay); and I found him gone to Mr. Crews, where I find him well; only, had got some brush upon his foot which was not well yet. My Lord told me how the ship that brought the Princesse and him (The *Tredagh*) did knock six times upon the Kentish Knock, which put them in great fear for the ship; but got off well. He told me also how the King had knighted Vice-admirall Lawson and Sir Rich. Stayner. From him late, and by Coach home – where the playsterers being at work in all the rooms in my house, my wife was fain to make a bed upon the ground for her and I; and so there we lay all night.[1]

Saving the fact that only a few knowledgeable historians would already know which persons are being referred to in this passage, and what the Kentish Knock is (a shallow sandbank in the North Sea east of the Thames estuary, dangerous to shipping), the general line of the story is easy enough to follow. Apart from Pepys himself, who as diarist is obviously involved in most of what is described, several of the people mentioned appear more than once in the narrative: Colonel John Birch, Colonel Robert Slingsby, King Charles II, the Princess Royal. Over the course of Pepys's whole diary, many people, places and events are mentioned many times. The narrative gives us a schematic but informative picture of part of what was going on to various participants in London on 25 September 1660, and the whole diary of course over a much longer period. Following a term much used by Whitehead, we might say the story is about the "adventures" of Pepys and his various friends and acquaintances, as well as the places they inhabit.

If we consider the story, it involves complexity: events follow one another and are linked, several people are involved in a single event, the same person is involved successively in many events. The people and places mentioned are themselves complex. The Palace of Whitehall, residence of the king, was a large and rambling group of buildings with many rooms. Pepys himself had all the complexity that any adult human being has, his bones, heart, liver, kidneys, brain and so on all functioning in their accustomed way across many years and encompassing untold millions of microevents, most of them too routine and unimportant to rate a mention, but existent nevertheless. Pepys moved around from place to place: from his home to his office, to other offices, to the theatre, to inspect His Majesty's ships, and so on. Every movement involved an untold number of displacements of objects and their parts, each describable by a mathematical function of

considerable complexity. Of all this ontological complexity, only the minutest schematic portion is captured in the bald narrative of the diary, and the total detail outruns the linguistic and informational capacity of anyone to represent. Ontological complexity outruns linguistic complexity by many orders of magnitude, indeed possibly by at least one or two alephs, if motion is continuous, while on the other hand any portion of language is finite.

Despite this, we are able in language to capture part of this complexity in language. So the question I am raising is: what is it about language that enables us to correctly (truly) describe parts and aspects of the world? We take language for granted in everyday life, but it is on reflection amazing that a sequence of articulated sounds, or in the written case, a sequence of approximate geometric shapes, is capable of expressing such complication. To describe how this works is of course the job of linguistics, and I do not for a moment intend to enter into detail, but we may wonder where, in the phenomenon that is language, the potentiality for linguistic complexity arises. Of course without intelligent persons and their language-processing brains, none of it would be possible, but taking the instrument for granted, there still has to be a natural account of where the complexity arises.

Consider by way of analogy a piano, as played by a single pianist. Those strings, frame, 88 keys and the mechanism to which they attach, together with a capable performer of course, are the *conditio sine qua non* for performances of Beethoven's Opus 111 or Prokofiev's Sonata No. 8, but what gives rise to, what is the source of, the *musical* complexity? Part of it is that at any one time up to ten keys are depressable by a single pianist, but even a monotone instrument like an oboe can play complex pieces, so the chief source of the complexity must be succession in time, allowing notes to be of different lengths and to succeed one another. Succession allows a multiplicity of varied elements to be stacked up one after another, and in this regard language and music are very similar. But mere succession of varied elements does not in itself give rise to the kind of variety we find in the Pepys passage, allowing such successive complexes to represent very different kinds of thing and event and their manifold interrelations. Musical notes do not divide into different categories in the way that words do: there is nothing corresponding to the distinctions between nouns, verbs, adjectives, adverbs, prepositions, conjunctions and sentences, for example.

So while temporal succession or some analogous linear spatial succession (as in writing) is what serves as the locational container or space for linguistic complexity, there is more to it than that. The differences among the kind of words have been the subject of descriptive grammars for thou-

sands of years, but the key general principles behind the power and variety of linguistic complexity have been understood much more recently, and the key breakthrough came in the work of the Lvov-Warsaw School, specifically in the work of Stanisław Leśniewski and Kazimierz Ajdukiewicz. That approach has come to be known as *categorial grammar*, and with minor reservations I consider it to embody the best general account of how linguistic complexity works. The bulk of this paper is an attempt to show how and why categorial grammar transparently represents linguistic complexity. In the final section I connect the complexity of language to the complexity of discourse more generally, and indicate briefly how the Lvov-Warsaw School opened up avenues in the ongoing discussion of argumentation.

3. Application

Categorial grammar had two founding fathers: one by practice, the other by precept. Gottlob Frege analysed linguistic utterances and their contents not via the traditional opposition between subject and predicate, which is at best relevant to a small (if important) class of sentences, but in terms of the mathematical idea of a function, in application to an argument or several arguments. In the true arithmetical sentence[2]

$$7 + 4 < 3 \cdot 4$$

there is no single subject and predicate, but there is a verb, '$<$', which applies to two complex terms, '$7+4$' and '$3\cdot4$', and these in turn are composed of two binary operators, the addition operator '$+$' and the multiplication operator '$\cdot$', each taking two unstructured numerals as arguments. Each of the complex terms names a number, on the left-hand side 11, on the right-hand side 12.

Frege's insight is that whereas simple or complex names such as '7' or '$7 + 4$' do their job of naming (denoting) something as they stand, the other signs, that is in our example '$+$', '$\cdot$', and '$<$', do not do work in isolation, but need to be supplemented by other signs in order to work. Frege says that such signs stand in need of supplementation, and indeed to emphasise this fact he always quotes them in a context with names, or expressions serving as dummy names, marking the places where supplementation or completion occurs. When suitably supplemented, the resulting wholes, involving the supplemented signs together with what supplements them, do a suitable semantic job, in the case of '$7 + 4$' and '$3 \cdot 4$' denoting numbers, and in the case of the whole sentence expressing a truth.

With few exceptions, language in use consists of producings and receivings of sentences. These make statements, ask questions, issue commands, and the like. How the sentences get to hook up semantically to the world is through two kinds of mechanism: indexical expressions (or indeed tacit aspects of the utterance) which exploit the context of utterance (its time, location, speaker, addressees, salient features of the environment etc.), and names, which denote given particular individuals or groups. The two mechanisms often function in tandem together in a sentence, even within a single phrase, as in

The woman over there talking to Dermot used to be my wife

where the first noun phrase 'the woman over there talking to Dermot' uses the present continuous tense, a contextually resolved reference to a woman perceptible to speaker and hearer, and the proper name 'Dermot', while the second noun phrase relates the woman to the speaker via the possessive pronoun, and the use of the compound verb 'used to be' indicates that the woman in question was the speaker's wife but at the time of utterance is so no longer.

Clearly the two key elements in this are the whole sentence and the parts that get the sentence to denote items in the world. Leaving non-declarative sentences aside, the point of sentences in standard speech is to put something forward that is intended to be taken as true. When things go well, what is said is true, when they don't, then not.

So the fundamental idea that made Frege appeal to the mathematical notion of a function rather than the logico-linguistic notion of a predicate is that, given one or more names, to get a sentence you need something else which, when suitably combined with the names, results in a sentence. The names can be varied and this remaining part be kept constant, just as the numbers input to the addition function $x + y$ can be varied and different sums result. We speak in such cases of the *application* of a function to its one or more arguments, resulting in a value. This is the key idea in categorial grammar, but with an important difference. Frege took there to be a fundamental isomorphism between language, what it means, and what it is about, or between sign, sense, and signification (reference). This led to his use of the metaphor of *unsaturatedness*, which he took to apply in the first instance to functions, then to sense, and finally to signs themselves. Without going into why in detail, we wish to dissociate the idea of application from any presumption of isomorphism, retaining only the idea of one expression's being the result of the *application* of one or more expressions (or expression patterns) to other expressions (or expres-

sion patterns), to yield a complex expression. To avoid this, and indeed to cohere with standard terminology, we avoid the term 'function' and instead employ Carnap's word 'functor'[3] and say that a complex expression typically (not always – see below) consists of a functor and one or more argument expressions. The complex expression results from the application of the functor to the arguments, or conversely from the saturation of the functor by the arguments.

4. Iterated and Recursive Application

The principle of linguistic complexification was again perhaps first fully understood by Frege, who pointed out two ways in which complexity may ramify. The first is that an argument to a functor may itself be complex, the result of saturation or application at a lower level. While there are practical limits to the depth to which linguistic structures can be nested and ramified, limits imposed by the contingent limitations of time, space and the ability of speakers to keep things in mind, there are no theoretical limits. A sentence in English can go on for as long as the author can manage or feel like, and there are indeed some long sentences, including the last of Joyce's *Ulysses*, which has over 4,000 words. Application can take place over and over, as when a string of what would otherwise be complete sentences are strung together coordinatively by repeated 'and's. More subtly, such repetitions are frequently cases of recursion, where a single form of application pertains to one or more of the arguments, as in nested relative clauses in the English nursery rhyme *The house that Jack built*, which in the final stanza are embedded to a depth of ten levels. Frege exploited just such nesting in his logic, building up elaborate formal sentences using repeated use of the conditional 'if ... then ---' in his graphical notation. For example in the proof of Theorem 655 of his *Grundgesetze der Arithmetik* there are formulas with sixteen clauses, so fifteen conditionals.[4] An adequate account of linguistic complexity must allow for this.

A different kind of ramification occurs when what works as a functor in some contexts is an argument in others. In the sentence

Sean plays golf

it is clear that the functor is the verb phrase 'plays golf'. We negate the whole sentence by negating this phrase:

Sean does not play golf

On the other hand the superficially similar sentence

Every Irishman plays golf

is negated not by negating the verb but by negating the initial quantifier phrase, as

Not every Irishman plays golf

which shows that in this sentence the verb phrase is an argument to the higher order functor 'every Irishman'.

Again Frege was the first to grasp this fact in all its theoretical ramifications. In principle any functor can serve as argument to a functor of order higher than its own. In practice we do not tend to climb very high in this hierarchy, but the option is there. For example in the sentence

It is easier to amuse every Irishman than every Scotsman

the quantifier phrase 'every Irishman' functions as an argument.

Following now standard terminology we call the functor which at the first level of analysis binds a complex expression together the complex expression's *main functor*. So whether a functor is a main functor or not depends on the context in which it occurs.

5. Syntactic Categories

While Frege worked very efficiently with expressions of different functorial levels, he did not pause to codify or notate the principles involved. The general idea of laws governing the combination of meanings was outlined in principle by Husserl in the fourth of his *Logical Investigations*, where meanings are divided into dependent and independent, the former corresponding to functor expressions, the latter to non-functor expressions. Husserl proposed that meanings fall into different categories (*Bedeutungskategorien*) according to the way in which they legally can combine.

Husserl's idea of categories of meaning and Frege's of categories of function were merged by one of the few logicians to be influenced by them both, Stanisław Leśniewski. In his logical languages Leśniewski assigned all expressions other than parentheses and quantifiers to what he called *semantic* categories. But again he worked with the idea rather than codifying and notating it. That achievement is due to his contemporary Kazimierz Ajdukiewicz, in his 1935 article 'Die syntaktische Konnexität',[5] in which a system of notation and rules of combination are explicitly formulated for the

first time. After a slow start, this idea spread widely in the logical and linguistic community and has come to be called *categorial grammar*. We shall give briefly notation and principles of categorial grammar, which captures in the most transparent form the way in which linguistic complexity arises and ramifies.

In categorial grammar, as in the tradition leading up to it, expressions are divided into different syntactic categories. Some are non-functorial or basic. Which basic categories there are depends on the language. In propositional calculus the only basic category is that of SENTENCE (S). In Frege's logic, leaving the judgement stroke aside, there is again only one basic category, that of NAME (N). Leśniewski in his logical languages of ontology and mereology had both S and N as basic categories, and it is the same in predicate logic or in the simple theory of types. Natural languages may have further categories, as surmised by Ajdukiewicz, such as COMMON NOUN (C) and perhaps TENSE (T) and others; the details might vary from language to language while the principles remain the same. They are encapsulated in the following rules:

R1 There is a finite collection of basic categories $\kappa_1, \ldots, \kappa_m$, $m \geq 1$, all the κ_i different.

R2 Assuming all categories are ordered alphabetically (the details of how this is done may be left aside), if α is a category and $\beta_1, \ldots, \beta_n$ are $n \geq 1$ categories (not necessarily all different) in alphabetical order, then there is a functor category of expressions taking arguments of categories $\beta_1, \ldots, \beta_n$ and yielding a complex expression of category α. The category of the functor is written $\alpha\langle\beta_1 \ldots \beta_n\rangle$.

The simple recursivity of R2 ensures the ramification of potential complexity among expressions. Note that it is wholly syntactic in nature.

6. Cumulativity and Complexity

Complication in language has two clearly distinct sources. One is the simple cumulative possibility of saying more. This need not involve syntactic complexity beyond that required to form individual sentences. In the sense that complexity requires multiplicity *in unity* it is not complexity at all. A simple sentence repeated over and over (imagine some of piece of absurdist theatre or performance art) no more engenders linguistic complexity than a steadily dripping tap engenders a complex fluid flow. Call it instead *cumulativity*. The phenomenon of functorial nesting however is

different and is clearly the source of any complexity beyond that of the simplest utterances. There is one linguistic phenomenon that shares features of both complexity and cumulativity and that is coordination. In sentences like Shakespeare's

> The master, the swabber, the boatswain, and I,
>
> The gunner, and his mate,
>
> Lov'd Mall, Meg, and Marian, and Margery,
>
> But none of us car'd for Kate

the listed names, with occasional 'and's in each list, are clearly cumulative, albeit constrained within the confines of a single sentential place. Likewise the ability to string individual sentences together with 'and', like daisies in a chain, is more akin to cumulation than genuine complexity. It can be subsumed under the latter, if we allow that the conjunction 'and' is of category $\mathrm{S}\langle\mathrm{SS}\rangle$ and treat a cumulated conjunction as comprising the first sentence and the added sentence as the second. But while formally correct, the analysis only incidentally captures the repetitiveness which is characteristic of cumulation. While we can let coordination count as a form of complexity, it is then a limiting case. A more revealing analysis would be to say that 'and' is a multicategorial word of categories $\mathrm{S}\langle\mathrm{S}\ldots\mathrm{S}\rangle$, for any finite number of S arguments greater than one. Here the cumulativity comes out in the analysis.

7. Combination

For linguistic complexity to occur, clearly expressions have to be stacked up together in a way which gives rise to unified linguistic complexes. Superficially this occurs by concatenation, which is itself a form of phonemic or graphemic cumulativity. What takes it beyond the mere stringing together of bits of language into a chain is the categorial diversity of the parts strung together, which enforce a structural hierarchy of parts according to the ideas familiar from grammar, but most cogently captured in categorial grammar. Since we are not concerned with the details of how combination takes place and how different arguments are fitted together with their functors, which details vary from language to language, we may be schematic in our representation of combination. Suppose A is an expression of functor category $\alpha\langle\beta_1 \ldots \beta_n\rangle$ and $B_1 \ldots B_n$ are expressions of categories $\beta_1 \ldots \beta_n$ respectively, with the β_i in alphabetical order as before, then we denote

by $A(B_1 \ldots B_n)$ the complex expression formed by saturating A by the B_i in the grammatically correct way. Its category is α. Note we are placing the functor before its arguments, as is standard in predicate logic. Strictly speaking the parentheses are superfluous providing the expressions are all well formed and of the correct respective categories, but we leave them in to help make structure explicit. Plausible grammatical analyses of the sentences

Sean plays golf

and

Every Irishman plays golf

have the forms

$\text{plays}_{\ S\langle N\rangle\langle N\rangle}\ (\text{golf}_N)(\text{Sean}_N)$

and

$\text{every}_{\ S\langle S\langle N\rangle\rangle\langle C\rangle}\ (\text{Irishman}_C)(\text{plays}_{\ S\langle N\rangle\langle N\rangle}(\text{golf}_N))$

respectively. If it is desired to make explicit the categories of resultant categories in the analysis (at intermediate and final level) we can easily do this, either by labeled tree structures, or more compactly if less perspicuously by labeled bracketing, as

$[[\text{plays}_{\ S\langle N\rangle\langle N\rangle}\ (\text{golf}_N)]_{S\langle N\rangle}(\text{Sean}_N)]_S$

and

$[[\text{every}_{\ S\langle S\langle N\rangle\rangle\langle C\rangle}(\text{Irishman})_C]\ _{S\langle S\langle N\rangle\rangle}([\text{plays}_{\ S\langle N\rangle\langle N\rangle}(\text{golf}_N)]_{S\langle N\rangle})]_S$

The latter type of notation obviously threatens to become rapidly unsurveyable, so for clarity labeled trees are better, though we omit them here out of space considerations. In the above two examples it is notable that the phrase 'plays golf' occurs in each case as a unit, an intransitive verb phrase, which corresponds to our linguistic feeling that it indeed is a unitary phrase in each case.

There are many ways in which categorial grammar can be carried well beyond what is merely indicated here: into matters of resolution of complex expressions and criteria of grammaticality, especially when considering partial saturation; into considerations of linear structure, its limits and the nature of remote connection; and even into aspects of morphology, such as the difference between the untensed 'play', as in

Can Sean play golf?

and the tensed 'plays' or 'played'. For present purposes however we may leave things here, and simply reiterate our point that categorial grammar offers the most perspicuous and elegant representation of the nature of linguistic complexity.

8. Binding

The relatively simple functorial structures outlined above work remarkably well for natural languages, but it is a stark fact that they break down for nearly all logical and mathematical languages, for reasons to be explained. There are also features of natural language such as pronoun binding which the mere categories of expression and their functorial combination fail to capture or explain. For example in the sentences

Dale insulted Stevie and she left him

and

Dale insulted Stevie and he left her

there are in each case two possible readings, depending on the gender of the persons named 'Dale' and 'Stevie'. This goes beyond grammar. A very straightfoward illustration in logic comes from the difference between two predicate logical sentences

$\forall x \exists y Rxy$

and

$\forall z \exists y Rxy.$

The first sentence is unexceptionable, whereas the second is not well-formed according to some formation rules, but even if well-formed, differs from the first in being not a closed formula or sentence but an open formula. In other words, whereas under an interpretation the first sentence will have a truth-value, the second will not, since it contains a free or unbound variable 'x'. Yet from the point of view of grammar there is no difference between them if both are well-formed, and no grammatical explanation why the second might not be well-formed in some languages. It was recognized from the very beginning by Ajdukiewicz that variable-binding operators like the quantifiers are not adequately dealt with as functors in the sort of categorial grammar we have considered hitherto. Ajdukiewicz and others have attempted expedients to get around this, but there is a reason why no such attempt can succeed.

Before we see what this is, let us recall the now familiar fact that a language using variable binding, such as those of logic and mathematics, does not need more than one binding operator, or more precisely, one typed family of typically analogous operators. Russell already had an inkling of this, but it was first made fully explicitly by Alonzo Church.[6] Church's λ operator can be used as the sole binder, all other operators being definable as the combination of a functor with the λ operator. If λ can be replaced or eliminated, then the problem of representing variable binding would not arise. And so it does not, since it is well known that λ can be replaced by a suite of combinators, which are functors, not operators. For a purely combinatory language, functors alone suffice and the categorial grammar we have outlined is adequate. There are some details about the differences between typed and untyped languages but the general principle is the same.

However this does not get us off the hook of explaining how languages with binding work. To suppose it did would be like supposing that we can give a grammar for English by using the grammar of French and showing that any English sentence has a French translation. It is simply avoiding the issue. So we need to show how languages with binding can have their own grammar. Here the principal difference between functor (only) languages and operator languages comes into play. For a functor simply adds one layer of grammatical complexity to its arguments, and is grammatically indifferent to any embedded complexity of its arguments. That in a sense is its virtue and simplicity. A variable binder however not only adds a level of complexity, but it can bind variables nested at any finite depth of structure whatsoever within its scope. This can be seen even in simple logical examples such as

$$\forall x \ulcorner Fx \rightarrow \exists y \ulcorner Rxy \vee \forall z \ulcorner (Fy \wedge Rzx) \rightarrow Rzy \urcorner\urcorner\urcorner$$

where the bound variable 'x' occurs at the top, intermediate and bottom levels of the matrix wherein it is bound, and also more dramatically elsewhere in logic and mathematics. It is this arbitrary depth of binding that leads to the long and unsurveyable swathes of combinators that typically grace combinatory equivalents to λ formulas, since it takes many applications of structure-shifting and repetition-reducing combinators to get variables out to where they can be "explained away".

For this reason, an adequate grammar for variable binders must go beyond functorial categorial grammar in two linked ways. Firstly, it must represent not only the category but also the internal structure of any matrix, i.e. expression into which is bound. And secondly it must mark the places within this structure into which a given binding variable binds. There is

a subtle but relatively unknown reason why it is not necessarily a variable of the right shape that is to be found filling such places. It is possible to have a logical language – that of Frege's *Begriffsschrift* is the most salient example, indeed the only one I know of – in which places are *marked* by a bound variable but filled by some other expression.[7] So for example Frege expresses that 12 is a multiple of 4 by a formula[8] which we can notate, expanding a notation of Leśniewski and using lower corners to group a sequence of binding variables and upper corners as above to mark operator scope, as

$$\text{Anc}\ {}_{\llcorner}\gamma\beta{}_{\lrcorner}{}^{\ulcorner}0_{\gamma} + 4 = 12_{\beta}{}^{\urcorner}$$

meaning that 12 is got from 0 by adding 4 some finite number of times. The Anc operator is the proper ancestral, in this case of the relation of being 4 greater than, and its variables mark but do not fill places in its matrix. Taking a leaf out of Frege's book, we can use such marking variables to show which places a variable operator reaches into within its scope. This is why the full syntactic structure of the matrix is required, and not just its resultant category. I have outlined elsewhere[9] the principles of and given a notation for such an extended categorial grammar, which involves adding a third rule R3 to our grammar,

R3 If A is expression of category α containing occurrences of expressions $e_1, \ldots, e_k$ where the e_i are here listed (but do not necessarily occur in the expression A) in alphabetical order, and $\gamma_1, \ldots, \gamma_k$ are the categories of $e_1, \ldots, e_k$ respectively, and Z is an expression of category $\beta{}_{\llcorner}\gamma_1 \ldots \gamma_k{}_{\lrcorner}{}^{\ulcorner}\alpha{}^{\urcorner}$ and $v_1, \ldots, v_k$ are variables of categories $\gamma_1, \ldots, \gamma_k$ respectively (which may but need not be identical with their respective e_i), then the expression $Z{}_{\llcorner}v_1 \ldots v_k{}_{\lrcorner}{}^{\ulcorner}A^*{}^{\urcorner}$ is of category β, where A^* is either the same as A if the v_i are the e_i, or is derived from A by marking places where (tokens of) the e_i occur with the variables v_i (as in Frege's notation). Here the variables v_i accompanying Z in lower corners bind either variables or places within A, and in the latter case their loci of binding are shown in A^*.

The only possibility that this rule leaves out is where the matrix, here a single expression, is replaced by a sequence of expressions of possibly different categories, like a many-placed functor. It is safe to say such a theoretical possibility has been rarely if ever used even in advanced logico-mathematical languages. It might have a use, but we can leave that for another time.

It is the combination of functorial complexification and variable binding deep into the resulting complexes that give mathematical languages their

spectacular expressive power. As we mentioned, the variable-binding option is in principle dispensable, and natural languages exploit it hardly if at all, but the combinatorial alternative is so unwieldy in complex cases that variable binding is nearly always practically preferable for human use. For computers lacking the frailty of human memory it may well be different. However without functors to build up the complex structures into which variables can be inserted so as to be bound, there is nowehere for variables to bind into. So it remains true that the primary, if not always the sole, source of linguistic complexity of the genuinely structural kind is functorial application.

9. Repetition

A story can link together events and episodes regarding particular participants by the device of repetition. In the case of Pepys's diary with which we began, the first-person nature of the narrative keeps the diarist constantly in play, but as we mentioned, other players have their parts and they too may return again and again. In this way the complex tapestry of events and their participants is woven. Apart from pronouns, which work only over relatively short distances, the main work of keeping the same individuals under discussion in the narrative is carried by repetitions of identifying names and other phrases: 'Sir R. Ford', 'Spain', 'my Lord', 'the King', 'my wife' and so on. It is no accident that bound variables, while in context they function semantically and syntactically like pronouns, are in superficial form like repeated names, as indeed the frequent grouping together of bound and free variables indicates. For it is the repetition of a distinctive identifying form like a name but not itself a name that enables bound variables to function across arbitrary syntactical distances, across arbitrarily long and cumulatively told stories, and to plumb arbitrary syntactic depths. So repetition, while not the source of *linguistic* complexity, is the carrier for language's ability to elaborate accounts of arbitrary *semantic* complexity about a subject. To take one fairly extreme example, one may consider the eight volumes and (to date) ten companion volumes of the biography of Winston Churchill by Randolph Churchill and Martin Gilbert. Theoretically, that could be grammatically compressed into a single sentence, no doubt to its considerable literary detriment. The names 'Winston' and 'Churchill' occur therein many thousands of times, and while not the only source of return to the same topic, are its principal carrier. If we are repeatedly to "revenir

à nos moutons" we need names for the sheep. And to employ an insight of Wittgenstein, ultimately repetition, even of what is said, is shown, not talked about.

Repetition is not the same as cumulation: it is the pinpointing of repeated elements within a structure, whether complex, cumulative, or (most probably) both. It is, bound variables aside, not a syntactic feature, but a semantic one, and is indispensable. In the confines of special logical languages, such as combinatory logics, repetition of bound variables may be eliminated, but repetition is not itself thereby eliminated, since the combinators involved are typically repeated in application many times. Such logico-structural elements are not the way in which language hooks into reality, any more than a forest of repeated 'and's or 'if's gives a logical formula a subject matter. It is through us and our understandings of elements not compounded that language engages with reality. That it can do so in ways approaching adequacy is however down to the four sources of complexity in language and its use: functorial complexity, cumulation, repetition, and the latecomer, variable binding.

10. Repetition and Argumentative Unity

In 1926, following a challenge from Jan Łukasiewicz, Stanisław Jaśkowski devised the first modern system of natural deduction, a formalization of the practice of mathematicians of proving things not by using the axioms of propositional and predicate calculus together with substitution, but by making assumptions and seeing what followed from them. The archetype of such practices is Conditional Proof: if from the assumption p one may infer that q, then one is entitled to assert the conditional $p \rightarrow q$, discharging or dropping reliance on the assumption. Jaśkowski went on to publish his ideas in 1934,[10] and the method has since become the standard way of doing proofs in elementary logic, to the benefit (and relief) of generations of undergraduates and their teachers.

Jaśkowski's method, and likewise all subsequent forms of proof from assumptions, all rely essentially on the repetition of variables. You are only entitled to derive $p \rightarrow q$ after a subproof from the assumption that p when what you infer from p is q, and not something else. Similar remarks apply to more complex rules as well, including those for predicate logics. In modern relevance logics, it is required not only to keep track of assumptions but to keep track of *uses* of assumptions in proofs.[11] In this way, relevance logics outlaw derivations of such notorious paradoxes of implication

as $p \rightarrow (q \rightarrow p)$ and $p \rightarrow (q \vee \sim q)$, which can only be proved by "straying off the point" or becoming "irrelevant".

A sequence of formulas or formulas and subproofs in a proof is not a single formula, and its complexity is not syntactic. It is kept together as a unified discourse of its kind by repetition. Nevertheless, as we know, proofs in mathematics can become extremely complex. They work, and their architects stay on the point, in good part by repetition, of variables used within and across sentences, and of constants, be they names or predicates, that are assumed understood at the beginning of the proof or are introduced in the course of the proof. All, or nearly all, proofs of any complexity make use of definitions in order to reduce repetitions and cognitive load. To take a simple but important example, in topology it is useful and important to know when two topological spaces are homotopy equivalent. It takes several lines and a lots of preparation going back to first principles to say what homotopy equivalence is. If we were not allowed to say spaces were homotopy equivalent we would very quickly lose track. Defined terms serve as mental counters, allowing us to move on more quickly to more advanced and more important results.

No one spent more time and effort in formulating the principles of correct definition than Stanisław Leśniewski. The expression of Leśniewski's requirement on what it is to be an acceptable definition of one of his logical systems of protothetic is encapsulated as Terminological Explanation XLIV of his metalogical description of that system: in abbreviated form it extends over two sides and comprises eighteen independent clauses.[12] To get to that point Leśniewski relies on over forty prior metalogical definitions, all of which rely themselves on repetitions of constants and variables, and further are expected to conform at the metalevel to equally stringent normative requirements, so the definition of 'definition' is informally expected to conform to standards as rigorous as those it formulates. Further, this definition is just one of several that Leśniewski relies on to be able to specify what counts as an acceptable extension of a logical system which starts from an axiom and has reached a certain point. All his definitions are relative to the stage of the system and are self-adjusting in their import as a result. Logical systems for Leśniewski are expandable logical stories, and as such are required to hang together in the same way as Churchill's biography, and indeed in practice more so, since, like Darwin's *Origin*, a logical system is "one long argument", the last thesis of which is where the argument has reached to date.

The interlocking sequence of definitions that make up Leśniewski's Terminological Explanations lead into his stipulations as to what kinds of ex-

pression can be correctly added to a system at a given stage in its development in order to extend it by another thesis. As such they comprise perhaps the most fully worked out set of conditions on argumentative coherence that have ever been formulated, and as anyone who has worked with them can attest, they are very intricate.

The point of this final section has been twofold. Firstly it has been to stress that what holds an extended argument together as a unity is a complex and insufficiently understood matter. We are familiar with arguments that drift off the point, and are ready with such admonitions as "That's got nothing to do with the matter under discussion!" Saying what such digressions amount is is much harder. There is in natural language no hard and fast border between staying on the point and drifting from it, even though we can tell the difference in clear cases. In logic and in more formal argumentation theory it should be possible to be more explicit about the requirements that are used without often hitherto having been formulated. In their different ways the two Stanisławs have made a good start, so that in argumentation theory as in logic, we can continue to look to the Lvov-Warsaw School for inspiration.

NOTES

[1] Pepys (1971), 253–4.

[2] I am ignoring here Frege's mature view that this expression is not a sentence with a truth value but a name of a truth value.

[3] Carnap (1934, 1937), § 3.

[4] Frege (1903), 221.

[5] Ajdukiewicz (1935, 1967).

[6] See in particular Church (1940).

[7] Simons (1988).

[8] Frege (1983) p. 24, formula 4 (1979, p. 22).

[9] Simons (2006).

[10] Jaśkowski (1934).

[11] See e.g. Anderson & Belnap (1975), 17 ff.

[12] Leśniewski (1992), 479–481.

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FROM SPEECH ACTS TO SEMANTICS[1]

Abstract. Frege introduced the notion of pragmatic force as what distinguishes statements from questions. This distinction was elaborated by Wittgenstein in his later works, and systematised as an account of different kinds of speech acts in formal dialogue theory by Hamblin. It lies at the heart of the inferential semantics more recently developed by Brandom. The present paper attempts to sketch some of the relations between these developments.

Keywords: assertion, dialogue, force (Fregean), force (pragmatic), inferentialism, pragmatics, semantics, speech acts

1. Speech Acts

Pragmatics, the study of speech acts, may be carried out either *descriptively*, comparing the rules and conventions that operate in various actual discursive contexts, or *formally*, working out the consequences of simple, precise rules of dialogue and exploring the properties of dialogues conducted in accordance with them (Hamblin, 1970, p. 256). In terms of this contrast, the present work is on the formal side, exploring simplified versions of central pragmatic concepts which may then provide a general structure for future more realistic descriptive studies; though it does not go so far as to present rules of dialogue set-theoretically as in Mackenzie, 1990. In pragmatics we distinguish between various kinds of linguistic action such as asserting, questioning, defining, promising, warning, expressing doubt about, and calling another participant to order, and it is helpful to have clear, even if oversimplified, understandings of these and of the relations between them.

Frege distinguished different kinds of speech acts in terms of what he called *force*:

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> An interrogative sentence and an assertoric one contain the same thought, but the assertoric sentence contains something else as well, namely assertion. The interrogative sentence contains something more too, namely a request. Therefore two things must be distinguished in an assertoric sentence: the content, which it has in common with the corresponding propositional question; and assertion (Frege, 1918, p. 329).

Dummett elaborates:

> The theory of sense and reference is then to be supplemented by an account of the various forms of linguistic force that may be attached to a sentence: the theory of force thus supplies an account of the various uses that are actually made of sentences in actual speech. The separation of sense and force can only be justified if it is possible, for each variety of force, to give a *uniform* description of the linguistic act which is effected by the utterance of an arbitrary sentence, whose truth-conditions are supposed known, to which a force of that kind is attached. There will thus be one general account of the use of sentences to make an assertion, another of their use to ask a sentential question, and so on, each applicable independently of the particular sense and hence the particular truth-conditions of the sentence. (On Frege's own account of the matter, this holds good only for assertions and sentential questions; but, as we have seen, if a theory of meaning of this general structure is possible at all, the procedure should be able to be extended to commands, requests, expressions of desire, etc.) (Dummett, Michael, 1973, p. 416, his emphasis; see also his ch. 10, pp. 295–363.)

Force is embodied in rules of dialogue which require those who engage in discourse to behave in particular ways. Wittgenstein said, "For a *large* class of cases – though not for all – in which we employ the word "meaning" it can be defined thus: the meaning of a word is its use in the language" (Wittgenstein, 1953, I § 42, pp. 20^{e}, his italics). We are investigating *conduct*, governed by normative rules, rather than regularities of behavior.[2] He is celebrated as an advocate of an anti-theoretical and pragmatic approach to linguistic meaning. In his (1953, i. § 54, p. 27^{e}), he distinguishes between (*i*) practices governed by explicitly formulated rules, (*ii*) practices governed by rules, whether formulated or not, and (*iii*) practices open to normative assessment, whether or not practitioners are aware of consulting or being guided by anything. Though we may try to formulate the proprieties of conduct explicitly as rules, explicit rules presuppose norms implicit in practice. A rule can govern conduct only if it is applied correctly, and if this correctness in turn also had to be formulated explicitly, we should be faced with an infinite regress. The regress can be avoided only if at some point there are practices of distinguishing correct from incorrect conduct which

have not been formulated into explicit rules (Wittgenstein, 1953, I. § 201, p. 81e; Brandom, 1994, pp. 20–21).

Linguistic interaction is governed normatively, at least in sense (*iii*) of Wittgenstein's list, by being open to assessment. Indeed, those who behave improperly are subject to sanctions. If you agree to "Tiree is a blue wren" then you must agree to "Tiree is a bird" if asked or withdraw you earlier agreement, and that "must" is enforced by other speakers of the language. (Quine speaks of "bizarreness reactions" in such circumstances, 1951, § 3, p. 53; cf. Mackenzie, 1984). The ways in which speakers of a language enforce its rules on those of their fellows who disobey them are familiar to all of us. Brandom elegantly relates an illustrative anecdote:

> 'Having several times committed himself to the claim that a wolf is present (thereby licensing and indeed obliging others to draw various conclusions, both practical and theoretical) under circumstances in which he was not entitled by the evident presence of a wolf to undertake such a commitment and to exercise such authority, the boy was punished – his conduct practically acknowledged as inappropriate – by withdrawal of his franchise to have his performances treated as normatively significant (1994, p. 180).

The similarity of the ways speakers enforce the rules in widely different times and cultures can be seen from the fact that a version of the same story was told by Æsop (*Fab.* § 196, p. 200).

The phenomena in which we are interested are constituted by linguistic interaction, by dialogue; but a proper subset of them have been studied in detail in the context of logic and are very familiar in that setting, and we can take advantage of this familiar, and strictly speaking misleading, context in describing them here.

Assertion lies firmly within the realm of normative rules and appropriate linguistic action. Assertion is distinguished, indeed constituted, by its inferential role. Parrots and thermometers may reliably produce what appear to be true assertions in, and only in, appropriate circumstances; but these are not assertions at all, merely responses, because parrots and thermometers do not engage in giving and asking for reasons. Brandom explains: "The parrot does not treat 'That's red' as incompatible with 'That's green,' nor as following from 'That's scarlet' and entailing 'That's colored' " (1994, p. 89). The same point had been made much earlier by the pirate Long John Silver, speaking of his parrot Cap'n Flint: "Here's this poor innocent bird o' mine swearing blue fire, and none the wiser, you may lay to that" (Stevenson, 1883, ch. 10, pp. 96–7).

2. Statements

For expository purposes, we may help ourselves to a set of *statements* or indicative sentences, as deployed in an ordinary one-speaker (monolectical) logical system, with the apparatus of connectives, operators and quantifiers, and the taxonomy of statements – negations, conditionals, universal generalisations, and so on – constituted by that apparatus. What the rules allow a participant to say at a particular stage of a dialogue may depend, in several ways, on what has already been said by or to that participant. To allow for this it is convenient to imagine that with each participant is associated a *store* on or in which (tokens of) locutions are inscribed and from which they may be erased, depending on what occurs in the dialogue. A participant in dialogue is thus being taken to be a temporally extended object. (Recall Locke's definition of a *person* as "a thinking intelligent being that has reason and reflection and can consider itself as itself, the same thinking thing in different times and places", 1690, II. xxvii. 9 = 1961, vol. 1, p. 280, which made reidentifying a person at different times central to the concept).[3] In *Fallacies*, Hamblin calls this store a *commitment store* (1970, p. 257). The word "commitment" may suggest a belief, even an especially fervent belief; but this suggestion is misleading. Participants in dialogue need not believe their current commitments, nor need they commit themselves to everything, or indeed anything, they believe. Some participants in dialogues, for example corporate bodies and machines, may be regarded as being incapable of having beliefs.[4] In the notes distributed to his logic classes in 1979 Hamblin used the word *tally* rather than *commitment*, perhaps to prevent students from mistakenly thinking that a commitment was a belief (1979, pp. 3–4). He said that "... the primary theoretical job that commitment-stores do for us is to provide us with a dialectical definition of statements" (Hamblin, 1970, p. 265), as the central class of locutions to which participants become and cease to be committed in the course of a dialogue. Things other than statements, such as observations, may justify a statement. A statement may justify something other than a statement, such as an action. But only statements can serve in both roles, and it is in the first instance to statements that participants become or cease to be committed.[5]

3. Questions

A question is a speech act which is grammatically marked as needing to be followed by a speech act which is an *answer* to it; the answer typically

must have a different participant as its speaker, and have an identifiable relation to the question, being either syntactically related to it or of a specific kind which may serve as an answer to many questions. This characteristic of questions means they can be used for finding out something which the answerer knows but the questioner does not, and also for finding out whether the answerer knows something which the questioner already knows (teachers often employ questions in this way), and also for eliciting admissions. People are creative and rule-subverting, and develop the practice of exploiting the requirement for a question to be answered by asking what appears grammatically to be a question to make a substantive point, the rhetorical question.[6] Questions can be added to the language of a monolectical logic in at least two ways. The first is with a *locution modifier*, an expression which, when prefixed to a statement, forms a locution which is not a statement, in this case the corresponding sentential question. From the statement "p" we construct the question "$?p$", to be read as "Is it the case that p?". Sentential questions may have no effect on commitments. A second way is to introduce expressions corresponding to *interrogative pronouns*, occupying the places of quantifiers. If "$\exists x, \varphi x$" is to be read "Something is φ", then "$Qx.\varphi x$" would be the question "What is φ?". By saying "What is φ?" a participant becomes committed to "Something is φ").[7]

What is said after a question, the response to it, may be of various kinds – *I don't know*, or *I didn't understand the question*, for example, are allowable responses to most questions. Among the responses to a question are those which are either themselves statements syntactically related to the question (as "p" and its negation are each related to the question "$?p$") or specify a particular statement syntactically related to the question when they occur as a response to that question (as "Yes" and "No" do for sentential questions, for example, and as "The Sparrow" does as a response to "Who killed Cock Robin?"), and in each case the answerer becomes committed to that related statement.[8]

4. Withdrawals

Making a statement, or in some circumstances not objecting to a statement made by somebody else (Hamblin, 1970, p. 274), adds that statement to one's commitment-store. But a commitment can be cancelled. There may be several kinds of locution whose utterance removes commitment to a particular statement, perhaps together with other effects. The most direct is a locution which simply removes any commitment its speaker may have had

to the statement it specifies, which we may call a retraction or *withdrawal* (and specifically, the withdrawal *of* a particular statement). One may withdraw a statement to which one has had no commitment. The withdrawal of a statement can be formed directly from the statement by another *locution modifier*, reulting in a locution which is a withdrawal rather than a statement. The resulting locution may be read "I'm not sure that p".

5. The core of pragmatics

So far we have been listing various kinds of speech acts and noting features of the use of each. But speech acts do not occur just one by one; they form a system. A speech act is a *move* in a dialogue *game*. "In the long run, whether a given locution is or is not a statement, question or the like depends upon its place in a dialectical system, and not vice versa" (Hamblin, 1970, p. 259).

> One of our first ideas about language is that there are different species of words – nouns, pronouns, adjectives, verbs and so on. As we learn more about language, we come to see that these species, much refined, reappear as categories in terms of which we frame rules; and these rules, from among all possible strings of English words, exclude most as not being sentences. These rules are the rules of grammar. Another of our first ideas about language is that there are different species of sentences – statements, questions, commands, and so on. Were we to learn more about language, we might come to see that these species, much refined, appear as categories in terms of which we frame rules. These rules, from among all possible strings of English sentences, would exclude many as not being intelligible discourses. One such rule, for example, would be some refinement of the idea that questions must be answered. That there should be rules of that kind is necessary if we are to explain how *communication* – as against independent vocalizers scattered about the landscape uttering sentences into a lonely void – is possible. (Mackenzie, 1984, p. 345b, emphasis in original.)

The most crucial relationship in pragmatics is one which connects several species of *force* in Dummett's sense. Let us use the term "statement" for a sentence whose utterance constitutes an assertion in the absence of special circumstances.[9] A main class of things to which participants may become committed are statements in this sense. The heart of pragmatics lies in the rules governing the relation of a set Γ of statements to a different, syntactically related, statement s, which require that if a person has asserted or accepted the statements in Γ (say, "Every human is mortal" and "Socrates

is human"), that person *must not* deny, question, express doubt about, or ask for reasons to accept the statement s (say, "Socrates is mortal"), and *must* affirm it if asked. Thus the different kinds of speech acts – statements, questions, expressions of doubt (withdrawals), and any others which may be identified – are governed by proprieties which connect them and their functions to each other. The relation is commonly expressed in shorthand form as: From Γ, s may be inferred.[10] These pragmatic rules constitute the practice of inference and the avoidance of inconsistency in communication (Mackenzie, 1984, 1990).

The primary way in which this core relationship appears in dialogue is through participants' ability to demand consistency from one another. Consistency is a concern of all human use of language except where someone talks without any attention to whether what is said is true or false. Some nonsense verse may qualify,[11] but much achieves its effects precisely by being deliberately inconsistent either with other parts of itself or with common knowledge (e.g. Carroll's "The sun was shining on the sea", 1871, ch. 4, pp. 233–6) and therefore is concerned with consistency. Heidegger's *Gerede* (idle talk) 1927, p. 213) has a structure of transitive authority and hence does not completely disregard truth and consistency. "Humbug" in the sense of Black (1985, p. 143) and "bullshit" in the sense of Frankfurt (2005, pp. 33–4) may be instances, and they are precisely the kinds of discourse we feel to be nearest to lacking any meaning.

> At first sight we would suppose it to be a requirement of the statements in a commitment-store that they be *consistent*; but on reflection, we may come to think that, although there does exist an ideal concept of a 'rational man' which implies perpetual consistency, the supposition is by no means necessary to the operation of a satisfactory dialectical system. In fact, even where our ideals of rationality are concerned, we frequently settle for much less than this; a man is 'rational', in a satisfactory sense, if he is capable of appreciating and remedying inconsistencies when they are pointed out. (Hamblin, 1970, pp. 263–4, his italics).

Participants in dialogue need a kind of speech act with which to call an interlocutor to account for what appears to be an immediate inconsistency, and to which (in the first instance) the other must reply by withdrawing one or other of the set of immediately inconsistent statements. Subsequently replies which adopt other strategies may be explored: for example, removing the immediate inconsistency by pointing to an equivocation (Mackenzie, 1988). But as Lewis Carroll drew to our attention, it is not sufficient just to remove inconsistencies. A participant becomes liable to an objec-

tion for immediate inconsistency not only by adding (or allowing to be added) a commitment to something immediately inconsistent with her existing commitments, but equally does so by doing anything which would *remove* a statement immediately implied by her existing commitments. We must not express doubt about, or ask what reason there is to accept, or do anything else which would withdraw our commitment to, a statement which immediately follows from others among our commitments. This is what the Tortoise failed to do in his instructive dialogue with Achilles (Carroll, 1895; Mackenzie, 1979). (A dialogue strangely misunderstood by Deleuze, 1990, p. 20.)[12] The idea is that if the sequent $\Gamma \vdash s$[13] is an immediate consequence and I am committed to all the elements of Γ, then (*a*) though I do not need to affirm s, I must agree to it if asked; (*b*) if I say something t immediately inconsistent with s, then I may be called to account and must then withdraw either t or an element of Γ; and (*c*) (Carroll's point) that if I say something which has the effect of removing s from my store, then I may be called to account and must then either admit (affirm) s or withdraw an element of Γ. The meaning of the sequent $\Gamma \vdash s$ in the sense relevant to dialogue is that a participant who does anything which has the effect either of adding something inconsistent with s or of removing commitment to s when committed to all elements of Γ becomes liable to an objection which will require readjustment of the participant's store to consistency on the matter of whether s.[14]

In practice, an inconsistency can be apparent only if it is fairly immediate. Most interlocutors would object to somebody who was committed to the premisses of an Aristotelian syllogism denying or expressing doubt about its conclusion. Hence our example above where Γ is "Every human is mortal", "Socrates is human" and inconsistence arises from "It is not the case that Socrates is mortal" or "I'm not sure that Socrates is mortal". Properties of familiar relations are also immediate. People object if one denies "$a\mathrm{R}c$" when committed to "$a\mathrm{R}b$" and to "$b\mathrm{R}c$" where R is a transitive relation (e.g. one denoted by a comparative adjective, as "is taller than") or denies the converse of a symmetrical relation to which one is committed (denies "$b\mathrm{R}a$" when committed to "$a\mathrm{R}b$", where R is a symmetrical relation like "is near"). However, an inconsistency which requires a page or so of mathematical reasoning is not immediate enough to be a ground for objection in ordinary, or even in mathematical, conversation. Notoriously, Frege became aware of the inconsistency in his system only after his attention was drawn to it by a letter from Bertrand Russell (1902; Frege, 1903). Mathematicians have proved the equivalence of the Axiom of Choice to many other propositions (Rubin & Rubin, 1985), but in most cases these equiv-

alences are not obvious, and though anybody who affirmed the Axiom of Choice and denied one of the other propositions would be inconsistent, the inconsistency would not be apparent to most people.

> We should reflect, too, that consistency presupposes the ability to detect even very remote consequences of what is stored, and that this would itself make nonsense of certain kinds of possible dialectical application. Could we model a discussion, between mathematicians, of the validity of a certain theorem, if we had to model the mathematicians themselves as all-seeing? In a discussion of a proof a participant may be committed to one step, but not yet committed to the next, which may be still under discussion. This, at least, is the sense of 'commitment' relevant to dialectical systems: others may use what sense they may. (Hamblin, 1970, p. 264).

How adept participants are at recognising implications and inconsistencies – which ones are immediate for them, and which are not – obviously differs among individuals, and also among topics being discussed. Expertise in a field includes the ability to recognise as immediate implications which those without that expertise need to have explained.[15] Often too, those with expertise can recognise that two statements which seem to outsiders to be inconsistent can actually be true together under certain conditions. It is also possible that a set of statements some would regard as inconsistent in all cases is seen by others as actually consistent – that some people have in this sense a different logic from others. Intuitionist mathematicians, followers of Brouwer and Heyting, may be willing to agree to "Not every statement has a truth value", but not to concede "Some statement has no truth value", though for those accustomed to classical logic the former immediately implies the latter. Followers of Meinong may affirm "There are some things which do not exist", which to classical logicians is self-contradictory. In dialogues between those who follow different logics, only what is immediately inconsistent according to both logics will justify an objection for immediate inconsistency.

When called to account for what seems an immediate inconsistency, there is at least one thing I may do other than withdrawing what I wrongly denied or affirming what I wrongly removed, namely to adopt a defence of equivocation. Thus if I am committed to "Every duck is female" and to "Donald is a duck" and have denied or withdrawn (etc.) what follows validly from them, "Donald is female", I may remove my liability to objection by *distinguishing* two senses of "duck", as applying on the one hand to all waterbirds of a certain kind (the hunting sense), and on the other hand to adult female birds of that kind (the barnyard sense, in which ducks

are contrasted with drakes and ducklings). I can then retain my commitment to "Every duck in the barnyard sense is female" and to "Donald is a duck in the hunting sense" while rejecting "Donald is female", since it is not an immediate consequence of those two commitments.[16] Other kinds of locutions may be introduced and the properties of the rules governing their use explored.

6. Argument

Explicit argument can be introduced to dialogue in various ways. A convenient one is to specify the *challenge* of a statement, a locution which like a withdrawal removes any commitment the speaker may have had to the statement challenged but which also requires the other participant either to dispense with commitment to the statement or to give a *ground* for accepting it. Thus if Ann says the challenge of "p", Bob must respond either by saying the withdrawal of the statement challenged, "I'm not sure that p", or by retaining (or adopting) commitment to "p" and providing an argument for "p", of the form "Because q".[17] This response would be taken as committing Bob both to "q" and to "If q then p". It is commitment which makes clear the difference between the challenge or demand-for-evidence sense of "Why?", "How is it known that?", which leaves the challenger not committed to the statement challenged, and the speech acts performed by other senses of "Why?", such as "How come?" (Aristotle's efficient cause) or "What for?" (final cause), each of which presumes that the respondent remains committed to the statement about which "Why?" was asked. The ascription of the conditional relating the ground offered to the statement challenged ("If q then p") in effect makes explicit the arguer's claim to the validity of arguing from q to p, a claim implicit in using q as a response to a challenge of p. The conditional may be only contingently true, and is so in most actual argument.[18]

Considerable effort has been expended by logicians over the past fifty years or so in developing systems of monolectical logic in which *ex impossibile quodlibet* does not hold, that is, in which it is not the case that from a contradiction any statement whatever can be inferred. (Fine, 1974; Anderson & Belnap, 1975; Routley, Meyer, Plumwood & Brady, 1983; Read, 1988; Anderson, Belnap & Dunn, 1992; Priest, 2008) It is certainly valid in classical logic that $\{p, \neg p\} \vdash q$. In a setting of dialogue, however, there is no reason to suppose that an inconsistency will lead to a "psychotic break" (Meyer, 1975, p. 417) or to having to admit the truth of every statement:

anybody who responded to "How is it known that q?" by saying "Both p and $\neg p$" would simply become liable to a resolution demand for immediate inconsistency.

7. Speech Acts and Maps

The distinction between the functions of different kinds of speech acts is central to meaning. This can perhaps be more easily seen if we step outside language in the ordinary sense and consider such things as maps. A wiggly blue line between two black dots on a map may entitle a traveller to conclude that there is a water-course between the cities of Albury and Wodonga. But it only confers this entitlement if we construe that map as representing what the countryside is like, as having assertoric force. The map would justify quite different entitlements if we took it as a proposal, suggesting changing the countryside to be like this, or as a question, asking whether the traveller had ever been in a region like this. What Frege called force is not limited to verbal language, but is central to the communication of meaning.

Meaning is to be understood in terms of the kinds of things which may be done, correctly or not, successfully or not, in the course of participating in dialogue. An expression has meaning to the extent that it is taken to affect what may and what may not occur subsequently in the conversation (as the occurrence without a later withdrawal of both "Every human is mortal" and "Socrates is human" renders the later saying of "Socrates is not human" or "I'm not sure that Socrates is human" a trigger for a charge of immediate inconsistence). Participants treat "It's red" as precluding "It's green" or doubt about "It's colored", as something which must be admitted by those who have said "I's scarlet". Even observation reports must be inferential, that is, give rise to logical relations (and therefore constraints on later conduct in dialogue) (Brandom, 1994, p. 590).

8. Inferentialism

Inferentialism is the view that something's linguistic meaning is a matter of its inferential role. "What was needed was a functional theory of concepts which would make their role in reasoning, rather than supposed origin in experience, their primary feature" (Sellars 1975, p. 285). Two statements have the same inferential role just in case replacing one by the

other never turns a good inference into a bad one. In the most immediate sense, the only expressions which have an inferential role are statements, which can be inferred from other things, and from which other things can be inferred. (This is Kant's doctrine of the primacy of the propositional.) Strictly speaking, expressions which are only parts of statements – words and phrases, subsentential expressions – can not have an inferential role. "We therefore distinguish contents that *can become a judgment* from those that *cannot*" (Frege, 1879, § 2, p. 12, his emphasis). One of Frege's important contributions was to explain how subsentential expressions could be understood as having an inferential role in an extended sense by looking at substitution. As well as considering inferential role of the sentence "φa", we look also at sentences "φb" and "φc" and so on for the predicate "φ" and at sentences like "ψa" and "χa" for the subject term "a" (see also Brandom, 1994, p. 97)

A statement's inferential role depends on what it can be inferred from (its circumstances of application), and what can be inferred from it (the consequences of its application); thus a consequence of application of the statement "Tiree is a blue wren" has among its conseequences of application the statement "Tiree is a bird". Where these are dislocated, where the consequences of application do not follow from the circumstances of application, the statement, or more broadly the statement form, ceases to have a use. This occurs most visibly with pejoratives: to classify somebody as (to use a long obsolete example) a *goddam* it is sufficient that the person be of English nationality; but the consequences of its application include that the person be more than usually prone to committing blasphemy and disobeying the third commandment (Shaw, 1924, scene i, p. 60). If one ceases to accept the inference from being English to being prone to commit blasphemy, then one ceases to use the word "goddam". (Dummett, 1973, p. 454; Brandom, 1994, p. 126–130). Conversely, as we learn more about the world or as our prejudices change, other expressions connecting circumstances to consequences come to be used.[19] Among the circumstances of application of some (many) sentences are observations, as those who identify meaning with method of verification or with assertibility have remarked. Among the consequences of application of some sentences are actions and other non-linguistic events, as the classical pragmatists insisted. Frege's initial focus on logic and mathematics excluded the empirical and the practical, and thus in the *Begriffsschrift* he was able to consider only inferentially sufficient premisses as circumstances and only inferentially necessary conclusions as consequences. His account needs thus to be extended to include the empirical and the practical.

The earliest formulation of the idea that meaning is a matter of inference before Kant was due to Leibniz: "One thing *expresses* another (in my language) when there is a constant and ordered relation between what can be asserted of the one and what can be asserted of the other. In this sense a projection in perspective expresses its ground plan. Expression is common to all forms, and is a genus of which natural perception, animal sensation, and intellectual knowledge are species" (*To Arnauld*, 9 October 1687 = 1973, pp. 71–2.[20] Leibniz's definition of "expression" here makes essential reference to the public, inferentially articulated practice of *asserting*. He is thus distinguishing, not as Descartes did (e.g. in his 1641) between two kinds of stuff (the mental and the material), but between what is, and what is not, inferentially articulated. "It is this in which Leibniz's *rationalism* consists: that where empiricists begin with a primitive notion of *representation* and seek to ground in it whatever inferences are to be recognized (as Hume attempts to ground causal and inductive inference), he as a rationalist begins with inference and then explains the notion of representation in terms of it" (Brandom, 1981, p. 479, his italics).

Leibniz (1765, II. ix. 8, p. 137; II. xxix. 13, pp. 261–2; IV. xii. 4, pp. 451–3; etc.) repeatedly attempted to make clear that an image is not the same as a concept (or "*distinct idea*"), that is an understanding of "the nature and properties of" (p. 262) something.

> The central point is that Locke tries to use 'idea' in such a way that an 'idea of x' may be a sense-presentation of it or something like a concept or notion of it; and Leibniz repeatedly insists that these are wholly different and should not be given the same name. In his terminology, the datum of the senses is an 'image', and an 'idea' is an intellectual item which is involved in understanding, judging, defining, and so on. One wishes that Hume had been saved from Locke's conflation by reading this salutary corrective." (Remnant & Bennett, 1981, p. xvi).

9. The Pre-Kantian Assumption

The common assumption about meaning before Kant was that an explanation of linguistic meaning must begin with a theory of terms, both singular (e.g. "Socrates") and general (e.g. "human"). One would need to grasp the meanings of these before, and independently of, any other meanings. They are representations. Using their meaningfulness, we would then explain how terms are combined into assertions or propositions, and how the

truth or falsity of these depends on what is combined and how. From this account of the meaningfulness of propositions in turn we would explain how propositions are combined in inferences, and how the validity or invalidity of these depends on what is combined and how.[21]

Kant rejected this order of explanation. For him the fundamental unit of awareness or cognition is the judgement (assertion). He said, "Now the only use which the understanding can make of these concepts is to judge by means of them" (1781/7, A68 B93), and went on, "Now we can reduce all acts of the understanding to judgements, and the *understanding* may therefore be represented as a *faculty of judgment*" (1781/7, A69, B94, italics in original). Frege adopted as one of the principles of his *Grundlagen* "never to ask for the meaning of a word in isolation, but only in the context of a proposition" (1884, p. x^{e}; cf. § 60, p. 71^{e} and § 62, p. 73^{e}). "I start out from judgements and their contents, and not from concepts. ... And so instead of putting a judgement together out of an individual as subject and an already previously formed concept as predicate, we do the opposite and arrive at a concept by splitting up the content of a possible judgement" (Frege, 1881, pp. 16–17). As Dummett remarks, "In insisting on the crucial nature of the distinction between sentence and well-formed combinations of words that fall short of being sentences, and in giving a theory of meaning which offered an account of this distinction, Frege thus took a great stride forward, and contributed something that has become part of the foundation of any philosophical account of meaning" (1973, p. 4). To understand something as a term, whether singular or general, presupposes ascribing to it a role in judgement (Brandom, 1994, p. 362–3). "We have opposed throughout the view of assertion as the expression of an interior act of judgment; judgment, rather, is the interiorization of the external act of assertion." (Dummett, 1973, p. 362). Hamblin (1971) outlined inversion algorithms by which the semantic properties of a dialectical system may be recovered from the properties of the set of legal dialogues occurring within it. The pre-Kantian order leaves quite mysterious what it is for something to be a representation. The crucial, and puzzling, feature of representation is its *aboutness*: that a representation is, or purports to be, *about* something other than itself. The challenge for the inferentialist is to explain this *aboutness* without assuming what is to be explained.

10. Truth

It is perhaps worth noting in passing that this view permits a substantive response to Derrida's charge that philosophers have self-servingly fetishized

> reason-giving, which he sees as simply *one* game one can play with language, deserving no privilege of any kind relative to the myriad of others. Rather than simply ignoring him, or demonizing him as a dangerous irrationalist just for raising the challenge, on the one hand, or acquiescing in the radical conclusion he draws from what he takes to be the unanswerability of his challenge to justify the privileging he calls 'logocentrism', on the other, the pragmatic rationalist offers a responsive answer to that challenge: that our expressions play a suitable role in reasoning is an essential, necessary element of *our saying*, and *their meaning*, anything at all. Apart from playing such a role in justification, inference, criticism, and argument, sentences and other locutions would not have the meanings appealed to and played with by all the other games we can play with language. We philosophers should be proud to acknowledge and affirm our logocentrism, but should also justify it by an account of the relations between meaning and use, conceptual content and discursive practice. (Brandom, 2008, p. 43, his italics).

Donald Davidson emphasised the part that the concept of truth, and in particular the distinction between what somebody (including the speaker) thinks is so and what is so, plays in the meaningfulness of language:

> If this account of radical interpretation is right, at least in broad outline, then we should acknowledge that the concepts of objective truth and of error necessarily emerge in the context of interpretation. The distinction between a sentence being held true and being in fact true is essential to the existence of an interpersonal system of communication. (Davidson, 1975, p. 169).

How this distinction emerges was explained by Brandom in his *Making It Explicit* (1994). The essentially social notion of language use is implemented in commitment stores and in the requirement for each participant to keep two versions of each other person's commitment store:

> ... the capacity to coordinate in our scorekeeping the significance a remark has from the perspective of the one to whom the commitment it expresses is attributed and its significance from the perspective of the one attributing it. This requires recognising the different specifications of the same claim that correspond to extracting its inferential consequences and antecedents in the context of other commitments that are acknowledged true by the scorekeeper, on the one hand, and extracting them in the context of other commitments acknowledged by the target of that scorekeeping, on the other. This is just the difference between employing as auxiliary hypotheses claims that are true (according to the scorekeeper) and employing as auxiliary hypotheses claims that are merely *held* true (according to the scorekeeper) by the interlocutor whose commitments are being assessed. Thus every scorekeeping perspective incorporates a distinction between what is (objectively) true and what is merely (subjectively) held true. (Brandom, 1994, p. 598, his emphasis.)

The social perspective which results from the separating these two contexts is not *I-we*, which contrasts the individual with the community, or with everybody else, but *I-thou*, in which the contrast is that between commitments undertaken and commitments attributed (Brandom, 1994, p. 599). There can be no generally privileged perspective.

Because there cannot be a generally privileged perspective, objectivity must be understood to consist "in a perspectival *form*, rather than a non-perspectival or cross-perspectival *content*. What is shared by all discursive perspectives is *that* there is a difference between what is objectively correct in the way of concept application and what is merely taken to be so, not *what* it is, the structure – not the content." (Brandom, 1994, p. 600).[22]

To take something to be a representation is to take it to be a taking; that is, to take it to express an *attitude* concerning what there is and how things are. Its consequent liability for assessment as a successful representation (that it answers for its correctness to how things are) shows that this taking is implicitly open to the distinction between representational *attitude* (how things are taken to be by what is being treated as a representation) and representational *status* (the correctness of that attitude, which depends on how things actually are). The correctness of a representing is just this objectivity: that it is to be assessed in a way which takes the representation to answer to how things are, rather than how things are taken to be (Brandom, 1994, p. 78). By reversing the pre-Kantian order of explanation, we can begin with *assertion*, and characterise that as a social practice engaged in by people.

NOTES

[1] Work for this paper was hindered by the inadequate funding of Australian academic libraries.

[2] Those philosophical traditions, notably positivism and postmodernism, which are disconcerted by the normative must seek solace where they can.

[3] "A speaker who is obliged to maintain consistency needs to keep a store of statements representing his previous commitments, and require of each new statement he makes that it may be added without inconsistency to this store" (Hamblin, 1970, p. 257). Even if we only wish to take account of, rather than to require, consistency, some sort of record or store of statements made and not subsequently retracted will be needed.

[4] Even when Hamblin was writing, information technology already enabled corporations such as utility companies to produce letters containing false assertions about a customer's indebtedness to them without the aid of a human being.

[5] Since Hamblin wrote the study of fallacies has mushroomed, and a variety of other conceptual schemes have been drawn on. Budzynska & Witek (2014) consider the relation of kinds of speech act to the speaker's character (*ethos*).

[6] Schoolchildren may infuriatingly treat what a teacher intended as serious inquiries as merely rhetorical, deserving no answer. Conversely, sometimes people try to answer rhetorical questions. This was done unsuccessfully in:

(Grandma Simpson and Lisa are singing together, "How many roads must a man walk down?".)
Homer (overhearing): Eight!
Lisa: That was a rhetorical question!
Homer: Oh. Then, seven!
Lisa: Do you even know what "rhetorical" means?
Homer: Do I know what "rhetorical" means? (Appel, 1995).

It was done successfully on the cricket field when the Australian player Glenn McGrath said *Why are you so fat?* to his solidly built opponent Eddo Brandes of Zimbabwe, and was told, *Because every time I fuck your wife, she gives me a biscuit* [U.S., a cookie] (Portnoi, 2010).

[7] By asking "When did you stop beating your wife?", one commits oneself to "There is a time at which you stopped beating your wife". Since this is a substantive commitment – the other person need not have a wife, let alone ever have beaten her – the rules for answers to such questions need to provide that among the valid responses to the question must be the denial or expression of doubt about such a commitment; see Aristotle, *Soph.El.* 5 (167b38–8a16) and 30 (181a36–b24); and Hamblin, 1970, pp. 38–40, 215–8, 262–3, 268–9.

[8] Where a question is formed by use of more than one interrogative-pronoun analogues, a sequence of noun phrases may be necessary to answer it. "Who dragged what, at the wheels of what, how many times, round the walls of where?" should be answered "Achilles, the corpse of Hector, his chariot, three times, Troy" (Homer, *Il.* xxii, 395–405; xiv, 14–22).

[9] Quotation, play-acting, story-telling, joking, are all special circumstances which may render the utterance of a statement not an assertion of the speaker. They are contexts in which one may utter a statement without becoming committed to it.

[10] "A syllogism is discourse in which, certain things being stated, something other than what is stated follows of necessity from their being so", Aristotle, *An.Prior.* i. 1, 24b19–20. This already makes explicit the requirement that $s \notin \Gamma$.

[11] See further Hofstadter's discussion of how it is possible that Lewis Carroll's "Jabberwocky" (1871, ch. 1, pp. 191–7) and other nonsense verse can be translated into other languages, 1979. pp. 372, and the examples on pp. 366–8.

[12] Deleuze says:

"In short, the conclusion can be detached from the premises, but only on the condition that one always adds other premises from which alone the conclusion is not detachable. This amounts to saying that signification is never homogeneous; or that implication never succeeds in grounding denotation except by giving itself a ready-made denotation, once in the premises and again in the conclusion." (Deleuze, 1990, p. 20).

Sokal & Bricmont do not cite this passage in their chapter on Deleuze and Guattari (1998), but as they admit their lists of references to misuse of scientific language in Deleuze's works "are by no means exhaustive" (p. 158).

[13] Here "$\Gamma \vdash s$" may be read "from the set Γ of statements, the statement s may be derived". The term "sequent" is used in English to translate Gerhard Gentzen's *Sequenz*, because the English "sequence" was established as the translation for the German *Folge*. (On Gentzen's work on natural deduction and its relation to that of Stanisław Jaśkowski, see Indrzejczak, 1998.) The turnstile symbol "$\vdash$" comes ultimately from Frege's assertion sign (1879).

[14] Suppose I am committed to "Every human is mortal" and to "Socrates is human". These have as an immediate consequence "Socrates is mortal". (*a*) I do not need to say "Socrates is mortal", but if someone asks me "Is it the case that Socrates is mortal?",

I must answer affirmatively; and I should not ask that question myself. (*b*) I should not deny, or assert anything immediately inconsistent with, the conclusion "Socrates is mortal". To do so would result in my having immediately inconsistent statements in my commitment store. (*c*) I should not express doubt in the conclusion by saying "I'm not sure that Socrates is mortal", or ask for evidence for it by saying "How do we know that Socrates is mortal?" or say anything else which removes commitment to "Socrates is mortal". Though it would not add anything to my commitment store, for me to do something of this kind is as much immediately inconsistent as my saying "It is not the case that Socrates is mortal", and I can be called to account for it in the same way.

When justly called to account for an immediate inconsistency, I must say something which restores immediate consistency to my store. I might withdraw "Every human is mortal" or withdraw "Socrates is human", or (if I denied "Socrates is mortal"), withdraw my denial, or (if I expressed doubt about "Socrates is mortal" or in some way removed it from my store), affirm it and thus put it in my store. The same holds for other sets of locutions related by an implication which is immediate in that context.

[15] The sceptic Sextus Empiricus said, "As regards all the sophisms which dialectic seems peculiarly able to expose, their exposure is useless; whereas in all cases where the exposure is useful, it is not the dialectician who will expose them but the experts in each particular art who grasp the connexion of the facts" (*Pyrr. Hyp.* II, § 236 = vol. 1, p. 309).

[16] This example is, of course, too obvious to cause real confusion, but other cases of ambiguity can be harder to detect. Medieval philosophy relied heavily on distinguishing different senses of terms.

[17] Kacprzak & Yaskorska (2014) relate Hamblin's analysis to other systems of dialogue.

[18] It is also often not noticed that a cogent argument may exemplify a form not all instances of which are valid. Thus "If Michelle is going to the picnic, then everybody who lives at the house where Michelle lives is going to the picnic. Michelle is not going to the picnic. So, not every body who lives at the house where Michelle lives is going to the picnic." is a good argument even though it is an instance of Denying the Antecedent.

[19] The history of many scientific concepts, such as *temperature*, is interesting in this respect. "As new ways of measuring temprature are introduced, and new consequences of temperature measurements adopted, the complex inferential commitment that determines the significance of using the concept of temperature evolves" (Brandom, 1994, p. 127).

[20] Leibniz, though he did not live as we now do surrounded by devices depending on isomorphic relations for the storing and reproduction of melodies and images, nevertheless understood the point later to be made by Wittgenstein (1921, § 4.014). As Leibniz said, "But these means of expression are varied; for example, the model of a machine expresses the machine itself, a perspective drawing in a plane expresses a solid, a speech expresses opinions and truths, letters express numbers, an algebraic equation expresses a circle or some other figure; and it is because these means of expression have something in common with the other conditions of the thing expressed and studied, that we come to know the corresponding properties of the thing expressed. Hence, evidently the means of expression need not be similar to the thing expressed, so long a a certain analogy holds among the conditions of both" (1676, p. 282). And again, "For it is sufficient for the expression of one thing that there should be a certain constant relational law, by which particulars in the one can be referred to corresponding particulars in the other" (1712, § 11, pp. 176–177).

[21] This is of course the order of explanation followed in typical presentations of model-theoretic semantics. Each singular term of the language is taken to represent a particular in some domain, and each n-adic predicate is taken to represent a set of n-adic sequences of the particulars. The construction of well-formed formulae, the definition of quantification, the generation of sentences, the Tarskian definition of their truth in terms of satisfaction, the construction of arguments, and the definition of their validity in terms of set-theoretic

inclusion between truth conditions, are all then straightforward. Inferentialism reverses this order of explanation to derive representation from inference, returning to Frege's approach in the *Begriffsschrift* (1879). Compare the "inversion algorithm" of Hamblin (1971, p. 149), which provides a schema for defining semantic properties in terms of the set of legal dialogues.

[22] Arguments that objectivity in the sense of having a God's eye view is unattainable consequently miss the point, despite their widespread popularity.

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COLLECTIVE REFERENTIAL INTENTIONALITY IN THE SEMANTICS OF DIALOGUE

Abstract. The concept of a dialogue is considered in general terms from the standpoint of its referential presuppositions. The semantics of dialogue implies that dialogue participants must generally have a collective intentionality of agreed-upon references that is minimally sufficient for them to be able to disagree about other things, and ideally for outstanding disagreements to become clearer at successive stages of the dialogue. These points are detailed and illustrated in a fictional dialogue, in which precisely these kinds of referential confusions impede progress in shared understanding. It is only through a continuous exchange of question and answer in this dialogue case study that the meanings of key terms and anaphorical references are disambiguated, and a relevantly complete collective intentionality of shared meaning between dialogue participants is achieved. The importance of a minimally shared referential semantics for the terms entering into reasoning and argument in dialogue contexts broadly construed cannot be over-estimated. Where to draw the line between referential agreement and disagreement within any chosen dialogue, as participants work toward better mutual understanding in clearing up referential incongruities, is sometimes among the dialogue's main points of dispute.

Keywords: ambiguity of meaning, collective intentionality, dialogue, equivocation, intentionality, meaning, semantics

1. Introduction: What is Dialogue?

Dialogue is literally two voices. Often we expect discussion to involve the distinct opinions and reasoning of at least two different persons with different points of view developing different arguments to support their positions against those with whom they are in dialectical opposition. The authors of such dialogues must enter into the participation of thinkers representing distinct points of view, much as the playwright must do in a work of drama or comedy intended for enactment on the stage.

As limiting cases, we must therefore consider dialogues written by single thinkers expressing multiple voices from within the resources of their

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own imaginations. Philosophical dialogue is generally written by single authors, such as Ludwig Wittgenstein in *Philosophical Investigations.* Or, centuries earlier, in Anselm of Canterbury's didactic dialogues *De Casu Diaboli, De Veritate,* and *De Libertate Arbitrii.* Nor should we overlook especially Plato's more inventive nonhistorical philosophical dialogues, generally involving Socrates as dialectical hero or foil, along with those of Galileo, George Berkeley, David Hume, Nicolas Malebranche, among many others from antiquity to the present day.[1]

2. Two Voices Engaged Together in Reasoning

What is logically required if there is to be dialogue in the most general sense? We need minimally two voices, although not necessarily those of two different persons or dialogue participants. A single dialogue thinker need not be schizophrenic or exhibit multiple personality disorder. It is enough if an individual can project different philosophical positions *as though* in multi-person dialogue, to take on the argumentative stances of different thinkers at different times, in different characters, or on the basis of different assumptions. Philosophical dialogues can evolve as a result of a single thinker changing his or her mind over time, considering a proposition at one moment, and then criticizing it from as many different angles as occur sometime afterward at another.

There seems in contrast to be no requirement for dialogue to involve the articulation of logically, theoretically or practically opposed positions. In principle, a dialogue could unfold around the conversation of two voices that agree with each other and want to further develop their shared ideas. Interesting dialogues typically involve dispute, debate, argument, critique and counterargument, a little verbal swordplay. However, there are also many kinds of interesting and uninteresting genuine dialogues that meet the minimal expectations for a dialogue nonetheless, which should not be left out of account in trying to understand the concept of dialogue in its most general terms, and regardless of the interest we may attach to or withhold from any of its particular applications.

For two voices to engage in dialogue, as opposed to merely talking in turns in one another's presence, it appears logically necessary for the participants to understand at least some of each other's efforts at communication. This requirement is a matter of referential semantics, and, more specifically, where dialogue is concerned, of an ideal of collective intentionality. We can only talk with rather than past each other, and the characters in a dialogue

of one author's recollection or fictional creation can only be represented as talking with rather than past each other, if we as thinkers and speakers share a minimally sufficient referential intentionality relating thoughts expressed in the dialogue to the same referentially intended objects of dispute. Otherwise, there can be no agreement or disagreement about the meaning of the same concept, the truth value of a proposition, or the deductive properties of an inference.

3. Shared Referential Intentionalities in Dialogue

The fact that there is no simple formula for determining the exact minimum of shared referential intentionalities among genuine dialogue participants is a sign that the proper functioning and understanding of dialogue is not a purely logical matter, but involves an irreducible rhetorical dimension. That is to say that there are decisions to be made and interpretations to be chosen among possibilities of reading progress toward understanding or the reverse in the course of a dialogue, and especially in the case of philosophical dialogues.

Every successful dialogue proceeds in a different way toward securing the minimal ground for the possibility of both agreement on some things and potentiality for disagreement on others. A good dialogue is like an airplane descending from cloud bank to ground. It focuses agreement or dispute between multiple voices from a starting point of hazy cloud formation to the relatively more finely and distinctly delinated, generally conceptually more fundamental, agreements or disagreements underlying the surface disputes as they often appear already in a dialogue's opening moves.

The semantic basis for dialogue is among the outcomes of dialectical exchange occurring fictionally or reportorially within a dialogue format moving forward at least in the time it takes for an imaginary speaker uttering more than one syllable at a single instant of time. That minimal requirement should be met in every dialogue, even if the two voices offer only one syllable in reply to another syllable, and the dialogue is done. To think the content of a proposition *Fa*, that object *a* has property *F*, is already to occupy a moment of time in thought and its expression. It is not pronounced like the musical note, but as saying *a is or has property F* or *F of a*, *F applies to a*, among other forms, the real or imaginary expression of which must occupy a moment of time, depending on whether the dialogue participants are real persons whose actual historical dialogical exchange is recorded or invented for a fictional dialogue. If it seems obvious that dialogue can only take place

in real or imaginary time, at least in the time that it takes someone to read or hear more than one syllable of a dialogue spoken, it is nonetheless worthwhile to emphasize the point, and doing so here should equally not disappoint.

What we are calling the rhetorical dimension of dialogue is based among other things on the temporal dimension of points of exchange in an ongoing discussion. Timing is as important for argument as it is for comedy. The fact that a dialogue begins when voice A introduces a certain argument, chooses one out of multiple arrangements of assumptions and conclusions in constructing or at least gesturing toward an argument, and a second voice B joins the interchange at a moment of real or imagined time afterward, makes rather a difference as when B first presents the same argument as in the original application, and A then later rejoins by offering the same argument as presented before in the first application considered. It can make all the difference in the world whether A precedes B or B precedes A in real or imagined time in presenting identically the same arguments in a dialogue, for example, as to whether or not A (or B) in offering the argument in question is begging the question against B (or A), or whether or not A (B) is arguing against a straw man. If B in the real or imaginary time of the dialogue has made an argument that A then criticizes, whatever the other merits or defects of A's argument against B's argument, A can hardly be accused of knocking down a straw man, for B provides the example of a position held by B against which A's criticism is directed.

A needs to know at least an essential part of what B means, and vice versa, in order for their distinct voices to be able to interact dialogically. Otherwise, we have emphasized, they will simply be talking in succession but argumentatively past one another. The first requirement of dialogue would therefore appear to be that the several voices involved in dialogue must be capable of understanding one another well enough for there to be sufficient shared referential agreements in order to make sense of the possibility of their disagreeing. The condition is meant to apply even when the dialogue participants do not actually disagree, but merely undertake to examine a jointly accepted agreed upon thesis, in order to explore its implications or applications, without ever running into assertoric or inferential conflict with one another in their extraordinary harmony, but rather build positively in dialogue toward a more completely shared collective intentionality. It remains fair to say, for all the importance of emphasizing the possibility of sociable ideally positively cooperative dialogue, most thinkers become involved in dialogue or are represented as such in fictional philosophical dialogues, in order to thrash out differences of opin-

ion. In the process, it often results in what are generally considered to be the most successful philosophical dialogues, not to exclude any other types, that disagreements are conceptually and inferentially refined, and clarity and a better sense of the strengths and weaknesses of one's own position and that of a dialectical opponent is attained. Such progress in a dialogue marks it as successful in this sense, even if it does not result in the resolution of any outstanding philosophical problem, and even if dialogue participants remain as alienated from one another's thinking as they were at the outset.

If I have lost my sanity, and believe that I hear a voice in my head that speaks a language I do not understand, then however it may terrify or amuse me, and whatever behavioral reactions it may occasion, I will not be able to enter into a genuine dialogue with the voice or its source in some other distant part of my personality. The voice cannot caution or instruct me, if I cannot connect with its language, nor can it try to dissuade me from acting, or create obstacles for the achievement of my wants. If any of this makes sense phenomenologically, then there will be two voices that are in some sense co-present, although not in dialogue with one another, provided that at least one side does not understand at all what the other is saying. We see in such extreme thought experiments what is needed for genuine dialogue, by reflecting on exactly how these kinds of cases fail to instantiate a discussion occurring in real or imaginary time, involving at least two different voices.[2]

4. Productive Oppositions Locked in Dialogue

If we believe that there are such things as dialogues, and that minimally two voices must be able to partially understand each other in order for a genuine dialogue to occur, then dialogue participants must at least share in a collective intentionality of reference to some objects and some of their properties. Only then are they free intelligibly to disagree about others.

Where there is dialogue, there is a modicum of understanding. There must be such, even if there is as yet no agreement or disagreement on whatever substantive issues may have occasioned the dispute. There must be such, even if the understanding is only partial and most of the dialogue itself focuses explicitly on potentially irresolvable points of significant referential and thetic or judgmental disagreement. The referential presuppositions that make such dialogue possible are sometimes subject to negotiation within an unfolding dispute.

If A and B are engaged in dialogue about whether or not it is the case that p, and if p abbreviates the proposition that object a has property F, then A and B must alike at least dispositionally understand what it means for Fa to be true, or to be false, to be confirmed by reason or experience, or to be judged incapable of being determined in truth value one way or the other. This condition in turn implies that A and B at least to a minimally sufficient extent must understand the referential meaning of object constant a, the concept of property F, and of the state of affairs in which a is F, Fa.

A dialogue is not abstract. We remind ourselves of the obvious when we reflect that it takes place over time. Like a dramatic or comic performance, a dialogue can involve twists and turns of argument, shiftings of burden of proof, appearance of succeeding or failing when the opposite is true, and many other possibilities. A dialogue in this sense is sometimes like a plot unfolding at the theatre. It can happen, especially in philosophically interesting dialogues, that dialogue participants change their positions, modify their understanding of the meanings or even meaningfulness of certain terms, as their dialectical interaction proceeds.

Although dialogue participants might in principle never reach agreement about the exact meaning let alone truth value, significance, utility, or the like, of Fa in a semantic theory's preferred normative sense, in the course of a good dialogue about such a predication, typically among many other things, ancillary or inferential, interlocutors should at least come to better understand what each believes the putative predication purports to mean. If the exact meaning of Fa remains the standout in a dialogue, about which participants are unable finally to agree, it can only do so against a backdrop of wide-ranging substantive agreements on the meanings of other terms, and even concerning the truth value of many propositions, without which it would not be possible to disagree and sustain meaningful disagreement concerning the semantic status of Fa.[3]

5. Equivocation and its Resolution in Dialogue

A sample dialogue of just the appropriate kind to illustrate the previous points concerning the need for a partial collective intentionality among dialogue participants is compactly presented in an unexpected source. It is offered as part of a booklength discussion of the formal semantic interpretation of musical scores by Kari Kurkela, in his published dissertation, *Note and Tone: A Semantic Analysis of Conventional Music Notation.* The dialogue features this exchange:

(1) *Mary*: What was that piece?
(2) *John*: It was the Moonlight Sonata.
(3) *M*: Did you like it?
(4) *J*: No, I didn't.
(5) *M*: You don't like the Moonlight Sonata?
(6) *J*: On the contrary, it is one of my favorite pieces.
(7) *M*: But you just said that we heard the Moonlight Sonata and that you didn't like it!
(8) *J*: I like the Moonlight Sonata but I didn't like what we heard...

It is obvious that John and Mary do not talk about the same object all the time. In (4), for instance, John refers to a single performance whereas in (6) he speaks of an abstraction...[4]

Dialogue presupposes a convergence of partial shared references among individual participants resulting in a collective intentionality. Exactly what these are typically are not prescribed, but unfold, evolve, are discovered and revealed in the process of interchange of ideas between dialogue participants. John and Mary must each and both mean the same thing by the 'Moonlight Sonata' in order for there to be meaningful communication of the sort required by two or more voices exchanging ideas in this application. Although, if pressed, they might be unable to offer specific insight into the ontology or identity conditions for individual works of music. Otherwise, even if only equivocally, they continue to use the same words from a purely lexical or syntactical point of view, they will not be able either to agree or disagree, thereby precluding their having a genuine dialogue.

The above snatch of conversation indicates the point very simply in a perfectly ordinary exemplary interchange. Such convergence need not take place immediately or throughout a dialogue at every moment in which there is discussion. It can be part of the purpose of a dialogue to clarify precisely these kinds of malocclusions between the conceptual frameworks of dialogue participants as their viewpoints are modified in and by virtue of engaging in dialogue. Effectively, distinct voices involved in dialogue can devote much of their energy to determining of one another precisely what each participant means by some key term or terms of interest. We need only think here of Berkeley's Enlightenment (1713) [3rd edition 1734] *Three Dialogues Between Hylas and Philonous*, where two fictional but philosophically representative speakers struggle over many pages to clarify the exact meaning of the words 'matter' and 'substratum', only to conclude philosophically that the words have and can have no intelligible perceptually validated meaning.[5]

What Kurkela says about the above dialogue between John and Mary is right enough, as far as it goes. Moreover, although Kurkela does not continue his analysis in this direction, the specific word that produces equivocation in the John-Mary dialogue is not 'Moonlight Sonata'. For while Kurkela correctly remarks that John refers to something different in dialogue lines (4) and (6), semantic interest reaches back also to line (2), where John first responds to Mary's dialogue-opening question. Dialogues, as an aside, can and often do, but are under no obligation to, begin with a question, classically exemplified by Meno's impudent first line in Plato's classic dialogue, the *Meno*.[6] Since Mary begins Kurkela's dialogue, if there is to be dialogue at all, then John as the second voice must respond to Mary's question in one way or another; else they have not yet begun an actual intercommunication of voices. Hence, to underscore the obvious once again, John must understand at least part of what Mary says, in the sense of sharing a collective referential intentionality by designating at least some of the same objects or concepts in each moment of their exchange.

Rather, the equivocation on which the quickly resolved narrative arc of the dialogue turns is the species or specimen distinction equally conveyed by the same equivocal word 'piece'. What does Mary mean in her opening question when she asks John 'What was that piece?' John, if he is to answer the question and take part in dialogue with Mary, must try to understand what she means by 'that piece'. He manifestly decides that she most likely wants to know what musical work or composition had just been performed. Although it appears that Mary and John may have both attended the same musical performance, context in the case of an actual dialogue with real life dimension might further reveal that Mary was not in a position to know what was on the program for the performance, so that John reasonably assumed she wanted to know what *piece*, in the sense of musical composition, he or they had recently heard performed. It might have been Mozart, for all that John expected Mary to know, it might have been Stravinsky, rather than Beethoven, or something other than that particular work by Beethoven.

6. Convergence and Divergence of Referential Meaning in Dialogue

Mary's next question causes John to step away from his original interpretation of her instigating question. Now the equivocal word to consider is 'it', when Mary asks, 'Did you like it?' The connecting reference is that of anaphor, often ambiguous, as in the old vaudeville joke, in which one

of two workmen pressing a nail against a board, says, When I nod my head, hit it with the hammer. It could be the composition or an occasion of its performance that is intended by Mary's 'it'. Since Mary in line (3) asks, "Did" (instead of "Do") you like it?, John is cued toward a specific event in the past, the performance of the composition that they both apparently attended, rather than his appreciation for the composition in more general terms.

If Mary wanted to know about John's general sense of enjoyment for Beethoven's composition, rather than a particular performance of the piece, then most likely she would not have directed John to something specific, to the 'it', occurring in the past tense. Otherwise, if she was inquiring about a possible change in John's attitude over time toward the composition, she might have more naturally have asked, 'Did you *ever* like it?' To ask simply, 'Did you like it?', in a dialogue context concerning a musical performance, without further specification, carries a strong presumption of conversational implicature establishing the referent of 'it' as a particular performance rather than the composition generally or in the abstract. Especially is this true if context reveals that Mary may have attended such a concert performance recently with John or anyway knows that John did. We speak metaphorically of great works of art as being timeless, and something of this sense carries over to a composition, such as the Moonlight Sonata, considered independently of its performances. That this is not Mary's intention, the back-reference of her temporally backward-directed anaphoric 'it', is a prime semantic consideration clarified only through John and Mary's further dialectical interchange.

Now John understands that Mary wants to know his opinion of the particular performance he recently attended. He did not like it, and says so without further qualification in (4). Mary in (5) may assume that if you like a composition you enjoy most or even all performances of it. Or she may not be familiar with John's musical tastes or knowledge of late classical early romantic music. Her main burden is that she must now deal with the further semantic consequences of the ambiguity of 'it', introduced by her own contribution (3), and a need to backtrack through the potential referential misunderstandings in their previous exchange. She must now consider that when John says he did not like 'it', thanks to her own lack of clarity in posing her previous two questions, he may have meant, for all she knows, in any of his answers, either the composition or its recent performance. Mary fully resolves the ambiguity already in line (5), although she does not seem to know it. John reinforces in (6) his understanding in (2) of what Mary ought to have meant by 'piece'. There are musical pieces, which is to say

compositions, and there are performances of those pieces. Logically, one might admire a piece but loathe its performance, although presumably one could not absolutely loathe each and all of its performances, including those in one's own imagination, hearing the composition played virtually as one prefers and thinks it should be performed.[7]

Mary in (7) expresses her outraged sense of inconsistency at the conjunction of John's perfectly reasonable answers, but John in (8) reminds her of the aforesaid distinction. The key difference is that between musical compositions considered, as Kurkela says, in the abstract, as opposed to particular performances. John undoubtedly means colloquially to explain that he has heard such musically superior performances of the Moonlight Sonata, that the recent performance in comparison was aesthetically distinctly unrewarding. He might say that they failed to properly deliver the score, that it was a travesty of Beethoven to have his music so under-practiced and badly performed and conducted by such unaccomplished incompetent musicians, if that is his conclusion. That the performers were not putting enough passion into the performance. Or the like. Nor were the tickets for the concert given away for free, John may continue to reflect.

On the whole, John is dissatisfied with the particular *performance event.* Although, as he might put it upon further reflection or dialectical dialogical interrogation, he may again like the composition itself as one of his favorite *pieces.* A performance of a piece is not the piece itself in the usual musical jargon, and in the most natural minimal implied cultural ontology of musical entities. The distinction remains valid even in avant music, while in other arts there is talk in specific media of the concept of a 'performance piece'. By this is meant a piece that is intended to be performed, however, rather than both a performance *and* a piece to be performed, even when the performance is a performance of the performance piece.

Cross-terminologies in the performance world might therefore be at the root of Mary's use of the word 'piece' in proposition (1). It is this slippage of collective referential intentionality that seems to set poor John off in the wrong direction, as he tries conversationally to respond to Mary's original question. The only possibility for John to have headed off further ambiguity at this early point in the dialogue would have been to respond pedantically in a variant of (2), (2*) *John*: It was a performance of the Moonlight Sonata. Or more pedantically still: (2**) *John*: It was either the composition Moonlight Sonata or a particular performance of the composition Moonlight Sonata. This is not how we want John to talk in ordinary after-concert conversation with Mary. The ambiguities of colloquial exchange just as Kurkela presents them are philosophically more instructive.

7. Generalizing Morals in Kurkela's Dialogue

The dialogue fragment from Kurkela is not chosen at random. It represents minimally necessary and sufficient requirements for genuine dialogue in multi-vocal performances. The proposal is that genuine dialogue requires speakers at some point to arrive at least at a shared understanding, or mutually recognized collective referential intentionality.

Progress toward shared meanings can often take the form of resolving an initial inhibiting referential equivocation, as the Kurkela dialogue illustrates, in a productive mutually recognized collective referential intentionality that is minimally necessary and sufficient in the context of a multi-vocal performance, even for participants to agree or disagree about other propositions included in the dialogue. Here, the larger target concerns aesthetic responses to Beethoven's Moonlight Sonata, considered in the abstract as a musical composition. John and Mary, who certainly get around in the logical and philosophical literature, work toward untangling what is at first only ambiguously represented as the object referred to by Mary's dialogue initiating question, either by Beethoven's score and its most accomplished performances, which John likes, or, and as opposed to that of, a recently experienced particular performance, which, once their talk comes to focus on this referential agreement, we eventually come to understand that John definitely did not like.

The aspect of dialogue emphasized by the presumably fictional exchange from Kurkela is that it is necessary and sufficient for a genuine dialogue to occur in the course of a multi-vocal performance, as opposed to persons taking turns talking past each other in real, imaginary, or virtual presence. All that is needed for genuine dialogue is for speakers explicitly involved in dialogue or implicitly in their ongoing verbal exchange to acknowledge a quantum of mutually recognized collective referential intentionality on the basis of which they can try to work toward further agreement or better clarification of irresolvable disagreements. At some point or other in a genuine dialogue, they must be talking to each other about some of the same things. The general point is obvious, which is not to say it is always theoretically respected. The philosophical implication for argumentation theory is that what is minimally essential to dialogue is semantically deeper than the propositional level of entire assumptions and conclusions, reaching down to the referential meanings of individual words. Much the same result is reached by arguing that if assumptions are shared, then so are the meanings of some of the terms agreed-upon propositions contain. The thesis need not be denied, but neither need it be relied on as the only or even the best route

toward establishing the minimally necessary and sufficient conditions for dialogue among all multi-vocal performances. It remains worth emphasizing that the theory of argumentation has its own immediately dialogue-related justification for the conclusion independently of such Frege-inspired but still controversial semantic principles as semantic compositionality. Why should we make such commitments in understanding the concept of dialogue, if there is no need? The vital insight, as essential as it is important to keep in view in argumentation theory, can be intuitively supported by reflecting directly on the minimal requirements, necessary and sufficient conditions, for dialogue. Additionally, the selection from Kurkela depicts discussants who typify the fact that there need be no preset starting place for dialogue in any mutually recognized referential agreement, as long as there is the potential of attaining it. Progress toward the goal is successfully made with at least some mutually recognized collective referential intentionality of shared referential meanings before the dialogue closes.

The dialogue, brief as it is, when we have mined it for main points of interest, reveals essential facts about the *concept* of dialogue, how it might be appropriately analyzed, and what is minimally required for a genuine dialogue among multi-vocal performances that also include non-dialogues. At a philosophical level, the sample musical discussion between John and Mary makes it possible with little or no further equivocation or related semantic clutter to identify and reinforce in a *found application.* This means that it is not an application that has not been cooked up as a thought experiment to illustrate the present thesis concerning the nature of dialogue, but appears in print for entirely different reasons. There in its innocence we discover the minimally necessary and sufficient conditions for genuine dialogue among real historical and fictional multi-verbal performances, in the effort of two voices to come to mutual understanding of relevant referential meanings. Genuine dialogue, as opposed to non-dialogue multi-vocal performances, verbal performances involving two or more speakers, who never touch base on any referential meanings, need not entail any *thetic* disagreement, but must have the potential to work toward a mutually recognized mutually recognized *collective referential intentionality* of speaker-shared referential meanings.

The point once made is unsurprising, for some perhaps even disappointing. It is a tautology, after all, if the situation is correctly understood. We say only that a genuine dialogue minimally requires or presupposes as necessary and sufficient conditions the realized potential at some stage of a multi-vocal performance for participant voices to achieve a mutually recognized collective referential intentionality of shared referential meanings.

The conclusion nevertheless has philosophically significant implications. It is markedly different than the Locke-Whately-Johnstone thesis that all argument involves the nonabusive *ad hominem*. John Locke, Richard Whately, and Henry W. Johnstone, Jr., all developed more or less in parallel tracks the suggestion that in order for there to be argument between different thinkers, they must agree upon the truth of at least some assumptions.[8] Here the point goes semantically deeper, in a way, but can be seen as the basis of an *ad hominem* rhetorical interpretation extended to include all genuine argument. There can be no *ad hominem* sharing of assumptions, without the mutually recognized collective referential intentionality of dialogue participants, and especially among those arguing with or against others, concerning the referential meanings of individual terms contained within the expression of agreed-upon assumptions, supposing there to be some, even where the corresponding conclusions of the arguments in question sharply disagree.

What is essential to genuine dialogue is not necessarily agreement on any shared *assumptions*, but only on the *recognition of shared referential meanings* of at least some words. Such words need not even belong to any explicit or background assumptions that genuine dialogue participants may happen to share or about which they may happen to disagree.

8. Conclusion: Disagreement Pendant on Mutual Understanding and Collective Referential Intentionality in Argument

The differences between John and Mary in their understanding of the intended references of special terms in their exchange, centering on the exact references of 'piece' and 'it' as the dialogue takes shape in imaginary time, should not be over-emphasized at the expense of their substantial agreements. John and Mary must at least implicitly believe themselves collectively to intend the same thing by 'Moonlight Sonata', the occasion on which the music was performed, and the grammar of English in this example, along with words about which John and Mary seem to be in perfect harmony, such as 'what', 'was', 'that', 'the', 'did', 'you', 'like', 'didn't', 'don't', 'on the contrary', 'is one of my favorite pieces', 'but', 'just said that we heard', and all the components thereof in all their grammatical combinatorics.

Although the word is not used by Kurkela, there seems also to be a significant agreed-upon shared reference, with no further clarification required, to whatever it is supposed to be that 'we [John and Mary] heard'. Were it not for convergence of collective intentionality on the same musical event,

John would have no easy way to resolve the ambiguity explicitly as he does in (8), between a musical composition, on the one hand, and, on the other, a particular musical event of its performance. It is the latter which they both understand and agree they 'heard', and the composition rather than the performance as what John assumes Mary wants to know by asking about the identity of 'that piece' in her opening (1). At least there seems to be no disagreement or ambiguity in the John-Mary dialogue over the performance event in question. It is only against such a backdrop of understanding that John and Mary can enter into referential confusion over other standout words, leaving the dialogue opening for ambiguity concerning what John thinks of 'that piece'. This phrase, for Mary, can apparently mean either the composer's musical composition or a musical group's performance of the same work on a particular occasion.

We learn a variety of interesting semantic requirements of dialogue from Kurkela's John-Mary conversation. Two voices exchanging different points of view or trying to resolve a question that one or more dialogue participant wants to answer, and working toward clarification of concepts or a solution to a problem. As often occurs in dialogue, even with oneself. Dialogue tolerates and even thrives essentially on a certain level of intentional disalignment between participants. They need not agree on absolutely everything, in order to understand well enough of one another the ways in which they may not agree, even if it is only in their usage of terms like 'piece', 'Moonlight Sonata', and in principle any other words, including what one of them previously anaphorically meant by 'it'. Whether there is a definite proportion of referential understanding or collective intentionality to referential misunderstanding or breakdown of collective intentionality, a limit of tolerance exists, as to how much misunderstanding a genuine dialogue can support against a backdrop of understanding and collectively agreed-upon intentionality, especially in referential convergences, is not formulaic but a matter of rhetorical judgment that is often worked out only in the ongoing course of the dialogue itself. These boundaries are not usually trivial to determine, and, in some interesting cases, they may require full imaginative participation in the dialogue exchange in order to identify exactly where disagreement occurs and how it originates, before dialogue participants can see their way clear to resolving their disagreement, if at all, once there is agreement at least as to major conflicting points in contention. Actual dialogue can extend this process far beyond the John and Mary variations, and in some instances may never actually be resolved.[9]

The optimistic conjecture, for those with faith or a track record of reliable positive experience in using dialectical methods, is that, provided there

is *any* basis for understanding, *any* shared grasp of reference or collective intentionality between two or more voices on which to build, all ambiguities can eventually be clarified in something like the way that has been described. Given enough time, physical endurance and good will on the part of dialogue participants, this level of clarity should always be within the grasp of open-minded argument between two or more voices, however disparate their respective dialectical starting places. The clarification for one another's benefit of two or more thinkers engaged in dialogue is attainable, from this perspective, even if, in contrast, agreement on the truth values of the ultimately contested propositions or application of concepts on which further disagreement centers, the differences that provide the explicit subject matter of dispute among dialogue interlocutors, is never achieved by opposing dialogue participants, and the most interesting disputes themselves are never dialectically resolved.[10]

NOTES

[1] An eloquent appeal for the importance of dialogue by a non-philosopher is offered by theoretical physicist Bohm (2004).

[2] For a counter-Aristotelian later Renaissance perspective on the logic of dialectical discourse, see Ong (2005) [1958].

[3] Here I partly follow Garrod and Anderson (1987). Another valuable resource is Reyle (1993).

[4] Kurkela (1986), pp. 136–137.

[5] I emphasize this aspect of the philosophical uses of dialogue format in my recent critical edition of Berkeley, *Three Dialogues Between Hylas and Philonous* (2013). I promote the use of dialogue format for the same reasons in the seven completed volumes of my Rowman & Littlefield series-edited, New Dialogues in Philosophy. The series includes my own *Dialogues on the Ethics of Capital Punishment* (Jacquette, 2009), alongside book-length dialogues by six other authors. As further indication of my interest in this genre, I have written article-length dialogues on a variety of topics, including Gödel sentence applications of the Turing Test in philosophy of mind (1993a), Zeno of Elea's paradox of Achilles and the tortoise in Jacquette (1993b), and the appeal and limits of idealism in metaphysics, Jacquette (2012). There is a growing literature written in and about philosophical dialogues, which I consider to be a healthy sign of interest in the format of two or more voices as an invaluable mode of conceptual inquiry. I offer further reflections on the significance of argument and sound reasoning in Jacquette (2013a). See also Jacquette (2013b) for a review of Finocchiaro's recent study of meta-argumentation.

[6] Plato, *Meno* 70a1–3: 'Can you tell me, Socrates, can virtue be taught? Or is it not teachable but the result of practice, or is it neither of these, but men possess it by nature or in some other way?' (Grube, 1981, p. 59). Meno's cheek in raising such a question would not have been lost on Plato's original readers, who would have known what a scoundrel Meno was from town gossip to the pages of Xenophon's *Anabasis*.

[7] The classic source is arguably Grice (1969). See also, from this same prolific era, Searle (1969), especially Chapter 2, 'Expressions, meanings and speech acts', pp. 22–53. Minsky (1969).

[8] A useful source is Henry W. Johnstone, Jr. (1996), with essential references to Locke and Whately. Also Johnstone (1952); (1954).

[9] See especially Walton and Krabbe (1995). Asher and Lascarides (2005). Lorenzen dialogical logics are explained in Rueckert (2011). An introductory approach with some similarities of conclusion is offered in Redmond and Fontaine (2011).

[10] I am grateful to two anonymous journal referees for insightful comments and suggestions for improvement, which have contributed to my revisions of a previous version of the essay.

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WITHOUT QUALIFICATION: AN INQUIRY INTO THE SECUNDUM QUID

Abstract. In this paper I will consider several interpretations of the fallacy of *secundum quid* as it is given by Aristotle in the *Sophistical Refutations* and argue that they do not work, one reason for which is that they all imply that the fallacy depends on language and thus fail to explain why Aristotle lists this fallacy among the fallacies not depending on language (*extra dictione*), amounting often to a claim that Aristotle miscategorises this fallacy. I will argue for a reading that preserves Aristotle's categorization by a quite different account of how qualifications function.

Keywords: fallacies; language; secundum quid; hasty generalization; the principle of non-contradiction

1. The Fallacy of Secundum Quid

Pickard-Cambridge translates Aristotle's (SR, §5) musings on this fallacy as follows:

> Those that depend on whether an expression is used absolutely or in a certain respect and not strictly, occur whenever an expression used in a particular sense is taken as though it were used absolutely, e.g. in the argument 'If what is not is the object of an opinion, then what is not is: for it is not the same thing 'to be x' and 'to be' absolutely. Or again, 'What is, is not, if it is not a particular kind of being, e.g. if it is not a man.' For it is not the same thing 'not to be x' and 'not to be' at all: it looks as if it were, because of the closeness of the expression, i.e. because 'to be x' is but little different from 'to be', and 'not to be x' from 'not to be'. Likewise also with any argument that turns upon the point whether an expression is used in a certain respect or used absolutely. Thus e.g. 'Suppose an Indian to be black all over, but white in respect of his teeth; then he is both white and not white.' Or if both characters belong in a particular respect, then, they say, 'contrary attributes belong at the same time'. This kind of thing is in some cases easily seen by any one, e.g. suppose a man were to secure the statement that the Ethiopian is black, and were then

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> to ask whether he is white in respect of his teeth; and then, if he be white in that respect, were to suppose at the conclusion of his questions that therefore he had proved dialectically that he was both white and not white.

Aristotle is talking here about expressions being used "in a certain respect" and "with a particular sense." Then he explains his first two examples by saying that they involve a confusion between "to be" and "to be x" in the first example and "not to be" and "not to be x" in the second "because of the closeness of the expression."

These certainly look like linguistic points and I would not want to deny that a linguistic confusion is the cause of the fallacy or that such a confusion explains why the fallacious argument could be mistaken for a good argument. However, the claim that it *is* a fallacy depending on language and not just *caused* by linguistic confusion amounts to the claim that it is some syntactic or perhaps semantic item of the expression – the subject, the predicate, or the copula – that is qualified by the "respect" or "sense," ignoring which qualification constitutes committing the fallacy. I will go through these in turn, give reasons for rejecting them, and then provide an alternative analysis of what Aristotle means by the 'use' of an expression. My basic claim is that Aristotle has a fairly austere idea of the meaning of an expression where it does not change from one use to another; what does change are factors that are, although indicated linguistically, extra-semantic, and these affect how the expression is mapped onto a truth-value.

a. Qualifying the Subject

The subject-qualifying reading takes the fallacy as involved with generalization. Because *most* of the Indian is black, it does not follow that *all* of the Indian is black, and it is only the latter that would be shown to be false by the whiteness of the Indian's teeth. The would-be refuter has taken a statement uttered as one susceptible to exceptions as if it were absolute.

This is currently probably the most popular analysis and is defended by writers as diverse as Walton (1999 & 2005), Tindale (2007) and van Eemeren and Grootendorst (1987). It basically identifies the fallacy of *secundum quid* with the fallacy known as *hasty generalization.* Certainly, hasty generalizations are fallacious. But is it the fallacy of hasty generalization that Aristotle is describing here?

The popularity of this interpretation is surprising because the textual evidence supporting this as an interpretation of Aristotle's fallacy rather than a description of a genuine but quite different fallacy is actually pretty

thin. In its favour, Aristotle does distinguish between different kinds of generalization in the *Posterior Analytics* where statements preceded by "most" are described as *qualified* and those preceded by "all" are described as *unqualified.* Thus, it may be natural to think that a fallacy Aristotle describes as "ignoring qualifications" is ignoring this distinction, making an unqualified generalization when only a qualified generalization is permissible. Against this interpretation, however, I would make five points.

Firstly, it is not clear that there are any fallacies of generalization in Aristotle; Aristotle does talk, of course, about induction, but there are no inductive arguments as such. Secondly, even if there were, "The Indian is black" does not seem to me like any kind of general statement, and it is difficult to see what could bring a person to say that it is were they not already in the thrall of a theory that demands it. Thirdly, even if the statement could be read as such a generalization, saying "This part of the Indian is black and this part of the Indian is black ..." and so on, then this statement would not express a proposition in Aristotle's sense of a single attribute copulated with a single thing, and it appears that it should. Fourthly and most importantly, it is not clear that "The Indian is black" taken in its *unqualified* sense is actually false, for in asking one to suppose an Indian to be black all over but white in respect of his teeth Aristotle does not seem to take this supposition to be in any way incoherent; there is no inconsistency in saying that the Indian is white in a certain respect but black absolutely. The textual evidence for this is in *Metaphysics* IV (§6) where he writes that "it is ... impossible that contraries should belong to a subject at the same time, unless both belong to it in particular relations, or one in a particular relation and one *without qualification*" [my italics]. This last clause is important, because the identification of *secundum quid* with hasty generalization presumed that it was false to make an unqualified statement that the Indian is black if his teeth are white, yet here we see Aristotle explicitly saying that it is *not* impossible for being-black to belong to the Indian without qualification and its contrary being-white to also belong to the Indian in a particular relation. Fifthly, it is not clear how this interpretation is meant to apply to Aristotle's first example where he distinguishes between being an object of opinion and being *simpliciter.* Aristotle here seems to be averring to the fact that we can have opinions about objects that do not exist and states of affairs that do not obtain, and that we should not be forced to say that they do exist *simpliciter* (perhaps in some kind of Platonic realm of Forms) because they exist as objects of opinion, that they should be said "to be" because they can be said "to be x"; to say this is to commit the fallacy (Knuuttilla and Hintikka,

1986). It is even harder to find any kind of generalization involved here than in the other examples.

For these reasons I reject the subject-qualifying reading.

b. Qualifying the Predicate

The predicate-qualifying reading builds the qualification into the predicate. In other words, "The Indian is white with respect to his teeth" is not to be read as "Part of the Indian (namely his teeth) is white" as it would be in the subject-qualifying reading, but as "The Indian is white-with-respect-to-his-teeth" where presumably this predicate denotes a way of being white rather than an object that is white. Then, trivially, the contrary is "The Indian is not-white-with-respect-to-his-teeth" and either of these contraries is logically consistent with the unqualified statement "The Indian is black." Kirwan (1979) gives this kind of analysis.

I reject the predicate-qualifying reading for the following reasons. Firstly, it seems just plainly odd to think of being white-with-respect-to-my-teeth as a way of being white. This does not describe a kind or intensity of whiteness – it is not being said that the whiteness is the whiteness as of teeth, which could apply equally to things that are not teeth. Secondly, this would allow predicates to be multiplied indefinitely. Thirdly, I see no textual evidence that this is a possible reading of Aristotle.

c. Qualifying the Copula

The copula-qualifying reading would say that "The Indian is white with respect to his teeth" should be read as "The Indian is, with respect to his teeth, white." This is an unusual reading that I am not sure is actually defended. Although Aristotle says that the arguer in the first two examples might confuse "to be" and "to be x", yet he does not claim that the arguer equivocates between them. Perhaps this is because the copula "to be" is syncategorematic and as such does not have a meaning at all, making it nonsensical to speak of two of its occurrences being similar in appearance but disparate in meaning, as we must if we are to claim an equivocation or ambiguity to be responsible. Similarly with "to be, with respect to y, x" and "to be, with respect to z, x". Although neither of these are syncategorematic, if Aristotle had claimed some kind of equivocation, it seems to me that he would simply have classed this case along with the fallacy of ambiguity or perhaps of form of expression, and would be saddled also with an indefinitely large number of copulas. That he doesn't do this suggests that these do actually have the same meaning, where meaning for Aristotle must be a more austere conception than it is for most modern theories.

In the next section, I will give an alternative analysis that preserves Aristotle's categorization and that I take to be consistent with the text. What is qualified when one speaks "in a certain respect" is not part of the content of what is uttered, but a condition of its being uttered; for example, a condition for the application of the predicate such that "The Indian is black" can be stated absolutely even when parts of it are white. It is only utterances uttered under the same conditions for which logical principles are applicable and ignoring such qualifications amounts to misapplying logical principles, that is to say, applying them when they are inapplicable.

2. A non-linguistic analysis

I will focus on the Principle of Non-Contradiction as my logical principle. In modern logic this is usually expressed as something like $\neg(p \wedge \neg p)$ but, Aristotle's being a tensed logic, it is by no means contradictory for "The Indian is black" and "The Indian is white" both to be true (or false) – what cannot be the case is that black and white be truly attributed to the Indian at the same time and in the same respect. Thus, Aristotle gives the Law of Non-Contradiction in *Metaphysics* IV (§3) as "the same attribute cannot *at the same time* belong and not belong to the same subject and *in the same respect*" [my italics]. Expressions being used "in a certain respect" and "with a particular sense" as stated in the fallacy of *secundum quid* in the *Sophistical Refutations* obviously parallels an attribute belonging "in a certain respect" or "in a particular relation" to its subject and has nothing at all to do, I dare say, with the qualified and unqualified generalizations of the *Posterior Analytics*.

We can only apply the Principle of Non-Contradiction if the expressions are used in the same respect and at the same time – the semantic value of the expression does not, on its own, determine a truth-value. The fallacy of *secundum quid* is committed when we try to apply this principle to a situation where it is inapplicable, that is to say, where the expressions are not used in the same respect and at the same time. This is a purely logical error and does not depend on language, as I hope to show.

I have already raised problems with treating the qualification as qualifying the meaning of the expression; it is not the case that the expression means something different on each occasion – the semantic value of the expression does not change. Therefore, *secundum quid* is not a fallacy due to double meaning. Just because it is not due to double meaning does not in itself establish that *secundum quid* is not a fallacy depending on language,

since not all fallacies depending on language are due to double meaning: the fallacy of form of expression and the fallacies of composition and division are not. Is there a resemblance to any of these fallacies strong enough that we may nevertheless count *secundum quid* among those fallacies depending on language or what Aristotle calls the fallacies *in dictione*?

There is a similarity between this example and the following example Aristotle gives of the fallacy of composition (SR, §4):

> Upon the combination of words there depend instances such as the following: 'A man can walk while sitting, and can write while not writing'. For the meaning is not the same if one divides the words and if one combines them in saying that 'it is possible to walk-while-sitting' and write while not writing. The same applies to the latter phrase, too, if one combines the words 'to write-while-not-writing': for then it means that he has the power to write and not to write at once; whereas if one does not combine them, it means that when he is not writing he has the power to write.

One could perhaps say that the contraries walking and sitting are not both being truly attributed in the same respect and at the same time, thus making it a fallacy of *secundum quid*. Taking respect and time into account, we do not get the impossible to instantiate because of the self-contradictory conjunctive predicate walking-and-sitting.

However, in this case we are talking about what a man can do, and it is not being argued that his power of walking-and-sitting is derived as a consequence of its being true at t1 that he is walking and its being true at t2 that he is sitting. We are not told whether either of these is true – maybe he has spent his entire life lying down. This does not affect what he *can* do, except in the trivial sense that it is impossible for a man already lying down to lie down. In the fallacy of composition the problem is the linguistic one of the proper semantic function of the phrase "while sitting" and the mistake is to take it as further determining (adverbially modifying) the predicate, thus assigning the wrong semantic value. It is this that makes it fundamentally dependent on language.

So, it does not seem that the *secundum quid* can be assimilated to any fallacy *in dictione*. In contrast, I think that one of Aristotle's examples of a fallacy *in dictione* is better handled when seen as a case of *secundum quid*. This example is given by Aristotle as a fallacy of ambiguity:

> 'The same man is both seated and standing and he is both sick and in health: for it is he who stood up who is standing, and he who is recovering who is in health: but it is the seated man who stood up, and the sick man who was recovering'. For 'The sick man does so and so', or 'has so and so done to him'

> is not single in meaning: sometimes it means 'the man who is sick or is seated now', sometimes 'the man who was sick formerly'. Of course, the man who was recovering was the sick man, who really was sick at the time: but the man who is in health is not sick at the same time: he is 'the sick man' in the sense not that he is sick now, but that he was sick formerly.

It seems odd to me to think of this as a case of double meaning. Can "the sick man" really mean "the man who was sick formerly"? Certainly we may continue to refer to objects using descriptions that were true but are so no longer, and perhaps we may think of this as using "sick" in a different way (a question of pragmatics), but to say that "sick" can mean "was sick formerly" is something I find peculiar. Perhaps the alleged ambiguity is less strange in Greek. But it seems almost as odd to think of "the sick man" as performing any useful referential function because it doesn't rule any men out but simply reflects the trivial fact that for reasons just given it is logically impossible for the man already in health to recover or for the man who is already standing to stand up. Even so, if "it is the seated man who stood up" is true then it is true in virtue of two attributions – one of being seated and one of standing up – and this would only be contradictory were the attributions claimed to be true at the same time, which is to say that the claim of contradiction (i.e., that he is both seated and standing up) commits the fallacy of *secundum quid* by ignoring the qualification of time. Although none of Aristotle's examples seem to ignore qualification of time in contrast to qualification of respect, to say that the person is sick and in health *at the same time* and in the same respect does seem to me be analogous to the fallacious claim that the Indian is black and white at the same time and *in the same respect*. The problem arises in the same way: the conditions for the application of the Principle of Non-Contradiction have not been met.

3. Conclusion

By the use of an expression Aristotle does not mean to imply that the content or semantic value of the expression varies with its uses. Convention, and not a minute examination of every point on an object's surface, dictates whether an object is white absolutely and without qualification. By the use of an expression Aristotle means the time at which and the respect in which the expression was uttered. Aristotle seems to put less information into the semantic component and more into an inferential component that takes

as inputs both the semantic value of what was uttered and the conditions under which (including the intention with which) it was uttered; it is these together that determine the truth-value.

Normally the conventions of language-use dictate that in, for instance, "The Indian is white" it is the present (denoted by the present tense of the copula) and the absolute sense of "white" (which is *not* the same as saying that every point on its surface is white) that is intended. If we want to make another intention explicit then we need to say something like "The Indian is white with respect to his teeth." But it is a mistake to think of "with respect to his teeth" as any part of the content or as playing any semantic role *within* the sentence. Rather, it has an inferential role. It tells you with what respect you have to speak should you wish to agree or disagree with me; it tells you what has to be the case in order for logical relations to hold. Only expressions used in the same respect (and time and place and relation etc.) have logical relations between them; no logical relation, and therefore no logical impossibility, holds between expressions used in different respects. Similarly, only an unqualified expression can contradict another unqualified expression.

The fallacy of *secundum quid* occurs when logical principles such as the Principle of Non-Contradiction are applied to expressions that are not used in the same respect. It is a logical error, not a linguistic error, even if its cause is, as Aristotle suggests in one of his examples, because "to be" and "to be something" are linguistically similar. I would add that cases where logical principles are applied to expressions that are not used to refer to the same time should also be included under this fallacy, and in fact, despite the lack of examples, in his initial characterization of the fallacy he refers to "the use of an expression absolutely or not absolutely but with some qualification of respect or place, or time, or relation". He goes on when explaining the fallacy of *ignoratio elenchi* to say that "to refute is to contradict one and the same attribute ... in the same respect and relation and manner and time in which it was asserted" (SR, §5). Thus, on my analysis the fallacy of *secundum quid* turns out to be a special case of *ignoratio elenchi* – the statement that the Ethiopian is black, even when unqualified, is not refuted when it is established that his teeth are white, nor has the would-be refuter proved dialectically that the Ethiopian is both white and not white.

This should make less tempting the idea sometimes floated that, in fact, all fallacies depend on language. This argument would go as follows. The fallacy of *secundum quid* is miscategorised by Aristotle as a fallacy not depending on language and should be re-categorised as a fallacy depending

on language. Then, by a kind of slippery slope, it may be argued that if we can do this for the *secundum quid* why not do the same for all fallacies *extra dictione*, for they all seem to have linguistic elements.

Now, I agree that all fallacies depend on language in the sense of the following thesis (T): It is the case that all fallacies have a source in language, in so far as linguistic phenomena account for the objective resemblance of a bad argument to a good argument, and hence explains why the bad argument deceives the unaware. But this is the case for fallacies *in dictione* and *extra dictione* equally – Buridan calls this linguistic aspect of the fallacy the Cause of Illusion and every fallacy has a Cause of Illusion and a Cause of Defectiveness (Buridan, 2001; Botting, 2012) – and is not what distinguishes the two classes of fallacy. The distinction rests on why the fallacious argument, whatever one's reasons for making it or thinking it good, is an example of a bad argument, or in other words, in what the badness of the bad argument and the goodness of the good argument consists (the Cause of Defectiveness). Aristotle seems to say that in the fallacies *in dictione* it consists of a difference in meaning between homonymous terms or using terms that belong to one category (in Aristotle's technical sense of the *Categories*) as if they belonged to another. But even for Aristotle this is ameliorated by his claim that all fallacies can be reduced to *ignoratio elenchi*, which is a fallacy *extra dictione*. On this basis (T) goes further in claiming that no fallacies are fallacies depending on language but depend instead on invalid inferences. It is logical validity that constitutes the goodness of those good arguments that the bad arguments resemble. There is a miscategorization after all, but in the opposite direction to that proposed, caused by a conflation between the question of what a fallacy actually is and why it occurs. Logic answers the first question, language the second (Botting, 2012).

The interpretations given of this fallacy where it depends on language are wrong and fail to capture Aristotle's correct analysis where it does not. The slippery slope is blocked at its first step. Consistently with (T), the fallacy of *secundum quid* is not a fallacy depending on language, still less does it have anything to do with generalizations. It is a logical error.

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SUPPORTING ARGUMENTATION SCHEMES IN ARGUMENTATIVE DIALOGUE GAMES

Abstract. This paper reports preliminary work into the exploitation of argumentation schemes within dialogue games. We identify a property of dialogue games that we call "scheme awareness" that captures the relationship between dialogue game systems and argumentation schemes. Scheme awareness is used to examine the ways in which existing dialogue games utilise argumentation schemes and consequently the degree with which a dialogue game can be used to construct argument structures. The aim is to develop a set of guidelines for dialogue game design, which feed into a set of Dialogue Game Description Language (DGDL) extensions in turn enabling dialogue games to better exploit argumentation schemes.

1. Introduction

Argumentation schemes have become established as useful formal argumentation tools that enable arguments to be analysed and collated according to the stereotypical patterns of reasoning that they exhibit. A large number of natural language arguments have been analysed, for example the Araucaria corpus[1], to yield several groups of otherwise undifferentiated schemes known as scheme-sets. There are three main groups of computational scheme-sets, due to Katzav-Reed [Katzav et. al., 2004], Pollock [Pollock, 1995], and Walton [Walton et al., 2008]. Schemes from any of these sets can be used within the Araucaria tool [Reed and Rowe, 2004] to annotate a specific analysed argument structure and indicate that it is an example of a specific scheme. In this context, schemes provide a mechanism for collating, comparing, and evaluating instances of arguments. This utility has enabled schemes to be adopted as a way to partition, categorise, and organise knowledge domains and to model a variety of associated reasoning methods in a way that is amenable to computational reuse. Argument schemes have been exploited across a range of domains and contexts and include within democratic deliberation [Bench-Capon et al., 2011], hypothetical reasoning

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[Bench-Capon and Prakken, 2010] and case-based reasoning [Wyner and Bench-Capon, 2007], [Wyner et al., 2011], and [Prakken et al., 2013]. More recently Bench-Capon *et al* [Bench-Capon et al., 2013] present schemes for differentiating between legal cases on the basis of social values. Schemes have also been used to guide argument generation and to suggest relevant responses within dialogue. From this perspective, when a speaker makes an utterance, and the locutionary act and associated content constitute the utterance of an element of an argument, such as stating a conclusion, then a listener has a range of responses that they can be licensed to make according to the protocol, such as exploring the basis for the argument by inquiring about the premises that support the uttered conclusion, or else by enquiring about the reasoning associated with the argument by uttering critical questions associated with the scheme.

The development of each of dialogue games and argumentation schemes has, with a few exceptions, occurred in parallel, and yet, used in concert, schemes and games are hugely complimentary. Schemes can be used in relation to dialogue games both at the development stage, to provide guiding principles for developing new game rules, and at the deployment stage, to provide guidance towards relevant lines of argument for the player to explore, to suggest appropriate responses to the expressed positions of others, and to provide a facet of strategic information which a player can use in their reasoning process in order to achieve their desired goals. However, whilst Argumentative dialogue has become a popular approach to structuring interaction, for example between people [Ravenscroft and Matheson, 2002], between people and intelligent agents [Reed and Wells, 2007] in pedagogic and mixed-initiative systems, and between intelligent agents within Multi-agent Systems (MAS) [Parsons et al., 1998] the dialogue games that are available have not fully exploited the benefits that are to be wrought from argumentation schemes. Argumentation schemes capture the constituent parts of arguments in a well-structured and constrained way, tending towards minimalism, but with sufficient additional structure to enable meta-level manipulation of arguments to be performed using automated computational tools.

This approach becomes increasingly important when argumentation tools are applied to real-world problem domains. For example, the SASSY project[2] aims to use argumentation to provide scrutability about decisions made by intelligent systems, similarly in the SUPERHUB project[3] argumentation schemes appear to be a useful way to capture the patterns of reasoning used by 'critic' agents within a multi-modal journey planner in order to identify potential plans that conform to the established prefer-

ences of the user. In both these projects, getting from the recognition that schemes might be very useful to an implemented system has proven problematic as it is not just a matter of schematising the relevant reasoning into arguments but also providing appropriate ways to interact with those arguments. Additionally it is necessary to adopt a method that is sufficiently flexible to support multiple dialogue protocols rather than attempting to design a game that accounts for all potential types of interaction. Within a knowledge domain, there may be a range of different groups of people whose communicative acts may be constrained in different ways, such as the kinds of arguments and dialogues that may occur at different levels of the legal process.

To enable dialogue games to better exploit argumentation schemes, a useful approach is to identify the range of constituent elements of extant schemes and to ensure that a given dialogue game is aware of those elements and can utilise them within a dialogue. To this end, we identify and define a property of dialogue games called *scheme awareness* that can be used to determine the degree to which a given game can exploit schemes within a dialogue and the game features that support this. Based upon this we are able to do two things:

1. Provide guidelines for the development of new dialogue games, and
2. Extend existing dialogue game description frameworks to account for scheme awareness.

Our aim in this paper is to take the approach of starting at the dialogical level, and then asking, what does it mean for a dialogue game to be able to exploit argumentation schemes? and consequently what properties does a game need to possess in order to exploit those schemes? Our aim is to provide just enough support for argumentation schemes within dialogue games so that it becomes straightforward to take an existing scheme-based knowledge base and effectively utilise that within a dialogue game.

The remainder of this paper is structured as follows; in section 2 we survey relevant background and related work and establish the need for increased argumentation scheme support in dialogue games. In section 3 we identify a set of features of dialogue games that are pre-requisites for effectively utilising argumentation schemes within dialogue games. On the basis of this we identify how dialogue games can be made 'aware' of and utilise argument schemes. Subsequently, in section 4 we identify a set of minimal alterations that must be made to the DGDL grammar to support increased scheme awareness in dialogue games described using the DGDL. Finally, we draw some conclusions and outline some directions for future work.

2. Background and Related Work

A number of approaches have been taken that attempt to unite arguments, schemes, and dialogue. The main approaches have been dialogue games that handle schemes, and description languages that variously describe arguments and or dialogue protocols. Beginning with dialogue games that handle schemes, if we envision a hierarchy of dialogue game groups organised with respect to argumentation schemes we might produce the following:

1. Games unable to utilise argumentation schemes.
2. Games able to utilise a single scheme.
3. Games able to utilise multiple/arbitrary schemes.

By 'utilise' we mean explicitly able to represent and/or manipulate either individual argumentation schemes or scheme-sets within the rules of the game. A stronger sense of the term utilise would require that the dialogue game not resort to external mechanisms such as making the implicit assumption that a human-agent will provide the necessary intelligence or that an external 'scheme recognising' computational module is available. However, under the stronger interpretation there are currently no games at level 3 so we relax this assumption to enable us to differentiate between those games that can explicitly represent some elements of argumentation schemes, such as those described below at levels 2 and 3, and those that do not explicitly incorporate any concept of argument schemes. This is commensurate with our wider goal of providing increased support for automated computational use of dialogue games and argumentation schemes and the longer term goal of this line of research is to describe games and associated game-playing engines that are self-contained and do not rely upon *deus ex machina* support for scheme recognition in order to be 'playable'.

There are many dialogue games that exist at level 1, including but not limited to Walton and Krabbe's PPD_0 [Walton and Krabbe, 1995, pp. 149–152], and RPD_0 [Walton and Krabbe, 1995, pp. 158–161], Girle's games for belief revision [Girle, 1993] [Girle, 1994] [Girle, 1996], Walton's CB family of games [Walton, 1984], and various games due to McBurney and Parsons of which [McBurney and Parsons, 2002] is representative. We point this out not to suggest that any of these games are deficient but merely to recognise that they were not designed to support the kind of linkage between schemes and dialogue that we are currently proposing. There is nothing to stop any of these games, or for that matter any of the many other games at level 1, from being enhanced with extra functionality in the form of new rules or locution types to support use of schemes, just that the basic games as

presented do not include this functionality and hence, for our purposes, they are unable to utilise argumentation schemes.

Under this approach we see that there have also been games developed at level 2, for example Atkinson's games that utilise the practical reasoning scheme of which [Atkinson et al., 2004] is representative here. The practical reasoning argument schema, denoted AS1, is as follows:

> In the Current Circumstances, R, we should perform Action, A, to achieve New Circumstances, S, which will realize some goal, G, which will promote some value, V.

Following this, Atkinson has presented various protocols, for example the PARMA protocol [Atkinson et al., 2006] for working with arguments structured using AS1, as well as a comprehensive range of critical questions associated with AS1. In Atkinson's approach, the dialogue games are carefully described to account for the dialogical interactions associated with a specific argument scheme, the aforementioned practical reasoning scheme, and are therefore not immediately applicable in other contexts, for example, replacing the practical reasoning scheme with one from the Reed-Katzav scheme-set. An earlier game due to Bench-Capon, the Toulmin Dialogue Game or TDG [Bench-Capon, 1998], is another example of a dialogue game that is explicitly based upon a specific argumentation scheme, in this case the Toulmin Argument Scheme [Toulmin, 1958]. In TDG the moves of the game correspond closely to the constituent elements of a modified Toulmin schema, in which the qualifier role has been removed and a presupposition role added, and games are played using a knowledge base in which Toulmin schemas are chained together.

There have also been attempts, albeit not wholly successful, to define how games at level 3 might work. These approaches utilise schemes in the weaker sense described earlier. For example, in [Reed and Walton, 2004], Walton's game CB [Walton, 1984] is extended to support basic integration of critical questions through the addition of a 'Pose C' move, related to posing a critical question, and support for recognising that an argument is a 'substitution instance' of a scheme.

The Dialogue Game Description Language (DGDL) [Wells and Reed, 2012] is a domain specific language (DSL) based upon the Ph.D thesis research of [Wells, 2007] for describing the rules of dialogue games, rather than an actual dialogue game itself. DGDL descriptions are underpinned by an extended Backus-Naur Form (EBNF) grammar [Wirth, 1977] which enables games to be described that are expressive, consistent, and syntactically verifiable and which is illustrated in Figure 1. Particular note should

```
System          ::= SystemID { [Game]+} | Game
SystemID        ::= Identifier
Game            ::= GameID { Composition [Rule]* [Interaction]+ }
GameID          ::= Identifier
Composition     ::= Turns [RoleList]? Participants, [Player]+ [Store]*
Turns           ::= {turns, TurnSize, Ordering, [MaxTurns]? }
TurnSize        ::= magnitude: Number | single | multiple
Ordering        ::= ordering: strict | liberal
MaxTurns        ::= max: Number | RunTimeVar
RunTimeVar      ::= $Identifier$
RoleList        ::= {roles, { Role [, Role]+ } }
Role            ::= speaker | listener | Identifier
Participants    ::= {players, min: Number, max: Number|undefined }
Player          ::= {player, id: PlayerID|RunTimeVar[, roles:{ Roles }]? }
PlayerID        ::= Identifier
Store           ::= {store, id: StoreName, owner=StoreOwner, StoreStructure,
                    Visibility}
StoreName       ::= Identifier
StoreOwner      ::= PlayerID | { PlayerID[, PlayerID] } | shared
StoreStructure  ::= structure:set|queue|stack
Visibility      ::= visibility:public|private
Rule            ::= {RuleID, scope:initial|turnwise|movewise, RuleBody}
RuleID          ::= Identifier
RuleBody        ::= Effects | Conditional [& Conditional]*
Effects         ::= { Effect [& Effect]* } | { Effect [|| Effect]* } |
                    { Effects [&||| Effects]* }
Effect          ::= EffectID( Parameter [, Parameter]* )
Parameter       ::= Identifier|Number|Commitment|SystemID|GameID|PlayerID
                    |MaxTurns|StoreName|StoreOwner|Requirements|Role
                    |RunTimeVar|Condition|Effect
Interaction     ::= { MoveID, Content [,Opener]?, RuleBody }
MoveID          ::= Identifier
Content         ::= {ContentSet|ContentVar[,ContentSet|ContentVar]*}
ContentSet      ::= UpperChar
ContentVar      ::= LowerChar | !LowerChar
Opener          ::= String
Conditional     ::= {if Requirements then Effects [elseif Requirements then
                    Effects]* [else Effects]?}
Requirements    ::= {Condition [& Condition]*} | {Requirements[ ||
                    Requirements]*}
Condition       ::= ConditionID( Parameter [, Parameter]* )
ConditionID     ::= Identifier
Commitment      ::= Content | Locution | Argument
Locution        ::= < MoveID, Content >
Argument        ::= < Conclusion, Premises >
Premises        ::= {ContentVar[, ContentVar]*}
Conclusion      ::= ContentVar
SchemeID        ::= Identifier
Identifier      ::= UpperChar [ UpperChar | LowerChar | Number ]+
String          ::= ``[UpperChar|LowerChar|Number|Symbol]+''
Number          ::= [0--9]+
UpperChar       ::= [A--Z]+
LowerChar       ::= [a--z]+
Symbol          ::= ` '|`?'|`,'|`.'
```

Figure 1. EBNF Grammar for the Dialogue Game Description Language

be taken of the Condition and Effect clauses in the grammar, which allow the set of conditions and effects used to describe the circumstances under which a move can be made, and the resulting effect of making such a move, to be specified by the game designer. This enables the total range of games that can be described by the DGDL to be extended to account for new dialogue game features without requiring alterations to be made to the grammar. An initial collection of conditions and effects was presented in [Wells and Reed, 2012] which includes the following conditions:

```
Event              ::= event( last|!last|past|!past, MoveID [,Content]?
                       [, PlayerID|Role]? [, Requirements]? )
StoreInspection    ::= inspect( in|!in|on|!on|top|!top, Commitment,
                       StoreName, [PlayerID|Role]?
                       [, initial|past|current]? )
RoleInspection     ::= inrole( PlayerID, Role )
Magnitude          ::= size( StoreName|LegalMoves, PlayerID,
                       empty|!empty|Number )
StoreComparison    ::= magnitude( StoreName, PlayerID|Role,
                       greater|smaller|equal|!equal, StoreName,
                       PlayerID|Role, )
DialogueSize       ::= numturns( SystemName, Number )
Correspondence     ::= corresponds( Argument, SchemeID )
Relation           ::= relation( Content|Argument, backing|warrant,
                       Content|Argument )
CurrentPlayer      ::= player( PlayerID|Role )
ExternalCondition ::= extCondition( Identifier [, Identifier]* )
```

and the following effects:

```
Move               ::= move( permit|mandate,next|!next|future|!future,
                       MoveID, [, Content]? [, PlayerID|Role]? )
StoreOp            ::= store(add|remove, Commitment, StoreName,
                       PlayerID|Role )
StatusUpdate       ::= status( active|inactive|complete|incomplete|
                       initiate|terminate, SystemID|GameID )
RoleAssignment     ::= assign( PlayerID|Role, Role )
ExternalEffect     ::= extEffect( Identifier [, Identifier]* )
```

An example of a minimal dialogue game, in the spirit of Hamblin's simplest dialectical system consisting of an "interchange of statements about the weather" [Hamblin, 1970, pp. 256] described using the DGDL and for purely illustrative purposes is as follows:

```
Simple{
  {turns,magnitude:single,ordering:strict}
  {players,min:2,max:2}
  {player,id:Player1}
  {player,id:Player2}
  {store,id:CStore,owner:Player1}
  {store,id:CStore,owner:Player2}
  {Assert,{p},''I assert that'',{store(add, {p}, CStore, Speaker)}}
}
```

In this "Simple" game we have a turn structure which allows one move per turn and a strict ordering of turn progression. Two players are defined, 'Player1' and 'Player2' and each player owns a store called 'CStore' in which their commitments are stored. There is a single locution available to be played, called 'Assert' whose only effect is to add the content of the assertion to the speaker's commitment store.

Because the DGDL is used to describes games, rather than being a game itself, it does not fit into the hierarchy outlined earlier. However, the DGDL may be used to describe games at any of the three levels of the hierarchy. This is achieved by incorporating support for describing game rules that deal with schemes in a manner similar to that of [Reed and Walton, 2004]. For example, when formulating a DGDL game description, rules can be introduced that enable a condition to be described using the correspondence condition predicate:

$$\text{Correspondence} ::= \text{corresponds(Argument, SchemeID)}$$

which indicates that a given argument corresponds to, or is an instance of, a particular argumentation scheme identified by SchemeID. If the condition is met then associated effects can be applied to the state of the dialogue, such as licensing the utterance of a critical question associated with the scheme. Unfortunately this approach relies either upon the players being human, and therefore possessing the ability to recognise that an argument is an instance of a give scheme, or else that the game engine has access to some external scheme identifying functionality. Whilst this circumstance is acceptable, the DGDL is meant to be able to describe games that can be played solely by humans, or solely by agents, or by any combination of the two, there is still room for a lot of improvement in the scheme handling of the DGDL. An approach leading to such an improvement is presented in section 4.

The majority of dialogue games occupy group 1 and require additional rules to enable schemes to be used. This suggests that there are two approaches to incorporating argumentation schemes into dialogue games (1) describe a new game that utilises schemes, and (2) adopt an existing game and retrofit with scheme specific functionality. In either case it is useful to enquire which properties a game must possess in order to move from group 1 to either group 2 or group 3.

Two further approaches that have some bearing on the work reported in this paper are scheme support in the Argument Markup Language (AML) [Reed and Row, 2004] and scheme support in the Argument Interchange Format (AIF) [Rahwan et al., 2007]. In [Reed and Walton, 2004] arguments and

schemes are recorded using AML, fragments of which are generated from a pre-partitioned agent belief database, and exchanged between agents during their communications. However this approach does not examine argumentative communication from the dialogical perspective but rather deals with arguments and schemes at the language level, arguments and their associated schemes are communicated entirely as content and the protocol itself is not 'aware' of the additional data available within the content, hence, it is difficult to exploit the additional context sensitive information provided by the scheme when constructing and selecting subsequent moves to perform. Additionally, AML has largely been superceded by the Argument Interchange Format (AIF) [Chesnevar et al., 2006] which provides both improved support for representing multiple conflicting and supporting arguments using a graph-based framework, but also a more fine grained integration of individual arguments and their associated schemes. This suggests that an alternative approach, that would unite arguments, dialogues, and schemes, might be to extend the Argument Interchange Format (AIF) [Chesnevar et al., 2006]. However, whilst it is true that the AIF already supports expression of arguments and schemes, it does not currently support dialogue very well. The most advanced approaches to dialogue in the AIF can be found in [Reed et al, 2008] and [Ravenscroft et al., 2009] which support for locutional elements within AIF documents, and [Reed et al., 2010]. However these approaches are currently unsupported by tooling and lack fine grained expressions for defining dialogue protocols. Furthermore, the AIF is, by definition, a high-level tool that is designed to be very flexible, enabling interchange of argument structures between disparate tools. However that is a different endeavour to the provision of basic, targeted support for schemes within dialogue games. A preferred alternative is to start with the description of dialogue games, for example as exemplified in the DGDL, and extend this to provide sufficient support for schemes.

3. Scheme Awareness

A pre-requisite for an argumentative dialogue game, before argument schemes are even taken into account, is that the game enables arguments to be expressed. An argument comprises a number of statements that are related. One statement is named the conclusion and the other statements are named premises, related such that the conclusion is said to follow from the premises. Furthermore the set of premises may be subdivided such that one is named the major premise and expresses a rule that defines how the re-

maining premises, named minor premises, support the conclusion. It should be noted at this point that the use of the terminology major and minor to distinguish the premise that acts as a rule from the other premises is merely a matter of stylistic choice and does not indicate adherence to any philosophical position on the grouping or lack thereof of constituent premises within argument.

A game should, minimally, support the expression of whole arguments as a single complex utterance. An example of this is found in the dialogue game PPD_0 in which the move named ΔSoP enables a player to utter both a conclusion, P, and its set of supporting premises, Δ within a single move. However, a more expressive game would allow arguments to be expressed either in whole, at a coarse grained level, as is found in ΔSoP or in part, at the fine grained level, by uttering individual locutions that introduce the constituent parts of a given argument, conclusions, premises, &c. piecemeal as the dialogue progresses. A piecemeal approach however enables a dialogue game to more closely model natural dialogues, an important factor in mixed-initiative scenarios. How a game supports the components of argument, whether in whole or piecemeal, affects how expressive a game can be considered to be and also lays the foundation on which awareness of argumentation schemes can be built.

Additionally, if a game allows arguments to be expressed in a piecemeal manner, then when an argument is uttered it may be completely expressed, corresponding to the principle of total evidence [Carnap, 1947], or else partially expressed, in which case the argument is enthymematic. As outlined above we assume that arguments arise during a sufficiently expressive dialogue game, and that a given argument may not have been fully expressed within the dialogue game at a given time point, although the argument may be completed at subsequent time-points in the remainder of the dialogue. This captures the idea that a dialogue is dynamic and that an under-specified argument expressed at time-point T_n may be elaborated on at some subsequent time-point $\text{T}_{n'}$. Recognising this gives rise to the question of whether the dialogue game enable arguments to be fully expressed and recognisable at the dialogue game level (as opposed to assuming that the argument can be parsed from the underlying logical language level)?

This is an important consideration because a game in which it is difficult to express fully formed and identifiable argument structures is one in which it will also be difficult to incorporate other machinery that builds on those argument structures without resorting to a *deus ex machina* solution. Many dialogue games were not intended to inform computational implemen-

tations, and yet some of them, Mackenzie's DC for example, have become influential, underpinning a range of subsequent games, either through extension as occurs in the game DE [Yuan and Wells, 2013] or through influencing the range of available locutions, as has occurred in Moore and Hobbe's game [Moore and Hobbes, 1996] and Amgoud *et al's* system [Amgoud et al., 2000] to name but two. Whilst the responsibility for handling move content can be delegated to the logical language, or content language level, the consequence is that it becomes difficult to specify rules governing the form of move content at the dialectical game level whilst also maintaining a consistent and self-contained system. The lines that delineate the logical and content language levels, the dialectical level, the argument level, and the argument scheme level are not clean cut, and there must be judicious overlap between each to enable them to work well together. For example, whilst it seems straightforward and conceptually clean to suggest that the logical language level should deal only with the expression of what is said, and the dialectical game should deal only with what is or is not allowed to be said, it is necessary that there is overlap in at least the upwards direction, from the logical level to the dialectical level. This enables the dialogue game to specify rules that depend upon not just the performative act associated with a move, but also the content associated with that move, specifying that one response is necessary if the content has one form but that another response is required if the content has yet another form. Furthermore, if computational implementations are to be made of these games, especially following the trend towards having dialogue game engines that can load different dialogue games at runtime, then it is necessary not only that the game rules are sufficiently expressive to describe the required dialogical behaviours, but also that it is feasible for the game-engine to recognise all of the conditions described in the rules.

Dialogue games should therefore be able to support the aforementioned levels of argument expression as a prerequisite to comprehensive scheme support. These are summarised as follows and constitute the requirements for sufficient expressiveness for a dialogue game with respect to argumentation schemes:

1. Assert, or otherwise express, an entire argument within a single locution
2. Assert, or otherwise express, either individually or in combination (but still individually addressable), the constituent parts of an argument within disparate locutions:
   (a) Conclusion
   (b) Major Premise
   (c) Minor Premise(s)

Minimally, an argumentative dialogue game should support at least item 1, expression of an entire argument within a locution. The remaining items merely enable dialogue games to be specified that can yield increasingly expressive, fine-grained, and more natural dialogues.

Given these prerequisites we make the fundamental assumption that every argument, regardless of whether that argument is fully or partially expressed, is associated with an argumentation scheme. Furthermore this association may be either implicit of explicit. If the association of an argument is left implicit then, for any argument that is introduced during a dialogue, the question of which specific argumentation scheme captures the expressed argument, can be asked. Without further information or processing, the scheme associated with such an argument is undefined and is labelled as such. In the OVA tool [Reed et al., 2011], which is underpinned by the AIF, anonymous schemes are represented by unnamed RA-nodes until the user specifies the actual scheme. Conversely an explicit association occurs when an argument is defined as being an instance of a specific identified scheme, this can occur in three ways during a dialogue, firstly, through some automated function that identifies which scheme the argument corresponds to, secondly, by the speaker of the argument identifying which scheme their argument is part of, and thirdly, by the respondent deciding which scheme applies to the argument and thus which critical questions can be posed. The second and third approaches are of interest because they can potentially lead to conflict, and subsequent argument about which scheme is most appropriate if the players disagree. Because there is no reliable automated scheme identification mechanism available to satisfy the first approach, it is necessary therefore that the dialogue game incorporates rules that enable the players to associate an argument, or element thereof, with a specific scheme.

We are now in a position to identify some aspects of scheme awareness, linking expressiveness with respect to arguments and argumentation schemes. Assuming that the aforementioned argument-related pre-requisites are met, a dialogue game should enable the players to express how the content of a given locution, if it is argumentative, relates to a specific scheme. Assuming that an external argumentation scheme server is available enables individual argumentation schemes to be identified and retrieved, one example of which is the AIFdb[4] which enables schemes to be retrieved programmatically by *schemeTypeID* using an HTTP/JSON Application Programming Interface (API). Given this, we can identify the following requirements that dialogue games should identify in relation to argumentation schemes, in addition to the requirements of argumentative expressiveness a game should:

1. enable the speaker to declare that an argument is part of a specific scheme, and,
2. enable the respondent to declare that an argument is part of a specific scheme.

During a dialogue, arguments rarely exist in isolation, but are linked and chained with other arguments to form more complex structures. A given statement may therefore have multiple roles acting as the conclusion of one argument, but also acting as the minor premise in a further argument. This has a bearing on the relationship between arguments, as expressed during dialogue, and schemes. For example, it suggests that every argumentative statement uttered during a dialogue is associated with at least one argumentation scheme and that game engines which support play of dialogue games should support individual statements being recorded as occupying roles in 1 or more schemes. This is particularly necessary if the game enables the players to disagree over which scheme to associated with a given argument.

Critical questions follow from the identification of an argument as being a part of a specific scheme. This licences the resulting utterance of the associated critical questions during the dialogue. A dialogue game should therefore support the utterance of relevant critical questions associated with a given scheme and an asserted argument. Once a scheme is identified, the associated critical questions should then become available using a similar mechanism to the pose locution of [Reed and Walton, 2004].

In this section we have identified a range of features of dialogue games that can be deployed in two contexts. In the first context, the features enable a determination to be made about the degree of scheme awareness that a given dialogue game has. This is useful when comparing and evaluating existing games from the literature, for example, when determining whether to adopt an existing dialogue game protocol within a given problem domain. In the second context, the features constitute the basis for a set of guidelines for how to build a dialogue game that is argumentation scheme aware.

4. Extending the DGDL

In this section we provide a minimal extension to the DGDL that enables DGDL game descriptions to be made more scheme aware. If the state of the art for argument mining was sufficiently advanced, we could rely upon automatic scheme recognition engines to identify that the content of the current locution constitutes an element of an instance of a given scheme and make that recognition, and associated data about the recognised scheme,

available to the DGDL game-engine. However, automatically recognising that an argument is an instance of a particular scheme is a difficult problem. At the time of writing, the current state of the art for argument mining is probably represented by the TextCoop platform [Saint-Dizier, 2012] which can recognise and categorise utterances according to locutional type or performative act with an impressive degree of success but does not yet categorise the recognised arguments according to the schema that they fulfill. Rather than attempt to solve that problem we shall instead attempt to circumvent it by assuming that an agent, knowing the argument that it is deploying within a dialogue, can include that information explicitly in it's utterances and thus communicate which scheme is associated with the expressed argument. By ensuring that players are explicit when uttering an argument about which scheme that argument, or part thereof, is representative of, we can obviate the need for an automated scheme recognition engine at this point. It should be noted that games described using the extended DGDL need not by scheme aware, just that this extension enables increased scheme awareness in the games that are so-described. Additionally, when a specific game is described using the DGDL, it is a decision for the game designer to make about whether it is mandatory for the players to identify the scheme associated with the utterances of a given argument. It can thus become a strategic issue of whether the player deems it necessary to inform the other player of the scheme associated with an argument.

The simplest method to extend the DGDL, taking into account the requirements and features introduced in section 3 is to introduce more structure into the content of moves whilst retaining the current flexibility of locution naming. Currently when a player makes a move they utter a locution and content, e.g. assert(p). Previous attempts to incorporate argumentation schemes have concentrated on the locution, for example, extending the basic assertion locution to account for schemes by introducing an assert_scheme_argument. However, by providing additional information into the content, we can enable the player to declare properties associated with the content during the dialogue. For example, each element of the content of a move can be supplied with meta-data by the utterer to make it clear the role that the content plays in the argument being constructed. The minimum set of meta-data that the DGDL should support to enable an item of content to be labelled with respect to its status in relation to argumentation schemes is the following:

- Label content as an instance of an argument
- Label content as the conclusion of an argument.
- Label content as the major premise of an argument.

- Label content as a minor premise in an argument.
- Label content as an element of a type of argumentation scheme.
- Label content as part of an instantiated argumentation scheme.

A simple way to extend the DGDL to account for the aforementioned content meta-data is to use one, or more, comma-separated key:value pairs to annotate asserted content during a dialogue, e.g. assert(k:v) where the keys and values are DGDL identifiers. Table 1 provides a specification of keys for each item in the list of label content given above:

Table 1

Key labels for each content type

Content Type	Key
Content is an instance of an argument	argument
Content is the conclusion of an argument	conclusion
Content is the major premise of an argument	major-premise
Content is a minor premise of an argument	minor-premise
Content is an element of an identified argumentation scheme	scheme-name
Content is an element of an instantiated argumentation scheme	scheme-instance

It should be noted in the current and following discussion that the example moves are only indicative of the kinds of moves that a game described using the DGDL might incorporate and are not excerpted from an actual game. Actual locution labels, content labels, and keys and values, would also be associated with a complete, grammar consistent rule-body that defines the legality requirements for playing the move and the resulting effects of so doing. A minimal requirement is that at least one value represents the locution's content variable, and the key indicates the type, e.g. one from the set {argument, conclusion, premise, rule}. For moves that incorporate more than one item of content, for example, to make the move assert(p,q) which asserts both p and q into a scheme-aware move, each item of content must be labelled, e.g. assert("conclusion":"p", "major-premise":"q").

Additionally a key:value pair can be used to declare that the content is associated with a specific scheme, e.g. "scheme":"slippery-slope". As an example, to assert that the statement, p, is the conclusion of an argument and furthermore that the scheme associated with the argument that this assertion is the conclusion of is an instance of the argument from expert-opinion we can use the following expression: assert("conclusion":"p", "scheme-name":"expert-opinion"). The advantage of taking this approach is that we increase the ability of players to make explicit what they mean to

say when they make a move, and by increasing the explicitness of exchanged utterances we simplify any subsequent computational processing.

When parsing a DGDL description the content of a move is read from left to right and each element that does not introduce a new element of content is associated with the content to it's left. Furthermore, each item of content may be associated with as many elements of meta-data as required until the next item of content is parsed. This enables a single declaration of content, to be labelled with as much meta-data as is required for the speaker to fully describe the status of their utterance. For example, in the following move assert("conclusion":"p", "scheme-name":"expert-opinion", "scheme-instance":"123321", "major-premise":"q"), the speaker has asserted the content, 'p' which is labelled as the conclusion of an instance of the 'argument from expert opinion' argumentation scheme and the particular instance of the scheme has the id '123321'.

To support the Key:Value content approach requires only a single alteration to be made to the DGDL grammar. The affected grammar production rule is the Content rule:

```
Content          ::= {[String:]*ContentSet|ContentVar|String
                      [, [String:]*ContentSet|ContentVar|String ]*}
```

which is altered to enable any existing expression of content to be optionally accompanied by a preprended "String:" element that represents the Key. Additionally a Key:Value clause may be used that consists of two string elements expressed thus: "String:String". It is a matter for further research to determine exactly what the set of "String" elements should consist of. In this paper we have explored the minimal set of requirements to enable an expressive labelling of move content with argumentation scheme oriented meta-data. However similar meta-data might be used by the speaker to incorporate further information associated with an utterance, for example, to label an argument with a measure of strength or an indication of certainty.

To some degree this approach is an extension of the responsibility of dialogue games to include wider responsibilities including elements of argument construction and representation. One criticism of this approach is that it risks subsuming too many elements of wider argumentation theory topics into the sphere of dialogue games. However, what we are advocating is merely the extension of dialogue games to provide sufficient support for schemes so that arguments and argument schemes can be easily utilised by dialogue games without additional processing, and so that the outputs from a dialogue game, such as the transcript of a dialogue, or the argu-

ments constructed during a dialogue contain enough structure that they can be used by tools developed for working with argument schemes. To this end we propose that there should be sufficient overlap of responsibilities to enable efficient automated sharing of data between dialogue game and argumentation scheme tools, and to enable those tools to work together, recognising that many argumentation tools now exist that are targeted at different groups of problems.

In this section we have presented an extension to the existing DGDL grammar that enables Key:Value pairs to be represented within the content portion of dialogue game moves. This enables game descriptions to associate additional information with the content of a locution thus enabling the status of the content to be declared by the players during a dialogue.

5. Conclusions & Future Work

The author holds that argumentation schemes are a useful way to organise and collate arguments when attempting to deploy computational argumentation technologies within complex real-world domains. In these contexts the system is meant to support some combination of computational efficiency, scrutability and introspection, and alignment with human reasoning and interaction processes. This holds even more strongly where mixed initiative systems are concerned in which groups of humans and agents may interact via dialogue games. This effort feeds into ongoing research that aims to align argumentative technologies with real-world problems as currently there can be quite a conceptual leap from a problem domain to deployment of argumentative tools within that domain. The aim is to provide support for the development of much better tools that support this mixed human-agent arena, where participants in a game aim to explore existing argumentative structures, or to construct, or co-construct, new argumentative structures during interactions that are regulated by an agreed protocol.

To support this, dialogue games require better support for manipulating arguments. Because argumentation schemes have become established as a *de facto* method for working with instances of arguments we predicate an increased support for argument manipulation in dialogue upon a tighter integration of said games with argumentation schemes. In section 3 we identified a range of features of dialogue games that can be used to determine how 'expressive' the game is in terms of argument elements and how 'aware' the game is of argumentation schemes.

This paper has reported on the provision of structural elements within dialogue games that enable new games to be developed that better exploit the properties of argumentation schemes, supporting the construction and exploration of argumentative structure during a dialogue, and thus easing the progression from structuring a knowledge or problem domain in terms of arguments, to interacting with that domain via dialogue games.

NOTES

[1] Available from http://http://araucaria.computing.dundee.ac.uk/doku.php.

[2] http://www.abdn.ac.uk/ncs/computing/research/ark/projects/current/sassy/.

[3] http://superhub-project.eu/.

[4] http://www.arg.dundee.ac.uk/AIFdb/.

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ARGUMENTATIVE POLYLOGUES: BEYOND DIALECTICAL UNDERSTANDING OF FALLACIES

Abstract. Dialectical fallacies are typically defined as breaches of the rules of a regulated discussion between two participants (di-logue). What if discussions become more complex and involve multiple parties with distinct positions to argue for (poly-logues)? Are there distinct argumentation norms of polylogues? If so, can their violations be conceptualized as *polylogical fallacies*? I will argue for such an approach and analyze two candidates for argumentative breaches of multi-party rationality: false dilemma and collateral straw man.

Keywords: argumentation, dialectic, fallacies, false dilemma, polylogue, straw man

1. Introduction

The argument of this paper proceeds as follows:

The chief goal of normative theories of argumentation is to define (a system of) correct argumentation and thus, *a contrario*, define fallacies: *in*correct argumentations that happen but should not. Among various possibilities, argumentative correctness can be co-defined with "intelligent interaction" (van Benthem, 2009, p. vii). An interaction is "intelligent" (rational, reasonable, critical) as long as it is governed by some idealized rules defined in a given model of interaction (or dialogue). For instance, the rules of dialectical models can guarantee that argumentative dialogues have a high error-correcting potential; ideally, errors are mutually eliminated through argumentative moves of the agonistically-minded discussants. Argumentation is incorrect (fallacious) to the extent it violates such rules. Further, an intelligent or rational interaction is, arguably, a species of the genus interaction. But what is interaction? Typically, for the purposes of argumentation theory, it is a dialogue in which two adversaries

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(proponent-opponent) argue on both sides of a contested issue, "in accordance with a set of rules or conventions" (Hamblin, 1970, p. 255). Such *di-logues*, however, do not exhaust the genus interaction. Discourse analysts recognize many other species – *tri-logues*, *tetra-logues*, etc.; for short: *poly-logues* – that generate distinctive "rules or conventions." If di-logues are not identical with poly-logues, then, supposedly, an intelligent di-logue is not identical with an intelligent poly-logue. So is there the possibility of, indeed a need for, capturing the rationality of such poly-logical interactions? That would bring to its logical consequence the idea of tying argumentative correctness (and fallaciousness) with norms of intelligent *interactions*. I argue here for a "yes" answer in three basic steps: 1) I define the concept of a polylogue and review its theoretical treatment (section 2); 2) I discuss the underpinnings of the interaction-related notion of a fallacy and argue that room for a normative model of an *argumentative polylogue* should be made (section 3); 3) I analyze false dilemma, collateral straw man, as well as some other fallacies of argumentation from a polylogical perspective (section 4).

2. Polylogue

2.1. Basic definitions

A *polylogue* is what it says – a *poly-logos*, discourse (λόγος) between many (πολύ). For the current purposes, I divide all verbal activities into either mono-logues or dia-logues.[1] *Dia-logues* comprise all interactive uses of language (to be precise: *actual* or *explicit* dialogues; *internal* or *implicit* dialogues are monological renderings of actual interactions). Based on the number of speakers, dia-logues – or simply *interactions* – are a genus that can be, quite straightforwardly, divided into the species of: *di-logues*, *tri-logues*, *tetra-logues*, etc. *Poly-logues* are thus all dia-logues which are not di-logues. Please note the distinction between dia-logues and di-logues. They are often confused due to: 1) the easily overlooked difference in Greek terms (dia-logue: 'through' discourse; di-logue: discourse between 'two'); 2) the practice, deeply entrenched in both ordinary and academic parlance, of limiting a dia-logue to a di-logue.[2] Here, I aim precisely to problematize this practice in argumentation theory.

Given the capacious, and very central, meaning of the notion of "logos" in ancient Greece – which may refer to a 'word,' 'discourse,' 'opinion,' 'thought,' 'account,' 'reason,' 'argument,' 'rule,' etc.[3] – it is common to follow Aristotle and understand "logos" with a normative edge as 'rea-

soned discourse' (e.g., Chen, 2010, p. 55; Johnson, 2000, p. 161). This paves the way for conceiving polylogues as 'reasoned' (based on reason-giving, argumentation) and thus, at least ideally, also 'reasonable' (intelligent) interactions between many.[4] Therefore, in the following, an *argumentative polylogue* will be understood as a form of verbal interaction which involves argumentation between multiple parties with distinct positions. The notions of 'positions' and 'parties' are significant here. A *position* is a verbally expressed stance (standpoint) on a disputable issue formulated as an open Wh-question: Who should be Egypt's next president? How to solve the financial crisis? In this case, we can get a genuine multiplicity of positions simultaneously defended and objected to in a multi-party dispute: there can be 12 contenders for the president's office (as there were in Egypt in 2012), and there can be many competing proposals on how to best tackle the financial crisis (see Fairclough & Fairclough, 2012).[5] Unless they are some versions of one another, such positions are contrary: if one of them holds, others are refuted; however, if some of them are refuted, no definite conclusions about the others can be drawn.[6] This is different from the polar yes/no questions, which allow for only two contradictory *sides* as answers: if one of them holds, the other does not, and vice versa (see Lewiński, 2013; Jacquette, 2007).[7]

Finally, *parties* are bearers of distinct positions along with the arguments supporting their positions: they are thus defined by what they hold and defend. In the course of argumentation, a party supports its position through arguments and starting points which build, presumably, a consistent *commitment set* (Hamblin, 1970; Walton & Krabbe, 1995). Eventually, a party can be defined as a defender of an individual *case*, that is, an ordered set comprising the party's position and its commitment set. Based on this: 1) two arguers supporting the same position (e.g., "The revolution must continue!") are different parties, so long as they express some incompatible arguments in its support ("Because it will allow us to build an Islamic state" vs. "Because it will allow us to build a secular state");[8] 2) a collectivity of participants (e.g., a political party in a parliament) is taken to constitute one argumentative party so long as they consistently argue for a given position (Lewiński, 2010). Such an understanding of argumentative polylogues differs from pragma-linguistic approaches distinguishing between each individual participant,[9] and from general philosophical approaches where "participants need not be persons" (Sylvan, 1985, p. 89).[10] It pictures argumentation as a clash of positions and arguments, rather than personalities, and thus focuses exclusively on elements pertinent to normative analysis of argumentation – a crucial requirement for discussing fallacies.

2.2. Polylogues in pragmatics

The first discipline directly relevant to the investigation of argumentative polylogues is pragmatics (in a broad sense including conversation, interaction, and discourse analysis).[11] Pragmatics – for instance in the form of Searle's (1969) speech act theory – starts from a simple schematic understanding of what interactions are:

> The speech act scenario is enacted by its two great heroes, "S" and "H"; and it works as follows: S goes up to H and cuts loose with an acoustic blast; if all goes well, if all the appropriate conditions are satisfied, if S's noise is infused with intentionality, and if all kinds of rules come into play, then the speech act is successful and [...] is concluded and S and H go their separate ways. (Searle, 1992, p. 7)

Such grounding of the speech act analysis on the simplified dualistic categories of a unified Speaker and unified Hearer has been criticized from a variety of perspectives as not being fully adequate to the task of understanding the pragmatic working of language. To this end, some pragmatic analysts have called for a shift of focus from schematic representations of interactions to "the description of all the phenomena which characterize the functioning of polylogues" (Kerbrat-Orecchioni, 2004, p. 2). Empirical studies of the pragmatic and conversational features of multi-participant interactions have examined phenomena which extend well beyond the standard rules and conventions of dyadic encounters (di-logues).[12] To start with, turn-taking – which in a di-logue between speakers A and B naturally follows the *a-b-a-b* sequences of 'adjacency pairs' (such as question-answer) – becomes a complex activity, with speakers often competing for the floor and generating convoluted patterns of conversations.[13] One of these patterns is 'interlocutive crowding' (when various speakers' topical lines interfere with one another) leading to 'splitting and resumption' (when parallel sub-discussions between subgroups emerge and then re-converge; see Traverso, 2004). Polylogues also allow for co-production of discourse by different speakers vis-à-vis their listeners, such as when one arguer sides with another one and provides arguments supporting the other's position.[14] Finally, to give but one more relevant example, speakers may strategically target their utterances to various ratified and non-ratified participants. Parents discuss between themselves, only to convey a message to their overhearing children, politicians speak to a journalist to challenge opponents and entice voters, etc. (see esp., Clark & Carlson, 1982; Goffmann, 1981; Levinson, 1988).[15] Characteristically, participants in polylogues skillfully design their discourse to take into account these phenomena. In this way, they orient their verbal contributions

to the often implicit rules and conventions of polylogical verbal exchanges which are not covered by the dyadic (di-logical) concepts.

Accordingly, the basic criticisms of polylogue analysts concern the empirical validity of the dominant dyadic scheme used in conversation analysis (with the notions such as *a-b-a-b* sequences of 'adjacency pairs') and speech act theory (felicity conditions defined in terms of dyads consisting of Speaker and Hearer): "Even if such a scheme is intended to be a model, for descriptive work it cannot be" (Hymes, 1972, p. 58). Thanks to their empirical orientation, pragmatic analyses of polylogues contribute a great deal to our understanding of the unique constraints and opportunities of actual multi-participant interactions. Yet, they reject the ambition of passing any normative judgments, whether regarding conversations at large, or their argumentative aspects in particular. Polylogical fallacies are not their concern.

2.3. Polylogues in dialectics

What remains to be investigated is how descriptive modeling of naturally occurring polylogues can be brought to bear on an interaction-based and normative argumentation theory, as developed, for instance, in dialectical models. If descriptive models of polylogues involve some additional rules and conventions for ordinary speakers, will normative argumentative models of polylogues also require some additional rules? If so, will these rules account for some new, *polylogical*, fallacies or at least provide a better account of the already recognized fallacies?

A good starting point for answering these questions are approaches to argumentation theory that are both dialectical and pragmatic. One such comprehensive approach is the pragma-dialectical theory of van Eemeren & Grootendorst (1984, 2004). Pragma-dialectics offers a thoroughgoing conceptual synthesis between speech act theory and dialectical theory. In the pragma-dialectical model of a *critical discussion*, the Speaker and the Hearer act in their dialectical roles of the Protagonist and the Antagonist performing speech acts which have argumentative relevance (advancing a standpoint, challenging a standpoint, advancing arguments, asking critical questions regarding arguments, defining, etc.). The analysis thus shifts its focus from all speech acts to argumentatively relevant ones and from descriptive to normative concerns: fallacies are those argumentative speech acts which violate the rules of a critical discussion. The question of polylogical rules becomes relevant here. If, as argued extensively by pragmatic polylogue analysts, "the speech act scenario" requires serious elaborations to adequately describe polylogues, then a speech act based *dialectical* scenario probably requires some conceptual work too.[16]

However, even a formal dialectical theory (e.g., Barth & Krabbe, 1982; Hamblin, 1970; Walton & Krabbe, 1995) might need some extensions whenever its scope is extended beyond consideration of simple di-logues between a Proponent and an Opponent. Hamblin's position makes this clear:

> The study of dialectical systems can be pursued descriptively, or formally. In the first case, we should look at the rules and conventions that operate in actual discussions: parliamentary debates, juridical examination and cross-examination, stylized communication systems, and other kinds of identifiable special context, besides the world of linguistic interchange at large. A formal approach, on the other hand, consists in the setting up of simple systems of precise but not necessarily realistic rules, and the plotting of the properties of the dialogues that might be played out in accordance with them. Neither approach is of any importance on its own; for descriptions of actual cases must aim to bring out formalizable features, and formal systems must aim to throw light on actual, describable phenomena. (Hamblin, 1970, p. 256)

Since Hamblin himself was "concerned mainly with two-person dialogues"[17] (1970, p. 257) argumentation in polylogues did not become an issue for him. Yet, some formal dialecticians have tried to bridge the gap between "actual, describable phenomena" of polylogues and "formal systems" by recognizing that not all dialogues involve just two parties. Prakken is one of them. His formal model of a "persuasion dialogue" consists of rules for only one Proponent and one Opponent, but that is because "[t]he remaining participants, if any, are the third parties with respect to [a thesis] t, assumed to be neutral towards t" (Prakken, 2009, p. 286). That is to say, the stipulated neutrality of "third parties" in a dialogue annuls their relevance for modeling argumentation. The problem remains what to do with third parties which are not neutral towards a thesis, but instead propose a third option which is contrary to what the Proponent and the Opponent argue about. A simple example is given in the next section.

2.4. Example: reciprocity vs. transitivity

Before moving to the issue of polylogical fallacies, I will present a very simple example, which also serves as an introduction to the forthcoming complications. Consider the following fragment of a polylogue between three discussants:

> A: I think we should buy an (A)merican Airlines ticket – it gets us from Lisbon to Windsor in a mere 16hrs for just € 800.
> B: I'm not so sure... Look! I found a (B)ritish Airways offer for the same price, and it takes only 14hrs.

In a di-logue, B (the antagonist of the (A)merican position and the protagonist of a contrary (B)ritish position) "wins" this line of argument without much ado – s/he has a (rather obvious) winning strategy. However in a polylogue, B can be easily "outflanked" by some other party, e.g.:

> C: If 2hrs are so important to you, how about flying Air (C)anada: 12hrs for € 800!

We can see here that the simple dyadic *reciprocity* is extended by the problem of *transitivity*. A and B are not only accountable to one another (in that, for instance, they are expected to practice what they preach), but also to "someone else." In this case, the (B)riton is killed by the (C)anadian with her/his own weapon: a better deal = a flight that is 2hrs faster at an equal price. Shortly, there is possibly a different set of considerations to be taken into account when practicing and evaluating polylogues (as opposed to simple di-logues).

3. Fallacy

3.1. Hamblin: logic as part of a dialectical system

Before discussing possible polylogical fallacies, it is worth mentioning the theoretical rationale behind considering them in the first place. Hamblin (1970) has convincingly argued that many of the so called fallacies of argument originated in "the context of disputation on the Greek pattern, as Aristotle originally intended it" (p. 33) and that they can "find their true modern home" in "the theory of the use of language in practical situations: what Carnap called Pragmatics and what we shall find reason to call Dialectic" (p. 40). He stands against some tenets of the formal logical and epistemic "concept of argument" and the resultant approaches to fallacies, which he deems, in some respects, insufficient or unnecessary (1970, Ch. 7). In a classical logical sense, *begging the question* is not an invalid inference, and a *fallacy of many questions* is not an inference at all. As is well known, Hamblin's solution is to construct formal *dialectical systems* in which, according to him, the notion of a fallacy can be most fully elaborated. That is because something is amiss in the mono-logical approach to argument that a well-developed dia-logical approach can fully grasp:[18]

> Dialectic, whether descriptive or formal, is a more general study than Logic; in the sense that Logic can be conceived as a set of dialectical conventions. It is an ideal of certain kinds of discussion that the rules of Logic should be observed by all participants, and that certain logical goals should be part of the general goal. (Hamblin, 1970, p. 256)

It is clear that Hamblin does not aim to *replace* Logic with dialectics. He instead argues, to use Wittgenstein's expression,[19] that Logic is best conceived of as a certain precisely "circumscribed region" (subset) within a broader dialectical system (superset). Thus, a dialectical system can embrace as "its own" all the logical fallacies (namely, failed deductive, and also inductive, inferences), and add those that are purely dialectical (by Hamblin's reading): e.g. begging the question (*petitio principii*). They can simply be called *dialectical fallacies.* Fallacies in general are thus violations of the rules of dialectical systems – systems of regulated (reasonable, intelligent, rational, critical) dialogue. Interestingly, while a dialogue may "have a number of participants – in the simplest case, just two" (Hamblin, 1970, p. 255), Hamblin's systems are exclusively dyadic (the two participants are Opponent and Respondent or Questioner and Answerer). So how about dialogues with a number of participants exceeding two (polylogues)? Will they be defined by the same rules and thus involve precisely the same fallacies? Or will they generate some additional (or different) norms of reasonableness?

3.2. Sylvan: dialectics as part of a polylogue system

Some preliminary answers to these questions have been given by Richard Sylvan (aka Richard Routley) in a paper "Introducing polylogue theory" ("dedicated to the memory of Charles Hamblin"):

> Polylogue generalises upon dialogue. [...] Dialogue suggests, for one thing, a central focus, a spotlight on one person, the speaker, at a time – limitations that polylogue can abandon. Dialogue is a conversation or discourse between two or more persons. No restriction to two persons is implied by the term *dialogue*, though a two party form *is* commonly suggested by use of the term. [...] Use of the term *polylogue* is designed to break all such presuppositions. [...] Finally, the sole participant in a polylogue may be an eccentric hermit or an artificially isolated reasoner: polylogue includes monologue. (Sylvan, 1985, pp. 89–90)

It seems as though Sylvan takes Hamblin's reasoning to its logical consequence, and suggests a yet bigger superset – later defined as a *polylogue system* – which includes the study of reasoned monologues (logic), dialogues (dialectics), and more. While for Hamblin logic is a certain precisely circumscribed part of the dialectical system, for Sylvan Hamblin's dialectical discussions are in turn special sub-systems within a polylogue – with their additional assumptions and limitations; e.g., a discussion is focused on one central issue debated by two persons. As such, dialectics does not cover the whole story. So what is the rest of the story?

For Sylvan, it is a polylogical system of communication, not unlike a computer network, with numerous connections between multiple participants. Polylogues involve "holistic restraints" defined through "certain sets of rules" (1985, p. 96) which control phenomena extending beyond simple dyadic interactions. Sylvan does not explicitly put it this way, but polylogues basically require looking anew at the notion of common ground, a central feature of dialectical (and also rhetorical) approaches to argumentation. In a dyadic encounter, common ground is what is shared by the two interlocutors – it is there or it isn't, and when it isn't, any reasonable communication, let alone argumentation, is precluded ("sorry, I don't speak your language"; *deep disagreement*; see Fogelin, 1985). In a polylogue, one can distinguish between *a global* common ground, what is shared among all participants, and some *local* common ground*s*, what is shared by some subset of participants.[20] For instance, *linguistic rules* need not be fully shared: "a polylogue is not ill-formed should it include sub-dialogues in different languages" (Sylvan, 1985, p. 96) – one can resort to other participants as translators and communicate reasonably without common language. Similarly for *logical rules* and *commitment rules*: new solutions (e.g., some metasystem of translation between various logics) need to be found to account for a *reasonable* multiplicity of logics and complex commitment stores in one multi-party discussion. This is what Sylvan begins doing, even though he considers it to be "a rather academic concern" (*Ibid.*). What is surely not a purely academic concern is the simple observation that polylogues require a different set of *procedural rules*: compare the discussion procedure of a dyadic legal trial with a parliamentary debate to which many members of various parties contribute. Speaking of Hamblin's dialectical systems, Sylvan claims that "there is little doubt that his rules resemble the rules of court procedure and order" (1985, p. 110). By contrast, polylogues would require something akin to the famous *Robert's Rules of Order* meant to secure an orderly conduct of multi-party assemblies (1985, pp. 102–103). This difference in discussion procedures is significant, as different verbal interventions would be relevant ('in order,' 'legal,' 'acceptable') in court and in an assembly. Importantly, procedural rules alone cannot define all fallacies: "What is in order, such as properly affirming the consequent, may be fallacious" (Sylvan, 1985, p. 103). All the same, taken together "the rules controlling polylogues" (1985, p. 96) – namely: linguistic, logical, commitment and procedural rules – can be instrumental in normatively defining rationality and its flipside, fallaciousness. Similarly to Hamblin's *dialectical systems* (1970, Ch. 8), the analysis of *polylogue systems* can be conceived of as either a *descriptive* or a *formal* (and normative) undertaking; therefore,

"polylogue theory [...] affords a setting for theories of dialogue, conversation and communication, and differently, for a theory of fallacies" (Sylvan, 1985, p. 107). However, Sylvan stops short of even sketching any such polylogical "theory of fallacies."

4. Polylogical fallacies

4.1. False dilemma

4.1.1. Example

Good examples of polylogues are easily found in political discourse. Take for example discussions during the first free presidential elections in Egypt in spring 2012 – a year after president Mubarak's 30-year-long dictatorial rule ended in a revolutionary upheaval. Considering Egypt is a presidential republic, the immediate electoral question – Who should be the president? – can also be formulated as a basic political issue: Who should govern Egypt? Many views emerged on this issue, with three of them dominating the public discourse:[21]

> 1) Morsi: Muslim Brothers! (Islamist anti-regime)
> "I will go on with the challenge of knocking down the corrupt regime. [...] I am the legitimate candidate, the candidate of the revolution and the revolutionaries."
>
> 2) Shafiq: Mubarak's supporters! (secular pro-regime)
> "I represent the civil state and the Al Ikhwan (the Muslim Brotherhood) represents the sectarian state. [etc. – ML] I represent stability and they represent chaos and hindrance to people's lives."

The debates between the Islamist Morsi and an ex-regime official Shafiq are interesting examples of a dialectical clash of what seem to be contradictory positions. In pragma-dialectical terms, Morsi and Shafiq engage in a clear-cut *mixed* difference of opinion (van Eemeren & Grootendors, 2004, p. 60). Interestingly, if they share any common ground, it is the idea that differences between them are contradictory: if one is right, the other is wrong, and vice versa. This is evident in the terms they use: corrupt-legitimate, civil-sectarian, stability-chaos. They thus "dichotomize" the debate (Dascal, 2008) by constantly resorting to mutually exclusive and, possibly, jointly exhaustive dyads. However, even if their discussion follows some dialectical rules, it does not exhaust the political disagreement space – there is at least one more prominent position on the issue:

3) Sabahy: Progressives! (secular anti-regime)
"I am not supporting the reproduction of the Mubarak regime nor am I supporting the continuation of the domination of the Islamic current."

Sabahy's position thus "de-dichotomizes" the debate by "showing that the opposition between the poles can be constructed as less logically binding than a contradiction, thus allowing for intermediate alternatives" and by "actually developing or exemplifying such alternatives" (Dascal, 2008, p. 35). So what is the problem here? In the language of fallacies, Morsi and Shafiq seem to be ensnared in a *false dilemma*: an unjustified (false) division of an issue into but two propositions (δί-λεμμα). In the following, I argue that the fallacy can best be understood as a polylogical fallacy of confrontation. That puts me in an awkward position – after all, there is already a logical and a dialectical treatment of a false dilemma. But is there really?

4.1.2. False dilemma in logic

Let us start with Tomić's (2013) "systematic exposition" of a false dilemma on logical grounds. Tomić, before moving on to her own proposal, critically analyzes the treatment of the dilemma in logic/argumentation literature. Notably, she claims that false dilemma should *not* be treated as an unsound use of the valid form of *disjunctive syllogism* due to "an incomplete or misleading disjunctive premise" (2013, p. 349).

$$\frac{A \vee B \qquad \neg B}{A}$$

1a. Valid disjunctive syllogism

$$\frac{A \vee B\ (\vee C...) \qquad \neg B}{A\ (\vee C...)}$$

1b. Fallacious disjunctive syllogism

Figure 1. False dilemma as a fallacious disjunctive syllogism ("Hidden" premises and conclusions in brackets)

On this reading, a fallacy is committed when the first premise ($A \vee B$) is a misrepresentation of an actual larger disjunction ($A \vee B \vee C...$); in this case, the inference to the proposition A is not valid anymore. However, as Tomić argues, this and other similar forms of reasoning "do not rely on the argumentation schemas/argumentation structures of dilemma-reasoning" (2013, p. 350). According to her, false dilemma is best explained as a failure in applying the logically valid forms of *constructive* and *destructive dilemmas*. Since there are two basic types of failure (incomplete disjunction and incomplete consequence), we obtain "four types of false dilemma."

$$\frac{A \vee B \quad A \rightarrow Z \quad B \rightarrow Z}{Z}$$

2a. Valid (simple) constructive dilemma

$$\frac{A \vee B\ (\vee C...) \quad A \rightarrow Z \quad B \rightarrow Z \quad (C \rightarrow Y)}{Z(\vee Y)}$$

2b. False (simple) constructive dilemma (incomplete disjunction)

$$\frac{A \vee B \quad A \rightarrow Z \quad B \rightarrow Z \quad (A \rightarrow Y) \quad (B \rightarrow Y)}{Z(\wedge Y)}$$

2c. Defeasible sound (simple) constructive dilemma (incomplete consequence)

Figure 2. False dilemma as a fallacious (simple) constructive dilemma[22] ("Hidden" premises and conclusions in brackets)

To cut Tomić's long story short, the first failure occurs when "the actually provided argument is deductively valid but has a false disjunctive premise and is therefore not sound" (2013, p. 351). Importantly, the disjunctive premise is false, because it is "incomplete" (pp. 352–353); e.g. $A \vee B$ should in fact be $A \vee B \vee C$ (see Figure 2b.). The other failure is due to "neglecting other relevant information" in the premises of the argument, namely, "the possible positive consequences of the given disjuncts" (p. 358) for the constructive type (premises '$A \rightarrow Y$' and '$B \rightarrow Y$' in Figure 2c) and, conversely, the possible negative consequences for the destructive type. In the former type (2b: incomplete disjunction), an argument is fallacious, for even if deductively valid, it is unsound. In the latter type (2c: incomplete consequence), an argument is deductively valid, even sound!, but it is still fallacious, since some additional information regarding the consequences of the premises can defeat it. I refrain from discussing the logical details of Tomić's account, which seem rather controversial.[23] Regardless of this, while her logical analysis might tell us where the problem lies, it also tells us it does not lie within logic. Rather than in inferential relations, it lies in the *content* of the premises, and I doubt if logic is interested in inviting such problems home. Copi and Cohen are quite blunt about it: since it is a valid form of inference, "[f]rom the strictly logical point of view, the dilemma is not of special interest or importance" (1990, p. 245); it is instead a practical problem of rhetorical controversies. As I will argue, this is so because it precludes the expansion of a debate that can expand by involving extra positions (extra disjuncts or consequences).

4.1.3. False dilemma in dialectics

For dialecticians, such as van Eemeren and Grootendorst, a false dilemma occurs when "a contrary opposition is presented as a contradiction":

> It is then suggested that there are only two options and if one of them cannot be proved to be the case, it is concluded that this is *not* the case (the "ordinary" *argumentum ad ignorantiam*) and hence that the other option *is* the case. All other possibilities are then glossed over. (1992, p. 190)[24]

Similarly to above, I will not discuss all the details of their treatment of the fallacy. But it is important to stress that van Eemeren and Grootendorst discuss these problems among "fallacies in concluding the discussion": false dilemma in combination with *ad ignorantiam* amounts to a fallacy of "making an absolute of the failure of the defense" (1992, p. 187ff.). However, when they speak of "two options" and "other possibilities," they clearly mean *standpoints*: it is the status of defended and challenged standpoints that is being decided at the concluding stage. So the false dilemma seems to be in fact a fallacy of "glossing over all other" *standpoints* that pertain to the issue. This is significant, since the standpoints to be discussed are determined at the very first stage of a critical discussion – *confrontation* – rather than the last, *concluding* stage. So let us look there.

The very first rule of the confrontation stage of a critical discussion is: *Discussants may not prevent each other from advancing standpoints or from calling standpoints into question* (van Eemeren & Grootendorst, 2004, p. 190). By quickly examining the plurality here ("discussant*s*" = *the protagonist* + *the antagonist*; "standpoint*s*" = $+/p$ or $-/p$), we realize it actually amounts to no more than duality. To understand why this is so, we need to begin even before the pragma-dialectical beginning, formulated as follows: "A dispute arises when someone advances a standpoint and someone else casts doubt upon it" (van Eemeren & Grootendorst, 1992, p. 107). However, a standpoint itself can be seen as a response to a more or less explicitly stated issue that instigates position-taking, such as a problem that calls for a solution through practical reasoning. Now, the issue can be expressed through one of the two grammatically available types of questions: 1) a *yes/no question*, which allows for two relevant responses (either yes or no), and thus for two *contradictory sides* ($+/p$ or $-/p$) as standpoints; 2) an *open Wh-question*, which allows for a number of relevant responses, and thus possibly an open set of *contrary positions* (p, q, r, ...) as standpoints.[25] Traditionally, the building blocks of dialectics are yes/no questions:

> [...] not every universal seems to be a dialectical premise, e.g. "What is man?", or "In how many ways is the good said?" For a dialectical premise is that in response to which it is possible to answer yes or no; but this is not possible in response to these questions. (Aristotle, *Topics*, 158a14–18)

> Problematic questions concern alternatives "Is two-footed land animal the definition of human, or is it not?" (l0lb26–37) "Are perception and knowledge the same or different?" (102a7) "Is every pleasure a good?" (108b35). Problems thus require the dialectical respondent to adopt one or the other side of an alternative [...]. (Lennox, 1994, p. 55; see also Krabbe, 2006, p. 186, and Spranzi, 2011, Ch. 1)

As dialectical disputations start from "a problem [that] is a two-sided question" (Smith, 1989, p. 148, cited in Lennox, 1994, p. 56) or a "contradictory alternative" (Lennox, 1994, p. 60), they cannot but be clashes of two contradictory sides of the problem observing the law of excluded middle ($p \vee \neg p$). As a result, the Aristotelian tradition of dialectics is, so to speak, an utterly dilemmatic business: dialectical procedures unfold through a series of dilemmas ("Is it the case, or not?"). What does not fit the contradictory form – basically, open issues formulated as Wh-questions: "What is man?", "Who to elect?", etc. – is not suitable for dialectical treatment. Instead, it belongs to the sciences or rhetoric. If this is so, there is no room *within* dialectics for a *false* dilemma which "involves the confusion of a contrary and a contradictory opposition" (van Eemeren & Grootendorst, 2004, p. 182) – there is simply no contrariness that would cause confusion. Similarly to logic, false dilemmas are alien intruders.[26]

4.1.4. False dilemma in a polylogue

As proposed above (section 2.1), in contrast to dialectics, a discussion over multiple contrary positions on an open issue instigated by a Wh-question is a defining feature of polylogues. In a context where one can discuss many propositions (poly-lemma), a di-lemma is false, because it focuses exclusively on two positions, thus preventing other positions (standpoints) from being considered. In this sense, I fully agree with van Eemeren and Grootendorst that a false dilemma consists in an unjustified reduction of contrary options to only two, taken to be contradictory. The difference is that I would call a system that allows for a clash of multiple contrary positions a polylogue, while they will reconstruct it as a critical discussion. (As argued in much detail in Lewiński & Aakhus, forth., a reconstruction of a polylogue in terms of multiple dyadic discussions is suspicious as a move from the polylogical whole to locally isolated dyads.) Moreover, the false dilemma seems to be best grasped as a fallacy of polylogical argumentation by virtue of violating a basic rule of *confrontation*: *Discussants may not prevent each other from advancing standpoints* that reads here: 'all parties to a polylogue should be free to advance their, possibly contrary, positions' (and further discuss them). Anyone who tries to reduce this open set of con-

traries to a closed dichotomy based on contradiction and proceed with an elegant dyadic discussion, may be guilty of the dichotomization of the disagreement space – the false dilemma. (Note that I define parties as bearers of positions and arguments. An individual reasoner considering various "options" is engaged in an inner polylogue – similarly to inner dialectics, that is, "two-sided dialectics for an individual thinker", Jacquette, 2007, p. 117.)[27] It is exactly here, in other words, where "incomplete disjunctions" – a chief concern for Tomić – are created. They are incomplete whenever the set of relevant answers to an open Wh-question is unjustifiably closed. In the argumentative framework followed here, competing answers to questions amount to positions that different parties take and defend when challenged.

I will conclude by acknowledging my debt to Hamblinian "logic" here: as he argued, while *petitio principii* and many questions are considered *logical* fallacies, they cannot be properly accounted for in classical logical terms (logicians deny that; see n. 18) – something akin to the status of long-term illegal immigrants: they reside, but without proper papers. They can get these papers in formal dialectics. I am arguing something similar for the false dilemma – while it *is* a fallacy fully recognized both in logic and dialectics, the explanations of its fallaciousness lie *outside* of logic and dialectic. Only in a polylogue can the fallacy receive a (fairly simple, no doubt) consistent and immanent treatment.

4.2 Collateral straw man

The dialectal fallacy of the straw man denotes a misrepresentation of someone's position attempted in order to easily refute that position. An argumentative move that involves a straw man can be characterized by two constitutive elements (Lewiński, 2011): the function of refuting an opponent's position and the form consisting in various methods of misrepresentation of the original position (misquotation, selective quotation, taking out of context, attacking a fictitious opponent, etc.). A simple example of the straw man may be:

Student:	My work is progressing well, because *many* of the chapters of the thesis are completed.
Supervisor:	Well, if *everything* is done, then why not submit it tomorrow?
Student:	I never said *everything*, just *many* of them.

Despite claims that the straw man is "a common, familiar, and thoroughly theorized fallacy" (Talisse & Aikin, 2006, p. 349), there seems to be a rather inconspicuous polylogical variant of the straw man. Consider the following (constructed) exchange:

Shafiq:	Our chief goal should be stability and peaceful continuation of Egypt's progress.
Morsi:	No! We should progress by removing all the remnants of Mubarak's regime and installing a new Islamic order that the people of Egypt want.
Shafiq:	Competent people who served our country well should remain in power. If we continue the revolution, we'll soon have a second Iran here.
Sabahy:	It's not true. Everything depends on how we lead the revolution – an Islamic republic is neither a necessary nor welcome outcome of removing Mubarak!
Shafiq:	How bizarre – you were just saying that the people of Egypt crave for a new Islamic order!
Sabahy:	It wasn't me, it was this jerk Morsi.

What we note here is some form of conflating opposing positions. Shafiq tries to pinpoint an inconsistency in Sabahy's position by using Morsi's statements – as if Morsi and Sabahy held an identical position with the same set of commitments. They clearly do not, and so we are dealing with an attack on a position that Sabahy does not actually endorse. Sounds like a good scenario for the straw man fallacy. But again, dialectics would not tell us everything about it.

In pragma-dialectics, a straw man is a violation of rule 3 for critical discussion: *Attacks on standpoints may not bear on a standpoint that has not actually been put forward by the other party* (van Eemeren & Grootendorst, 2004, p. 191). How does this rule apply to our example? Shafiq's attack is not a misrepresentation of his only opponent's ("the other party") position (a straw man *sensu stricte*), an attack on selected weak elements in a position (a 'weak man'), or on an entirely fictitious position (a 'hollow man') (see Aikin & Casey, 2011). Instead, it is a faithful attack on a central argument of a real opponent – just not precisely the right one. The kind of straw man committed – let us call it a *collateral* straw man – occurs due to responding to "another other," a category that dialectical rules may find hard to grasp.[28] Shafiq attacks Sabahy-opponent by attributing to him, quite faithfully, the commitments of Morsi-opponent. Of course, in a strict dualistic reconstruction isolating the discussion between Shafiq and Sabahy, Shafiq is obviously attacking a fictitious opponent, since Morsi does not belong to this very dyadic exchange. Yet in such a reconstruction something is missing, a crucial strategic aspect: someone "*has* actually put forward the (sub-) standpoint" that "the people of Egypt want Islamic rule"; and not a random someone, but a distinct opponent (another other) from the same side of the revolutionary barricade. So we have here

a new sub-species of the straw man fallacy, distinguishable on polylogical grounds.

To recap, in our example Sabahy becomes a victim of collateral damage due to Shafiq's insensitivity to distinguishing opponents in a polylogue. His straw man consists not in the known forms of misrepresentation, but rather in attributing some actual commitment to an insufficiently differentiated opponent. This fallacy can be properly analyzed only in a polylogue. While it can be easily recognized on dialectical grounds, some basic insight into how it happens and why it may be successful would be missing in a dyadic account.

4.3. Other fallacies from a polylogical perspective

I began my discussion of polylogical fallacies with a false dilemma – that is because it seems to be the starting point for all kinds of troubles related to polylogical argumentation. As argued above, the dilemma is related to what might be called – after pragma-dialectics – the first rule of polylogical *confrontation stage*. Indeed, rules of any model of argumentation understood as intelligent interaction (or dialogue) need to require, at the very outset, a clear formulation of what is at issue in argumentation – in particular, which type of question arguers are dealing with. *Yes/no questions*[29] can be handled through rules of a standard dialectical inquiry between two opponents. *Safe Wh-questions* with only two contrary answers (e.g., "Which of the divorced parents should have exclusive custody of the child?") also lend themselves to a dyadic dialectical discussion in which the relative merits of the two positions are judged. Moreover, discussion of multiple positions can possibly be split into a number of dyadic argumentations; then again, standard dialectical procedures may work. However, if there is no viable way to "dichotomize" a finite set of multiple positions, or a set is open-ended (as in *risky Wh-questions*), then arguers should recognize they are dealing with a genuinely multi-party disagreement space that should be explored as such through polylogical argumentation. Ideally, all possible mutual relations between multiple positions should be clearly defined by the arguers (for instance using the classic Aristotelian "square of opposition" which distinguishes between contradictory, contrary, sub-contrary, and sub- and super-altern relations). Having done that, arguers would be in a good position to see "what is at stake" in the polylogue.

On this procedural account of argumentation and fallacies, a false dilemma would be the first obstacle in properly investigating the issue and critically examining different positions on it through argumentation. This is not the only obstacle, however. Indeed, looking at the rules of a fully elaborated dialectical model – such as offered in pragma-dialectics (van

Eemeren & Grootendorst, 1992; 2004) – one can provide a fairly comprehensive overview of polylogical complications in fallacy judgments. Since there is no room to do so here, I will mention only three of them – in addition to the already discussed Rules 1 (related to the false dilemma)[30] and 3 (related to the straw man) of the pragma-dialectical critical discussion.

Rule 4 (*Standpoints may not be defended by non-argumentation or argumentation that is not relevant to the standpoint*; van Eemeren & Grootendorst, 1992, Ch. 12; 2004, Ch. 8) raises the question of relevance in multiparty argumentation. The scope of what amounts to "argumentation that is relevant to the standpoint" seems to be broadened. For example, seemingly irrelevant arguments that refute one of the standpoints expressed in a polylogue that is contrary to a defender's standpoint may well be relevant in supporting the latter standpoint. Schematically, arguer A may defend position *a* in response to arguer B (holding position *b*) by trying to refute some basic arguments for a third position *c* (defended by another party, C). Locally, taking it as A's defence against B's challenge, the refutation of *c* seems irrelevant. Yet, globally, it might constitute a relevant argumentative speech act. Imagine, for example, a socialist arguing in a TV debate with a liberal that a socialist candidate should be elected, since she is a champion of secular education free of religious concerns. Since the liberal candidate has precisely the same approach to education, this argument seems to be irrelevant in judging the relative merits of the two candidates. But in a broader discussion, which includes the candidate of religious conservatives, this is surely a relevant (counter-)argument. These considerations would of course call for a reappraisal of the classic fallacy of relevance: *ignoratio elenchii* (see Hamblin, 1970; Walton, 2004).

Rule 6 (*Discussants may not falsely present something as an accepted starting point or falsely deny that something is an accepted starting point*; van Eemeren & Grootendorst, 1992, Ch. 14; 2004, Ch. 8) stipulates that arguers should faithfully represent the starting points and commitments upon which they intersubjectively agree during their discussion. But such agreements gain in complexity when more than just two parties are involved. In general, all kinds of *intersubjective procedures* defined by pragma-dialecticians for the *argumentation stage* (van Eemeren & Grootendorst, 2004, pp. 145ff.) require a more complex notion of intersubjectivity and common ground – for instance, as discussed above (section 3.3), divided into a *global* and *local* level. What is (locally) shared by two parties is not necessarily shared by most or all parties. Should arguers be allowed to use premises that are acceptable to only a subset of parties? Will they not be guilty of the fallacy of *evading the burden of proof* vis-à-vis the parties

that do not accept the premises? Eventually, deciding which argument or criticism holds and is thus decisive in the current discussion is much more complex in a polylogue than it is in a dyadic exchange.

Finally, a polylogical approach may bring about a better understanding of *ad ignorantiam* fallacy which, in pragma-dialectics, is a violation of Rule 9 (*Inconclusive defenses of standpoints may not lead to maintaining these standpoints, and conclusive defenses of standpoints may not lead to maintaining expressions of doubt concerning these standpoints*; van Eemeren & Grootendorst, 1992, Ch. 17; 2004, Ch. 8). Along Walton's (1992) exposition, some conclusions from ignorance are drawn validly due to an "epistemically closed" (p. 381) knowledge base (e.g., I know a pen is in one of the five drawers and four drawers are empty, so: the pen is in the last drawer). A polylogical interpretation of this is straightforward: if a polylogue is instigated by a question intersubjectively deemed to be a safe Wh-question, and the list of competing answers *qua* positions is closed, then the refutation of all but one position (say: x) is a proof that position x holds. Open risky questions do not allow that: the set of answers is in principle open-ended so all of the considered contrary positions might be wrong. In this case, concluding from ignorance that a given position holds is fallacious.[31]

5. Conclusion

In order to pass well-justified fallacy judgments there needs to be a rationale on the basis of which fallacious arguments are considered a breach of rationality. Much effort in argumentation theory is dedicated to precisely this goal: to provide a consistent model or system of argumentation governed by the rules whose breaches constitute fallaciousness. This applies equally to logical, dialectical and, I would add, polylogical fallacies. While quite obviously I have offered no such model here, I hope to have raised some concerns that have a broader relevance for the study of multi-party argumentation. I have theoretically justified the polylogical stance on argumentation and presented a polylogical account of two fallacies: false dilemma and collateral straw man. Importantly, I have argued that any model of polylogue – similarly to Hamblin's dialectical systems – should not amount to a substitution of extant models (such as pragma-dialectical critical discussion) but rather a friendly extension that acknowledges their validity while adding some extra insights, both descriptive and normative, to the functioning of argumentation in a multi-party context.

Further normative work on polylogical argumentation can be developed in two directions: one of them is the issue of polylogical fallacies, arguments that are either considered completely fine or are considered fallacious without a solid grounding in logical and dialectical theories, but are clearly unreasonable contributions to a polylogue. The other one is the converse problem of arguments that are well-defined fallacies on logical or dialectical grounds, but perhaps are fine in a polylogue. Above, I mentioned certain forms of irrelevance: when an argument seems out of place in a one-on-one encounter, but then "regains" relevance when the broader polylogue is considered. To consistently pursue either of these ways, further work on a model of argumentative polylogue has to be undertaken.

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NOTES

[1] I only take the number of speakers into account here without considering numerous value-laden concerns which typically make *dialogue* a special – constructive, open, and respectful – form of interaction. For instance, Perelman & Olbrechts-Tyteca (1969, p. 37) distinguish between (heuristic) *dialogues* = *discussions* and (eristic) *debates*.

[2] For a further elaboration of these two points, see esp. Kerbrat-Orecchionni (2004) and Levinson (1988). For the routine of limiting dia-logue to a di-logue in argumentation theory, see Lewiński (2012, pp. 227ff.).

[3] See, e.g., the entry for 'λόγος' in *A Greek-English Lexicon* by Lidell & Scott, available here: http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A1999.04.0057%3Aentry%3Dlo%2Fgos.

[4] "A positive understanding of the term [polylogue – ML] finds many different ways of thinking reconciled and articulated reasonably" (Chen, 2010, p. 55).

[5] The examples given here and below are all cases of *practical reasoning* driven towards (a disposition/intention to some) action. In this case, the number of contrary positions is demarcated by the set of answers to the "What to do?" question. However, similar multiplicity might occur in the case of *theoretical reasoning* dealing with the questions of truth ("What is the case?"). For instance in science, a number of competing hypotheses might be defended and tested by different groups.

[6] Note that Wh-questions can be *safe* when they are "demanding choices between specified finite sets of alternative statements" or *risky* when relevant answers constitute an open-ended set of alternatives (Hamblin, 1970, p. 216). In the case of *safe* questions, after having properly refuted all but one contrary position (proposals, hypothesis), the last one holds by elimination (via a valid disjunctive syllogism; see section 4.3). In the case of *risky* questions, no such conclusion can be reached (the options might be all wrong).

[7] This applies to traditional bi-valued logic. Tri-valued logic (such as, e.g., used by pragma-dialecticians, see van Eemeren & Grootendorst, 2004) allows for a third option: 'X neither holds nor doesn't hold' (the 'I don't know' answer). Finally, proponents of para-consistent logics legitimize the fourth option: 'X both holds and doesn't hold' (see Sylvan, 1985). While I refrain from embracing para-consistencies, I only note that tri-valued logic does not generate a polylogue in the sense defined above: since one does not have to argue positively for doubt, it does not constitute a distinct *position*.

[8] Note that this is consistent with Quine's (1959; Quine & Ullian, 1970) take on the verification of beliefs: in most cases, we do not simply verify an individual proposition (here: *position*), like dialectics tends to do, but rather an ordered "web" of propositions (here: *case*), one of which is singled out for testing. This testing, however, is never fully independent from the acceptability of other assumptions (here: *commitments*).

[9] "[...] [W]e will not speak of 'multi-party conversations' but of *multi-participant conversations*, or rather *multi-participant interactions* [...] Thus, we will refer to as *polylogal* all communicative situations which gather together several participants, that is, real live individuals." (Kerbrat-Orecchioni, 2004, p. 3, italics original).

[10] "In a polylogue the participants need not be persons; some or all may be computers, as in a parallel computing network. The folklore committee comprising three men and a dog furnishes a polylogue setting." (Sylvan, 1985, p. 89).

[11] From a different perspective, also "intercultural philosophers" emphasize "the need of polylogic argumentations" (Wimmer, 1998, p. 8; Wimmer, 2007) understood as situations in which "individuals are confronted with several dialogue partners from different cultures simultaneously" (Chen, 2010, p. 54).

[12] Various aspects of polylogical conversations have been tackled, among others, by: Bruxelles & Kerbrat-Orecchioni, 2004; Clark & Carlson, 1982; Goffman, 1981; Goodwin & Goodwin, 1990; Haviland, 1986; Hymes, 1972; Kerbrat-Orecchionni, 1997, 2004; Levinson, 1988; Maynard, 1986; Traverso, 2004.

[13] "As for the alternating pattern, the famous *ababab* formula only works for dilogues, whereas for trilogues the alternation does not respect any kind of fixed rules: we are dealing with an infinite number of possibilities, the *abcabcabc* model being very exceptional" (Kerbrat-Orecchionni, 1997, p. 5).

[14] In their study of group discussions, Canary, Brossman, & Seibold (1987) described the structure of a *tag-team argument* occurring "when two individuals jointly formed a single argument" (p. 29). Note that for them "*argument structures* are rules and resources that are produced and reproduced in argumentative discourse" (p. 20). Bruxelles & Kerbrat-Orecchioni (2004) similarly discuss discursive patterns of "coalitions in polylogues."

[15] For thorough speech act analyses of many ordinary examples of how we craft our natural discourse to address many Hearers in a polylogue, see Clark & Carlson (1982), e.g., on p. 364:

> "With ordinary linear indirectness, utterances can become very complicated; but with lateral indirectness, the possibilities almost defy imagination. For a relatively simple example, consider this:
>
> (67) *Ann, to Barbara, in front of Charles, David, and Ewan*: Barbara, I insist that Charles tell you the joke about the two Irishmen."

According to Clark & Carlson, as related to different (groups of) listeners, this speech act is at the same time an assertion, a request, and a warning. This nuance would be missed in a framework consisting of *the* Speaker and *the* Hearer.

[16] Pragma-dialecticians recognize some of the polylogical elements of ordinary argumentation – for instance, arguing one's case simultaneously against different "audiences" – but they consider them to be rhetorical complications of certain *communicative activity types* which do not affect the dyadic dialectical model (see van Eemeren, 2010, esp. Chs. 4 & 5).

[17] Indeed, exclusively.

[18] Although, expectedly, proponents of logical approaches deny that: *petitio pricipii*, they argue, can be fully elucidated "on entirely logistical principles" in a way "closely resembling the Standard Treatment" (Botting, 2011, p. 23).

[19] Wittgenstein criticizes St. Augustine's description of language ("a system of communication") in the following way: "Yes, it is appropriate, but only for this narrowly circumscribed region, not for the whole of what you were claiming to describe" (*Philosophical Investigations*, §3).

[20] "Even if the principle 'No common logic, no communication' held, it would not follow that there must be a one logic for each polylogue, only common ground for each pair of parties in a polylogue that manage to communicate" (Sylvan, 1985, p. 110). Of course, on the flipside, there is always a danger that in a polylogue "different voices are ensnared in their own particularities; consequently, no common ground can be found" (Chen, 2010, p. 55).

[21] The examples – when in quotation marks – are actual fragments of political discourse translated from Arabic by D. Mohammed, and used in Lewiński & Mohammed, 2012. When not in quotation marks (see section 4.2), they are loose paraphrases of actual discussions.

[22] I limit myself here to presenting this type of false dilemma. Schemas for (valid and fallacious) *complex* constructive dilemmas and (*simple* and *complex*) *destructive* dilemmas can easily be generated along the same pattern and can be found in Tomić (2013).

[23] As rightly pointed out by one of the reviewers, Tomić might by guilty of "mixing" monotonic and non-monotonic logic "to produce a confusing result." Indeed, in (2013, Sec. 3.2) Tomić argues that "it is possible to defeat deductively valid arguments with true premises" and provides six necessary conditions for this to happen.

[24] I do not take them to refer here specifically to the *fallacy of illicit contrary* as formally described in Aristotle's term logic, committed when a contrary relation between propositions is taken to be contradictory. For instance: one resorts to the principle of contradiction to infer from the negation of a universal affirmative proposition (It's not true that "all dogs are black") the truth of a universal negative proposition ("No dogs are black"), while these two universals are merely contrary: they cannot both be true, but they can both be false (It's neither true that "all dogs are black" nor that "no dogs are black"). A correct contradictory inference is, of course, a particular negative ("Some dogs are not black").

[25] See above Sec. 2.1 and esp. n. 6 and 7 for further elaboration.

[26] Admittedly, pragma-dialectics, due to its tri-valued logic, is not Aristotelian dialectic. It allows for the "I don't know" $(?/p)$ answer to be the third relevant response to a yes/no question. The illegitimate step from doubt to negation $(?/p \rightarrow -/p)$ constitutes "the 'ordinary' *argumentum ad ignorantiam*" and plays, so to speak, an auxiliary role in committing the false dilemma as described in the quote above (van Eemeren & Grootendorst, 1992, p. 190). But for them the crux of the false dilemma lies in confusing contrary standpoints for contradictory ones. This is crucial here, since contrary standpoints cannot but be responses to Wh-questions such as, for instance, "Where can we still see a glimmer of hope in that terrible genocide in Kosovo?" discussed in van Eemeren et al., 2007, p. 61). Accordingly, pragma-dialectics does allow for discussions over such questions which lead to the adoption of contrary standpoints by the protagonist and antagonist. This happens in a "qualitatively multiple dispute" arising when the second speaker "takes up an alternative standpoint [...] [that], viewed dialectically, implies a standpoint that is opposite to" the first speaker's standpoint (van Eemeren et al., 2007, pp. 26–27). Then, however, if

a dispute proceeds between only two arguers discussing only two contraries out of "multiple" possibilities, it is nothing short of a false dilemma. If it involves multiple parties with multiple contrary positions, it is a polylogue. (I hope it's not a false dilemma.)

[27] See also Blair (1998). A famous account of inner dialectics is given by Plato:

> [Thought amounts to] the talk which the soul has with itself about any subjects which it considers. [... T]he soul [...] when it thinks, is merely conversing with itself, asking itself questions and answering, affirming and denying. [...] I define forming opinion as talking and opinion as talk which has been held, not with someone else, not yet aloud, but in silence with oneself. (Plato, *Theaetetus*, 189e–190a; see *The Sophist*, 263e–264b)

[28] Hamblin is quite clear about this: "Since we are concerned mainly with two-person dialogues we can dispense with the phenomenon of discriminatory direction of locutions to one person rather than another, and assume that all locutions are directed to the other participant." (1970, p. 257).

[29] See above, sec. 2.1 and n. 6 for a discussion of various types of questions.

[30] Note that a false dilemma may be "justified" by other fallacies violating rule 1 such as *ad hominem*: "We will only discuss these two options since all other alternatives are stupid beyond imagination."

[31] *Ad ignorantiam* in the case of yes/no questions can be understood on the grounds of tri-valued logic as an illegitimate step from a doubt about a proposition ("I'm not sure if God exists") to its negation ("so it doesn't exist"). See above n. 26.

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PART III:

DISCUSSION PAPERS

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MOTIVATED DOUBTS: A COMMENT ON WALTON'S THEORY OF CRITICISM

Discussion paper on Douglas Walton's "How to Refute an Argument Using Artificial Intelligence", *Studies in Logic, Grammar and Rhetoric*, 23 (36), 2011, 123-154.

Abstract. In his theory of criticism, D. N. Walton presupposes that an opponent either critically *questions* an argument, without supplementing this questioning with any reasoning of her own, or that she puts forward a critical question and supplements it with a *counterargument*, that is, with reasoning in defense of an opposite position of her own. In this paper, I show that there is a kind of in-between critical option for the opponent that needs to be taken into account in any classification of types of criticism, and that should not be overlooked in a system of dialogue norms, nor in a procedure for developing a strategically expedient critique. In this third option, an opponent questions and overtly doubts a statement of the proponent and supplements her doubts with a *counterconsideration* that *explains* and *motivates* her position of critical doubt, yet without supporting any opposite thesis, thereby assisting, as it were, the proponent in his attempt to develop a responsive argumentation, tailor-made to convince this particular opponent. First, I elaborate on the notion of an explanatory counterconsideration. Second, I discuss Walton's distinction between premises that can be challenged by mere questioning ("ordinary premises" and "assumptions") and premises that must be challenged by incurring the obligation to offer counter-argumentation (somewhat confusingly labeled "exceptions"). I contend that the latter type of premises, that I would label "normality premises," can be attacked without incurring a genuine burden of proof. Instead, it can be attacked by means of incurring a burden of criticism (Van Laar and Krabbe, 2013) that amounts to the obligation to offer an explanatory counterconsideration, rather than a convincing *ex concessis* argument. Of course, providing the opponent with the right to discharge her burden of criticism with explanatory counterconsiderations brings a clear strategic advantage to her. It is much less demanding to motivate one's doubts regarding proposition P, than to convince the proponent of not-P. If we want to encourage opponents to act critically, and proponents to develop responsive arguments, the importance of the notions of an explanatory counterconsideration and of a motivated doubt should be emphasized in the theory of criticism.

Keywords: burden of criticism, counterargument, criticism, exception, explanatory counterconsideration, D. N. Walton

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1. Introduction

Argumentation cannot be understood without having a clear grasp of the nature of the criticism that it purports to respond to. And criticism cannot be evaluated as legitimate or strategically expedient without having appropriate norms for criticism at our disposal. The conceptual background of the intricate links between argumentation and criticism has been developed in dialectical approaches to the subject, where argumentation is dealt with as a co-production of a defending proponent and a critical opponent. The proponent develops a (more or less) responsive defence of his thesis against an opponent who critically tests the thesis and the subsequent arguments, in a shared attempt to resolve their difference on what they perceive as the merits of both sides (cf. on critical discussion, Van Eemeren and Grootendorst, 2004; and on persuasion dialogue, Walton and Krabbe, 1995).

Walton's article "How to Refute an Argument Using Artificial Intelligence," published in this journal (2011), contributes to the much-needed *theory of criticism* (cf. Johnson, 2000; Govier, 1999; Krabbe, 2007: Krabbe and Van Laar, 2011; Van Laar and Krabbe, 2013; Walton, 2012). Walton deals with a large number of issues, three main ones of which are: (1) How to distinguish and characterize types of criticism such as rebuttal, attack, challenge, refutation, exception, defeater, and objection? (2) What norms govern these types of criticism in dialogue? (3) With what procedure can one develop a strategically expedient attack on an argument? In this discussion paper, I shall restrict my attention to a supposition that underlies Walton's ideas on what he calls *premise attacks*, and that has consequences for his views on each of these three issues. According to this supposition, an opponent either critically *questions* an argument, without supplementing this questioning with any reasoning of her own, or she puts forward a critical question and supplements it with a *counterargument*, that is, with reasoning in defense of an opposite position of her own. The supposition becomes apparent when Walton distinguishes between: (1) two kinds of premises, called *assumptions* and *exceptions*, and the corresponding types of critical questions (sometimes also called *assumptions* and *exceptions* by Walton: 2011, p. 137); (2) the norms that apply when an opponent chooses to criticize assumptions and exceptions; and (3) between the ways they fit in expedient strategies for attacking an argument. In this paper, however, I want to emphasize that there is a kind of in-between critical option for the opponent that deserves to be taken into account in any classification of types of criticism, and that should not be overlooked in a system of dialogue norms, nor

in a procedure for developing a strategically expedient critique. In this third option, an opponent questions and overtly doubts a statement of the proponent and supplements her doubts with a *counterconsideration* that explains and motivates her position of critical doubt, yet without supporting any opposite thesis of her own, thereby assisting, as it were, the proponent in his attempt to develop a responsive argumentation.

In Section 2, I shall elaborate on this notion of an explanatory counterconsideration, and how it can be used to express motivated doubt. In Section 3, I shall examine how this third option could be taken into account in a computational approach to criticism.

2. Motivating doubts

In order to introduce the idea of an explanatory counterconsideration, and to show how it can be used in an argumentative exchange to motivate one's doubt and thereby to substantiate one's critical position yet without really offering an argument, I shall consider the following variant of an example used by Walton. Suppose that the proponent puts forward as his thesis that video games lead to violence, and that the opponent addressed challenges this by requesting for argumentation: "Why do you think so? How can you convince me? What would be your argument?" Then, within the normative framework of any argumentative exchange along the lines of a persuasion dialogue or a critical discussion, it is on the proponent to defend his thesis, and to discharge his burden of proof. But then, he may not know in sufficient detail how to address the opponent, and what kind of reason might turn out to be convincing to her. Thus, there is an incentive for the proponent to request the opponent to inform him about what motivates her doubt, so as to become clear about what kind of propositions would take away her motivations for being critical.

For example, the proponent might want to know whether the opponent is reluctant to accept his opinion for taking into account the possibility that there is no causal link between playing video games and committing acts of violence, yet without having any doubts about the existence of correlations between playing these games and committing these acts. Or, alternatively, whether the opponent is taking into account the possibility that there are not even clear correlations between playing these games and committing these acts. Each situation would require a different argumentative defence on the proponent's part, and so he might want to be informed about the specific motivation that underlies the opponent's criticism, so as to be able

to maximize his chance of developing a responsive argument, tailor-made to convince this particular opponent. In such a situation, the proponent might want to pose a *request for explanation*: Instead of rushing into giving an argument to discharge his burden of proof, the proponent first requests a counterconsideration that would show what motivates the opponent to doubt the thesis at issue: "Please, explain why you do not accept that video games lead to violence" (See on such *requests for explanation* and the positive role they may play in persuasion dialogue: Van Laar and Krabbe, 2013).

The requested explanation can (but need not) be presented as a regular kind of assertion, which can be criticized in turn by the proponent if he would want so. For example, the opponent might state: "Well, there are clear correlations, but the causal connection cannot been made." In that case, the proponent should be allowed to force the opponent to become a second proponent, and to develop a convincing argument of her own.[1] In other words, the opponent's explanation is wrapped up in a counterassertion, and the proponent obtains the option to attack it, thus requesting a counterargument. The proponent's request for a counterargument cannot be refused by the opponent, on pains of committing the fallacy of Evading the Burden of Proof. And so, she might discharge her obligations by saying something along the following lines: "Because, being disposed to violence is a separate character trait that both causes a person to play violent video games and to commit violent acts. Persons without this special disposition, then, can play these games without any danger of becoming violent persons themselves!"

But then, the opponent may in at least two ways convey her counterconsiderations *without* wrapping them up in a counterassertion and a counterargument. First, she may express a counterconsideration with what Rescher has called a "cautious assertion," that is, a proposition of the form "P is the case for all that you (the adversary) have shown" or "P's being the case is compatible with everything you've said (i.e., have maintained or conceded)" (Rescher, 1977, p. 6). In our example, the opponent might, for one, state: "As far as you've shown, these correlations might not be indicative of any direct causal link at all. Being disposed to violence might be a separate character trait and ..." Second, she can offer her counterconsiderations in a purely questioning form: "How about P? Might P be true, in your view?" The opponent, for one, might utter: "How about the absence of any causal link? Could these be just correlations, not causally linked at all? What about being disposed to violence as a separate character trait that ..." In both these cases, I shall label such a proposition P an *explanatory counterconsideration* (Van Laar and Krabbe, 2013). The function, then, of such explanatory reasoning is primarily to inform the proponent of her motivations for her doubt,

and, secondarily, to give some strategic advice to the proponent about how to go about developing a convincing argument in favour of his stance. But the function is not, as in the case of a counterargument, to convince the proponent to accept a contrary position.

The differences between counterconsiderations expressed with a cautious assertion and those with a question are mostly superficial, for in both cases the opponent explains her critical stance, as well as gives – albeit in a somewhat indirect manner – strategic advice to the proponent for how to go about his attempts to convince the opponent of his thesis. In both cases, the proper reaction for the proponent is to refute the counterconsideration (by showing it to be false or by showing it to be probatively insufficient or even irrelevant) or to show that the counterconsideration is far-fetched. And in none of them should the proponent be allowed to challenge the opponent to offer a persuasive argument in favour of the propositions that make up her explanation. In other words, if the counterconsideration is not wrapped up in a counterassertion, and nevertheless the proponent challenges the proposition – "What is your argument in favour of there *not* being any causal link; How can you convince me?" – the proponent must be seen as having committed a straw man fallacy, for as a matter of fact, the opponent has in her criticism not genuinely asserted that there is no causal link. She had merely challenged the proponent to elaborate on his position, suggesting that the way to do so is by refuting this very counterconsideration (See Van Laar, 2011, for a formal dialogue model that implements this idea).

Offering counterconsiderations fits the kind of persuasion dialogue that is probatively asymmetrical (Rescher 1977) in being based on a division of labour between a proponent – who has the task of defending his standpoint vis-à-vis his opponent – and an opponent – who has the task of critically testing the standpoint and the defence offered in favoured of it. In many dialectical models, the proponent's task amounts to the task of showing (*arguing*) that the opponent's critical stance towards his thesis is untenable, given the opponent's propositional commitments, such as those that she has conceded as indisputable starting points in the preliminary stage of the dialogue, or those that she has conceded in the course of the argumentative exchange itself. The opposite task of the opponent's, then, amounts to the task of showing (*explaining*) that her position of not accepting the proponent's standpoint is tenable after all, notwithstanding her propositional commitments. With explanatory counterconsiderations, the opponent offers a reasoned criticism that goes beyond a mere question and yet she stops short of developing an argumentation of her own. In this manner, the opponent can critically test the proponent's position in a highly active,

substantive, creative and directive manner, yet without becoming a second proponent.[2]

That the opponent uses reasons to criticize the proponent's position should not fool us into analyzing this reasoning as itself an instance of argumentation, at least not as argumentation in the sense of an attempt to convince the initial proponent on the basis of what he has or should have conceded. Different from counterargumentation, an explanatory counterconsideration can be fully legitimate and successful even if it is *not* matching, or derivable from, propositional commitments of the proponent. As a consequence, *motivated doubt*, made up from the expression of critical doubt and an explanatory counterconsideration, forms a kind of criticism *sui generis*.

3. Considering Walton's distinction between assumptions and exceptions

Walton does not account for the kind of criticism where an opponent puts forward her motivated doubt. This becomes apparent when he discusses the options for an opponent who is confronted with a proponent who advances an argument that instantiates a particular argumentation scheme. Further elaborating on Walton's example, the proponent might employ the defeasible argumentation scheme From Expert Opinion, saying: "Dr. Smith is an expert on video games and Dr. Smith says that video games do not lead to violence. Therefore, video games do not lead to violence" (cf. Walton, 2011, p. 143). According to Walton, a critical reaction could, first, focus on one of the two ordinary, explicit premises, in which case, according to the norms he proposes, the proponent should argue in favour of the attacked proposition, in order to save his argument from defeat. Second, the opponent could focus her criticism on a kind of implicitly left premise that Walton dubs "assumption." This is the kind of premise that is not explicitly stated, but that is a legitimate focus of attack, such that if the opponent challenges it by mere questioning, it is, again, up to the proponent to provide an argument in support of the challenged proposition if he wants to save his argument from defeat. That Dr. Smith is a knowledgeable expert would be such an assumption in the example. Thirdly, the opponent could focus her criticism on a different kind of implicitly left premise that Walton dubs "exception." In the paper at issue here, Walton gives as an example of an exception associated with arguments from expert opinion, that "[expert] E is not trustworthy" (2011, p. 140). This example is difficult to understand as a premise, at least in an argumentative context, given that this proposition

does not support, but leads away from the argument's conclusion (to wit: whatever the expert stated). Yet, in a more recent paper, Walton gives as an example of an exception in an argument from expert opinion "the statement that the expert is personally reliable as a source" (2012, p. 380). Given that this fits the notion of a premise of a supporting argument, I assume that this illustrates his concept of exception best. (In my view, it would have been more clear to label that proposition a "non-exception" or, even better, a "normality premise.")[3] An exception, then, is conceived of by Walton as the kind of proposition normally left implicit by the proponent, such that if the opponent challenges it, the proponent does not need to provide an argument in support of this exception (normality premise), at least not before the opponent has offered an argument that supports the opposite proposition that the situation is exceptional, for example that expert E is *not* personally reliable as a source. Different from attacks on ordinary premises and assumptions, the mere challenge of an exception (normality premise), unaccompanied by supporting evidence, cannot defeat and rebut, let alone refute the exception (normality premise). In Walton, Reed and Macagno (2008), this norm is implemented in the rules of a formal dialogue system: If the opponent attacks an exception premise, "Pose C" (but not when he attacks a different kind of premise), the proponent has the option to request the opponent to offer a counterargument, "Why not-C?" (2008, p. 386).

The upshot of the discussion in the previous section should be that the opponent, if she has challenged an exception (normality premise) could be seen as having also fulfilled her dialectical obligations as soon as she has provided the proponent with an explanatory counterconsideration, and consequently without providing the proponent with a full-fledged counterargument. When challenging an exception (normality premise), she should not be forced to put forward a persuasive argument, starting from propositions that the proponent would be willing to subscribe to. Instead, she should be given the freedom to explain her critical stance with a cautious assertion, rather than with a real assertion, or with a counterconsideration in a questioning mode, thereby trying to direct the proponent to fulfil his burden of proof in the specific way of refuting that particular counterconsideration.

Walton does not provide a criterion for determining what propositions should count on the one hand as ordinary premises or assumptions, and on the other hand as exceptions (normality premises). In my view (presented in Van Laar 2011), it is plausible to construe a criterion on the basis of the concept of an explanatory counterconsideration. Suppose that the dialogue participants have (or can be assumed to have) accepted the following defeasible argumentation scheme: "Expert E says that P. Therefore P."

Then if the proponent puts forward an argument that instantiates this very scheme – "Dr. Smith says that these games do not lead to violence. Therefore, these games do not lead to violence" – then any proposition part of the proponent's argument that instantiates one of the premises of the scheme counts as an ordinary premise or as an assumption (if left implicit). Normality premises (exceptions), then, can be connected with those counterconsiderations that motivate an opponent to doubt and challenge the *connection* between premises and conclusion. How?

If an argument instantiates a defeasible argumentation scheme, such as From Expert Opinion, the opponent may also challenge the connection between the set of premises and the argument's conclusion: "Why should I accept that these games do not lead to violence if Dr. Smith says so?" On the proponent's request, the opponent should (at least if she has underwritten the argumentation scheme as *prima facie* acceptable) be obligated to provide an explanatory counterconsideration, and specify it to some sufficient degree: "Well, as far as you've shown, Dr. Smith is not personally reliable. To be more specific about it, he might, for all you've shown, have been paid by the game industry." Now, it is up to the proponent to refute the counterconsideration, and he may do so either by showing it to be false ("Dr. Smith is reliable, and he has no financial stake, because ...") or by showing it to be insufficient to refute his position ("Even if he would have been paid by the game industry, you can still take his word on it, because ..."). The former statement, with which the proponent refutes an explanatory counterconsideration as false, can be seen as fulfilling the same function that Walton assigns to exceptions (normality premises). In short, exceptions (normality premises) can be analyzed as those statements with which the proponent denies propositions that the opponent puts forward in explanation of why she doubts the connection between the premises and the conclusion of the proponent's argument.

Three concluding remarks on this issue: (1) Whether or not a proposition counts as a normality premise (exception) depends, in this view, upon the choices made within the (possibly implicit) dialogue, especially those by the opponent. (2) Whether or not a proposition counts as a normality premise (exception) also depends upon the specifics of the argumentation schemes that the participants have adopted. Suppose they accept the following pattern: "Expert E says that P. E is personally reliable. Therefore P." Then, an attack such as "Is Dr. Smith personally reliable?" possibly explained by "Might he have a financial bias?" would simply count as an attack on an ordinary premise or on an assumption. (3) By advancing such a normality premise (exception), the proponent has started to discharge his

burden of proof, and in a way suggested by the opponent. In line with the dialectical division of labour, it can be expected that the opponent critically tests the correctness of the new statement – "What would be your argument for your view that Dr. Smith is not being paid by the game industry?" – thus enabling the proponent to refute the counterconsideration in full.

Consequently, the notion of an explanatory counterconsideration can be used in order to elaborate on Walton's theory of criticism.

4. Conclusion

It hardly needs mentioning that providing the opponent with the right to discharge her burden of criticism with explanatory counterconsiderations brings a clear strategic advantage to her. It is much less demanding to motivate doubt regarding proposition P, than to convince the proponent of not-P. If we want to encourage opponents to act critically, and proponents to develop responsive arguments, the importance of the notions of an explanatory counterconsideration and of a motivated doubt should be emphasized in the theory of criticism.

NOTES

[1] Of course, in such a mixed dispute, the initial proponent's burden of proof does not evaporate.

[2] Given that offering counterconsiderations can often be considered a more cooperative way to criticize a position than merely challenging it, the opponent's *burden of criticism* should, in some situations, bring the obligation to offer explanatory counterconsiderations, such as when the opponent challenges a proposition with the status of a (common) presumption (Van Laar and Krabbe, 2013).

[3] Walton (2011) labels two propositions on pages 139 and 140 as both assumptions and as exceptions. I surmise that the labelling in the list on p. 140 is the correct one. In addition, as just explained, I also think that the examples of exceptions (normality premises) in this list should express that the situation is *not* exceptional.

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JUSTIFICATION AND ARGUMENTATION

Discussion paper on Lilian Bermejo-Luque's "Argumentation Theory and the Conception of Epistemic Justification", *Studies in Logic, Grammar and Rhetoric*, 16 (29), 2009, 285-303.

Abstract. In her paper "Argumentation theory and the conception of epistemic justification", Lilian Bermejo-Luque presents a critique of deductivism in argumentation theory, as well as her own concept of epistemic justification inspired by the views of Stephen Toulmin. Reading this paper induced me to reflect on the mutual relation between the notions of justification and argumentation. In this work I would like to first draw the reader's attention to a few issues which seem debatable to me, or which I find worth presenting from a slightly different point of view than that of Lilian Bermejo-Luque. I agree that deductivism is not suitable for a general theory of evaluation of arguments although the critique of deductivism presented by the Author appears as not fully adequate to me. Then I proceed to presenting my doubts about the "conception of justification as a proper outcome of good argumentation" presented in the work. I need to emphasise that due to a broad range of topics addressed by me in this short paper, the description of some of them will be neither fully precise nor exhaustive.

Keywords: argumentation, deductivism, justification, reasoning, argument evaluation

1. Deductivism – why is it wrong?

1.1. First, I would like to present several comments on deduction and deductivism and on its relations with argumentation and justification. I agree that deductivism is not suitable for evaluating arguments, although it seems to me that L. Bermejo-Luque somewhat inadequately presents the problems that deductivism struggles with. According to the Author, applying the rules of deductivism to arguments, the premises of which do not entail their conclusions, unavoidably leads to the error of argumentative circularity, which I cannot agree with. First, a few words on the logic of deduction and its characteristics. The central notion in the logic of deduction is the notion of entailment. Entailment is a relation between propositions which

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is constructed in such a way that true propositions may entail only true propositions. The basis for the relation of entailment is the very meaning of the words used (so-called logical constants). Speaking less strictly, this means that if propositions A and B entail proposition C, then if anyone thought that both A and B were true but C was false, they would be revealing the fact of not having understood the meaning of one of the logical constants used in propositions A and B or C. Such entailment is called a *logical* one. The relation of logical entailment is broadly used in mathematics, where it constitutes the foundation of theorem justification. In order to justify theorem T, i.e. to show that it is true, we would have to indicate true theorems U, W, ... that T follows from. Of course, the first question that arises is: how do we know that those theorems U, W... that we invoke in justifying T are true? They obviously require justification, but once we justify propositions U, W... by use of other propositions X, Y... then another question arises: how do we know that X, Y... are true? In other words, we are facing the problem of *regressus ad infinitum*. In mathematics this does not cause any difficulties. There is a certain category of "prime" theorems, called axioms, which are accepted as true by force of an arbitrary decision. Any proper justification of a theorem ends with them. If any of the theorems U, W, ... is not an axiom, then it should be entailed from axioms or theorems entailed from axioms, etc. It is enough to say that in mathematics a true (justified) theorem is one which is entailed from axioms (in particular, every theorem which is an axiom is entailed from axioms under the "from p infer p" rule of logic). The question of motives for accepting a given theorem as an axiom and the problem of the notion of truth in mathematics would require being discussed as a separate topic; however, it is not necessary for our purposes. Mathematics for philosophers used to be an unattainable model of a kingdom of absolute certainty and order. It is hard to be surprised by this fascination. In mathematics a once-justified theorem remains justified forever – it will never be revoked, it does not require being further specified or complemented. Justification of a theorem is never partial, it is always complete, and it consists in demonstrating the truthfulness of a theorem, and not e.g. its high level of probability. Besides, due to applying formal methods, the question whether a given theorem has been properly proven or not can be solved in an unambiguous and objective way, independent of any subjective feelings and inclinations of mathematicians.

1.2. The enumerated properties of the mathematical method strongly tempt us to apply it outside mathematics, i.e. to base the process of justification on the relations of entailment in other fields as well – to determine that it defines the only proper justification. Such an approach, known

as deductivism, in general terms determines that the only way of justifying a theorem is to demonstrate that it is entailed from true theorems.[1] L. Bermejo-Luque criticises deductivism in a way which, in my opinion, is only partly correct. I shall start from saying that I agree with the Author's statement that deductivism cannot handle the justification of general theorems, such as: "Every raven is black". The problem – as the Author aptly indicates – is that even though it seems that this theorem is supported by the premise: "All the ravens observed so far were black", it is not entailed from it. In order to obtain the entailment that is recommended by deductivism, an argument should be complemented with some premise. If, however, we add such a premise, e.g. "If each observed raven is black then every raven is black", then an argument reconstructed in such a way will, according to the Author, become a circular argument. If I understand the Author's thinking correctly, argument circularity in this case is based on the fact that the addition of the mentioned premise was motivated only by the desire to achieve entailment. And actually, if an essential premise for an argument was guessed on the basis of such reasoning there is no doubt we are dealing with circularity. However, things are different if our set of beliefs included – before considering the argument – some propositions which, together with premises specified in the argument, allow for deductive inference. It is easy to imagine that somebody had already thought (correctly or incorrectly) that if each observed raven was black, then every raven was black (e.g. the person might think that birds of the same species always have the same colouring).[2] In such a case the premise for an argument would provide grounds to carry out deductive reasoning without ending up with the error of circularity. *Some* error might occur here, but it would not be the error of *circulum in probando.*

In my opinion the raven example and similar examples reveal the defect of deductivism, namely the fact that we are very often ready to accept general propositions, such as: "every raven is black", even though we do not know any set of true propositions that they are entailed from. This shows that there are correct methods of justification which are beyond the reach of the method indicated by deductivism.

1.3. Other examples of circularity provided by the Author raise even more doubts. We cannot, for instance, consider the following argument: "it's raining, therefore you should take your umbrella" (p. 287), used in a regular context, to be a circular argument. If there are such propositions in the set of beliefs of the argument recipient as e.g. "if you intend to go for a walk and it is raining, then you should take an umbrella" and "you intend to go for a walk", then after hearing the above mentioned argument the person

will carry out appropriate deductive reasoning leading to the argument's conclusion. I would like to note that I am not trying to solve the question of the status of the indicated assertions used in the reasoning, which are not the premises of the original argument. But are these the components of that argument, e.g. its "hidden premises"? Answering this sort of question is part of the theory of argumentation. However, in my opinion, no matter how this theory solves the problem, one thing is certain: lack of entailment between premises of an argument and its conclusion does not yet mean that deductivism cannot be successfully applied in its evaluation without the danger of ending up with *circulus in probando*. The Author most apparently refers to deductivism as a concept according to which a good argument is an argument whose premises entail a conclusion. Meanwhile, this does not – in my opinion – constitute the essence of deductivism nor the condition *sine qua non* for its use. In the opinion of Trudy Govier[3] which I agree with, there is no such thing as a deductive argument. There is, however, a deductive standard of argument evaluation – a standard, we should add, which sometimes gives good results, but sometimes bad results.[4] I would also like to note that in mathematical works, i.e. in the kingdom of deductivism, we very rarely come across arguments the conclusion of which is entailed from the quoted premises. A mathematician e.g. reasons as follows: "$x + 2 < 3$, so $x < 1$". There is no logical entailment between the premise and inference of this argument,[5] but still we cannot accuse it of being circular.

2. How can arguments justify?

2.1. Before I proceed to discussing the concept of justification as presented by L. Bermejo-Luque I would like to present a few general remarks to the notion of justification and its relations with the notion of argumentation. If we are talking of justification of some proposition C in the course of argumentation, we are thinking of indicating (*explicite* or *implicite*) other propositions that were previously accepted, in the context of which proposition C deserves to be accepted. I am purposely using the phrase "C deserves to be accepted" instead of "C is true". If justification always consisted in proving the *truthfulness* of a proposition, we would very rarely be able to justify our views. Argumentation outside mathematics usually concerns empirical assertions which can never be viewed as simply true. Even if we feel psychological certainty about some proposition (e.g. "She is my relative"), we can always be found to be mistaken. Every time we wish to justify an empirical proposition we must carry out reasoning referring to other em-

pirical propositions, e.g. scientific theories, which may, in some time, turn out to be false.[6] Another fundamental problem in empirical disciplines is the lack of an equivalent for mathematical axioms, and as a result – the inevitability of *regressus ad infinitum*. Thus, we cannot discursively prove the truthfulness of any empirical proposition, though we may acknowledge that it deserves our acceptance due to the fact that earlier, for some reason, we had accepted another proposition. A fundamental problem can be expressed as the following question: why should acceptance of propositions, say A and B, make the acceptance of C something rational? Deductivism does not provide a good solution in the field of empirical propositions. Even if C logically follows from previously accepted propositions A and B, it does not at all mean that C deserves to be accepted. The rules of logic state: if A and B are *true*, then C also has to be *true*. We should not, however, confuse this principle with a completely different rule, namely: "if A and B are accepted, then C should also be accepted", which is not a generally valid principle. In order to find out how it functions, let us consider what would happen if e.g. we had previously accepted "not-C"? Or if C contradicts A[7]? Then, perhaps, we would rather withdraw our acceptance of A or B than accept C. Henry Kyburg's famous lottery paradox[8] shows that propositions of very high probability may entail a logically false proposition. Without going deeper into deductivism[9] we can note that its low utility is also due to the fact that one of the rarest cases is when a proposition that we are about to justify is entailed from previously accepted propositions. Most often we justify propositions by means of propositions which do not informatively include the proposition that is being justified, which means that we should allow for a situation where the justifying propositions are true while the justified one is not. There is, however, no clear, general theory that could explain the essence of the justification relation between propositions. Partial solutions are provided by inductive logic, but in practice its application requires too many conditions and primary assumptions to be met. The only branch of inductive logic that has practical application is statistical induction which concerns inferences related with population based on a sample. In practice, evaluation of justification is, to a greater or lesser extent, *intuitive*. This means that we cannot clearly define nor specify particular steps in a reasoning that binds justifying propositions with the justified one, nor rules that would justify the correctness of those steps (this does not only concern simple people, but also philosophers or scientists). Regardless of which, reasoning in empirical disciplines is defeasible: it can always turn out that some previously accepted proposition that we recollect contradicts the correctness of the inference. If we follow this path of thinking we will

finally arrive at a conclusion that all our knowledge about the world is always potentially, indirectly or directly engaged in the process of evaluating the correctness of a justification.

2.2. The above remarks concern problems related with justification. But what is the role of argumentation? In my opinion this is a phenomenon of a different level, namely the level of communication. Argumentation is something that a sender uses in order to provoke reasoning in the receiver that would lead to justifying some claim. Arguments do not justify, but they show – in a more or less precise way – the course of thinking that a receiver ought to follow in order to find that a given claim deserves to be included in their set of beliefs. In order to construct an argument for C, its sender has to previously know the justification for C, or at least know what is going to be accepted by the argument's receiver as a correct justification for C. The argument sender may not be able to provoke the desired reasoning in the receiver. A special example of such a situation is when in our argumentation we invoke propositions not accepted by the receiver. It may also happen that acceptance of C might introduce a contradiction to the receiver's set of beliefs, e.g. not-C has been previously accepted. There are many other reasons for an argument not to provoke the desired reasoning in a receiver.

Thus when we speak of a good argument we must always take into account the receiver's set of beliefs. There is no argument that can be considered good in absolute terms. An argument is either good or bad only in relation to the receiver's set of beliefs. Obviously, a good argument always points to correct justification. But what does good justification consist in? This question should be answered by the theory of justification, which differs from the theory of argumentation, though it is, of course, strictly related with the latter.

2.3. L. Bermejo-Luque rightly describes an argument as something which is somehow related with the act of communication with its sender and receiver. For the Author argumentation is "a communicative activity, an attempt at showing a target claim to be semantically correct" (p. 300). Such phrasing does not raise my objections, however, instead of "semantically correct" I would use a clearer expression, e.g. "acceptable" or "credible". The Author presents a concept according to which justification is the output of good argumentation, and in addition "it makes all the difference which conception of argumentation we endorse" (p. 300).

Further she writes: "By arguing, we put forward a claim – i.e. we present a certain content with a certain degree of assertive force – and by arguing well, we justify that claim" (p. 300). Thus, in order to justify a claim we need to provide a good argument for it. "[...J]ustifying is [...] a certain sort

of successful communicative activity" (p. 300). Correctness of justification, as I understand it, depends on the quality of the arguments used. A good argument results in good justification – what remains is only to explain the difference between a good argument and a bad one. On page 298 the Author gives the following definition of validity: an argument is valid if its warrant is semantically correct. This means that the presented concept of justification points to the semantic correctness of warrants of the arguments used as a criterion of the justification's correctness. We need to say that this criterion is rather vague. If we return for a moment to the deductivist concept of justification, we will see that with all its flaws it has one great merit: it explicitly indicates a procedure which allows effectively ascertaining whether a justification is good or bad. This procedure consists in establishing whether logical entailment is present between the premises and conclusion. But how shall we verify if a warrant of a given argument is semantically correct? According to what the Author says in her work, it seems that establishing this is merely intuitive. In my opinion the concept of justification should first of all indicate, as much as possible, a method for differentiating a good justification from a bad one which would be free from intuitive evaluation, objective, and would lead to unambiguous settlement of the problem. In my opinion it is the touchstone of this concept's value.

2.4. To illustrate what I am trying to say I will use an example of an argument provided by the Author on page 299: "every observed raven is black, therefore likely every raven is black". The argument is presented by the Author as an example of a valid argument, which is why if I prove that it does not deserve to be treated as such, it will suggest that there are some weak points in the discussed concept of justification. I think that this argument should not be considered to be a good argument because its value only depends on the receiver's set of beliefs. I shall begin with a different example of an argument, which might seem a bit artificial, but which allows us to conduct a strict analysis. Let us imagine an urn which contains 100 balls. Each ball may be either black or white. We draw 99 balls from the urn at random. All of the balls turn out to be black. Can we say, that it is likely that the last ball remaining in the urn is black? Well, calculations based on the probability calculus show that the probability of the last ball being black cannot be determined on the basis of the presented data.[10] In order to calculate this probability it is necessary to know the *a priori* probability of the last ball in the urn being black (or the *a priori* probability of various possible sets of balls in the urn). It is a highly non-intuitive result: most people are prone to think that the probability of the last ball being black is (a) high, (b) can be calculated on the basis of the

fact that 99 balls drawn from the urn were black. I think that this proves that the argument: "each of the 99 drawn balls is black, therefore likely the last ball is also black" is not valid in any reasonable sense of this word. Similar remarks may be referred to the raven example. We cannot justify the thesis that likely all ravens are black by the mere fact that all ravens encountered so far have been black. If, for instance, a scientist conducting DNA tests on ravens concludes that one raven in a million is blue, he will give to the assertion "all ravens are black" the *a priori* probability equal to zero. Information of all the so far encountered ravens being black will not affect his opinion on the properties of the set of all the ravens. If we arrive at a conclusion that all ravens are black, we do not only take into account the fact that all the so far observed ravens were black, but we allow for many various, additional pieces of information: the number of observed ravens, the circumstances of their observation, the intensity of our efforts to discover any non-black raven, various biological data. The issue would require deeper discussion – e.g. considering the raven problem from the point of view of the so-called inference to the best explanation, but in this paper I have only provided the most straightforward remarks.

3. Conclusion

In the end I would like to emphasise my intention of presenting my point of view in the most clear and explicit way. I aimed at showing the essence of differences between the Author's position and that of mine, especially with respect to the way of understanding justification and its relationship to argumentation. Certainly these problems may be approached using a variety of methods taken from very different areas of research. I found it useful to plainly sketch out my own position. I did so mainly to make my point of view open to further criticism. Critique and debate are indispensable ingredients of all scientific endeavors.

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NOTES

[1] Cf an excellent discussion on deductivism in (Govier 1999). Deductivism as a standard of argument appraisal is defended in (Lambert et al., 1980). I consider it appropriate to warn the reader that there are several meanings of the word "deductivism". We concentrate here exclusively on deductivism in argument evaluation and are not interested in e.g. Popper's concept of falsification.

[2] The premise under consideration is false (perhaps) but (a) it belongs to the set of beliefs of a given person which is possibly a consistent set of beliefs, and (b) by virtue of its logical form, it guarantees logical entailment to hold.

[3] Cf (Govier, 1987, p. 43)

[4] Because of lack of space I have had to leave out discussion about the relationship between epistemic principles and the rules of deductive logic.

[5] Please, note, that in the inference rule $x + 2 < 3 \ / \ x < 1$ there is not a single logical constant, and thus we cannot speak of logical entailment.

[6] Here it is worth mentioning the notes of Trudy Govier on the acceptability of argument premises in (Govier, 2010, pp. 116–147).

[7] Let us assume that we accept proposition $A \rightarrow \sim A$ and we accept proposition A. Both these sentences entail $\sim A$. Should we accept $\sim A$?

[8] (Kyburg, 1961, p. 197)

[9] For the brevity of presentation, I will not consider the details of the role of deduction in mathematics, science, and everyday reasoning.

[10] The calculations are considered elementary; they can be also found e.g. in (Hitchcock 1999).

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STRATEGIC MANOEUVRING AND THE SELECTION OF STARTING POINTS IN THE PRAGMA-DIALECTICAL FRAMEWORK*

Discussion paper on Frans H. van Eemeren's "Strategic Manoeuvring Between Rhetorical Effectiveness and Dialectical Reasonableness", *Studies in Logic, Grammar and Rhetoric*, 16 (29), 2009, 69–91.

Abstract. The article analyzes strategic manoeuvring within the pragma-dialectical framework with respect to the selection of starting points in the opening stage to frame the arguments. The Terri Schiavo case is presented, which can provide interesting insights concerning this issue. I would like to show that resolution of the difference of opinion requires the resolution of a subordinate difference of opinion concerning how to label her medical state, and why discussants were not able to resolve this subordinate difference of opinion. After, the conflict that arises between critical reasonableness and rhetorical effectiveness is examined and how strategic manoeuvring aims to resolve this conflict. In the final part of the paper I argue that the problems raised can be dealt with within the framework of pragma-dialectics.

Keywords: pragma-dialectics, strategic manoeuvring, starting points, fallacies, difference of opinion

1. Introduction

The study of argumentation is a wide-ranging interdisciplinary field, and pragma-dialectical theory is one of the main driving forces behind the wide scope of research done. This article deals with the study of argumentation in a broader context and tries to position the pragma-dialectical theory of argumentation within this broader field. It gives a brief summary of the framework of pragma-dialectics on the one hand, and discusses the treatment of fallacies in the pragma-dialectical framework in general, as well as the treatment of arguments from authority and how to distinguish these from the *argumentum ad verecundiam* fallacy.

Pragma-dialectics regards argumentation as a *communicative* and *interactional act* complex where arguers interact via functional verbal behaviour

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directed at other participants in the discussion. Arguers are held *accountable* for the constellation of the proposition that they put forward and they should do this in a manner that *appeals to* the *reasonableness* of the propositions put forward. (van Eemeren 2009, p. 72) These serve as the foundation for the meta-theoretical commitments of the pragma-dialectical theory of argumentation.

The second section of the article introduces the actual pragma-dialectical theory of argumentation. Its main goal is to combine an empirical orientation with a critical one regarding the study of argumentation, and aims to clarify how the gap between the normative and descriptive dimensions of argumentation can be systematically bridged. It distinguishes four stages: the "confrontation stage", in which the difference of opinion is externalized; the "opening stage" in which participants select the common procedural and material starting points; the "argumentation stage" in which participants determine whether the standpoint held by the protagonist is tenable in the light of the critical responses of the antagonist given the points of departure acknowledged by participants in the opening stage; and finally the "concluding stage" where discussants determine the end result of the critical discussion. (van Eemeren 2009, pp. 75–76)

The third section of the paper deals with fallacies and how pragma-dialectical theory is capable of tackling problems previously omitted by the logical standard treatment of fallacies. Pragma-dialectics aims to give constructive solution to the treatment of fallacies, as these are systematically connected with the rules for critical discussion and the process of resolution of the difference of opinion. Any move that is a threat to the resolution process at any stage can be considered a fallacious manoeuvre. (van Eemeren 2009, p. 79)

The fourth section of the paper deals with fallacies as derailments of strategic manoeuvring. Strategic manoeuvring is the continuous effort made by discussants to represent their standpoints in the most effective way rhetorically while maintaining the requirements of critical reasonableness. In the following sections of the paper I examine these efforts in greater detail, and examine how the selection of starting points in the opening stage affects the argumentation stage.

The fifth and final section of the paper examines how we are to distinguish the fallacious *argumentum ad verecundiam* from the non-fallacious argument from authority. Both arguments rely on the expertise of the source of knowledge; however. in the case of an *ad verecundiam* fallacy, the argumentative moves concerned are not in agreement with the relevant criteria for complying with a particular dialectical norm. (van Eemeren 2009, p. 86)

2. The conflict between *critical reasonableness* and *rhetorical effectiveness*

In the following section an argument is laid out to show that there is a conflict between the conception of *critical reasonableness* and the conception of *rhetorical effectiveness*. Van Eemeren and Grootendorst (2004) differentiate two different approaches to argumentation from one another. One approach is the *epistemo-rhetorical*; the other, the *pragma-dialectical*. The aim of the first approach is to produce arguments that persuade the audience in its favour; the aim of the second is to resolve the difference of opinion in a manner acceptable to the parties involved in the discussion (van Eemeren & Grootendorst 2004, pp. 15–16).

Critical reasonableness encourages the systematic submission of the protagonist's standpoint to the critical doubts of the antagonist. The interchange of arguments and doubts results in a resolution of the difference of opinion, which is acceptable to both parties involved. Acceptance is based on the concept of inter-subjective validity. "[T]he criterion of intersubjective validity satisfies the premise that reasonableness need not necessarily be universal. In this respect, unlike geometrical reasonableness, critical reasonableness is dependent on human judgment: It is related to a specific group of people at a particular place and time" (van Eemeren & Grootendorst 2004, p. 17).

On the other hand, rhetorical effectiveness encourages the party advancing a standpoint or critical doubts to present these in the most effective way possible, so that the resolution of the difference of opinion favours their standpoint or critical doubts. Considering the roles of the discussants in a critical discussion, there is a conflict of interest present. The conflict lies between *individual interest* – to effectively persuade the audience that the given individual standpoint is acceptable despite the critical doubts addressed by the antagonist, or that the critical doubts raised indeed render the given standpoint unacceptable – and the *collective interest* – to advance a standpoint that is acceptable to all parties and resolve the difference of opinion. Discussants manifest both of these interests, thus they try both to persuade the reasonable judge of the acceptability of their individual standpoint or criticism, and they try to convince the discussion partners of the reasonableness of the given standpoint or the reasonableness of the critical doubts. Pragma-dialectics aims to show that the gap between these two can indeed be bridged with the introduction of strategic manoeuvring. (van Eemeren 2009, p. 82)

The individual interest of representing a given standpoint most effectively is best achieved if actors diverge in their argumentative moves from one another. On the other hand the collective interest in finding a reasonable standpoint is best achieved if actors in the critical discussion converge with their argumentative moves in the same direction of resolving the difference of opinion. The introduction of strategic manoeuvring tries to resolve this conflict.

"Strategic manoeuvring refers to the continual efforts made in all moves that are carried out in argumentative discourse to keep the balance between reasonableness and effectiveness" (van Eemeren 2010, p. 40). However when the individual interest of achieving effectiveness overrules the collective interest of reasonableness, the discussion becomes derailed. The question arises: how are we to maintain reasonableness while allowing the critical discussants to maintain a level of effectiveness and strategic manoeuvring in the space of argumentative discourse without violating the idea of reasonableness? Is it possible to bridge the gap between the normative and the descriptive dimensions of the study of argumentation?

3. The selection of starting points

In the opening stage of the critical discussion, participants establish the procedural and material starting points as mutually agreed upon points of departure. "[S]trategic manoeuvring by the parties will be aimed at establishing rhetorically procedural starting points that secure an opportune allocation of the burden of proof and combine having desirable discussion rules with having material starting points that involve helpful concessions by the other party." (van Eemeren 2009, p. 83) However, it is difficult to come to terms with how any participant in a critical discussion would accept a starting point that would hinder their own rhetorical interest from representing their own standpoint to the fullest.

Rule 6 in a critical discussion considers the starting points. "No party may falsely present a premise as an accepted starting point, or deny a premise representing an accepted starting point" (van Eemeren *et al.* 2002, p. 128). When questions arise considering the selection of a starting point, discussants create a new critical discussion that is to resolve the subordinate difference of opinion which is arising. Still, there are cases possible where either of the discussants is not willing to accept certain starting points since this hinders their interest in rhetorical effectiveness, and keeps raising critical questions. Two issues are raised here: the first is theoretical and the

second is practical. The first issue is raised by Krabbe (2007), who calls it the *completition problem.* In theory participants are either unable to move on from the opening stage or even if they are, any arising conceptual controversies in the argumentation stage require discussants to return to the opening stage to settle the arising difference of opinion. The second issue is more practical and will be the focus of further discussion. It considers what happens when discussants reach an epistemic bedrock and cannot agree on the starting points for the arguments.

In the following, I will examine the discussion around about the case of Terri Schiavo, who fell into a coma. (Grady, 2005) The main difference of opinion was whether Terri Schiavo should be kept alive by artificial means or not. This gave rise to a subordinate difference opinion, on which the further analysis focuses.

The subordinate difference of opinion was whether her state should be considered a "passive vegetative state" (PVS) or a "minimally conscious state" (MVS). The difference of opinion in determining her medical condition was due to the "deeper lack of consensus what might constitute adequate procedure for determining whether, for any brain-injured patient she is in a PVS or an MCS. [...] In this way, the division over Schiavo's neurological status looks like a deep disagreement, and thus not one amenable to a reasoned argumentative resolution" (Adams 2005, p. 71). Fogelin argues that when in deep disagreement, the rational resolution of the difference of opinion is impossible and only irrational or non-rational persuasive techniques remain available to the discussants. "[D]eep disagreements cannot be resolved through the use of argument, for they undercut the conditions essential to arguing" (Fogelin 1985, p. 5).

The question that arises when discussing this issue is: how it is possible to analyze subordinate difference of opinion in mixed disputes? Both parties represent a standpoint and both argue for their own and argue against their opponent's standpoint. Even if parties agree in all starting points, the subordinate difference of opinion later revealed takes us back to the selection of starting points in the opening stage. If discussants are not able to settle the subordinate difference of opinion concerning the selection of standpoints in a manner that does not violate the rules for critical discussion, then the initial critical discussion becomes derailed as well.

The interesting point in the Schiavo case would be that even though discussants opted for a discussion procedure that fit the framework of pragma-dialectical theory, it is the medical evidence that proved to be inconclusive; the appropriate means of resolving the subordinate difference of opinion are absent. However one might argue that discussants might agree on a proce-

dure that could determine her proper mental state (Adams 2007, pp. 75–76), which could resolve the above subordinate difference of opinion. Still it cannot be ruled out that the premise used in the resolution of the subordinate difference of opinion is not questioned, which results in a further subordinate difference of opinion. Thus it is possible to construct another subordinate critical discussion in the opening stage concerning the selection of mutually agreed standpoints.

So basically, if discussants are not able to settle all the possible subordinate differences of opinion in a critical discussion, the resolution of the initial difference of opinion in a critical discussion is rendered impossible. In the following section I would like to argue that pragma-dialectics does not regulate how to discern labels that are acceptable to describe certain phenomena from those that are not acceptable. The initial starting points to label the arguments (the subordinate difference of opinion) determine whether the actual difference of opinion can be resolved. In order to achieve resolution either of the parties has to resign from advocating their labels which is done in a critical discussion.[1]

Applied to the Schiavo case either of the parties has to resign from labelling her state (either as PVS or MCS) so that the resolution of the actual difference of opinion could continue. However, due to inconclusive evidence neither of the discussants is willing to give up their labelling of the phenomenon. This reveals that the subordinate difference of opinion concerning the starting points of the arguments used in critical discussion has to be resolved first. However if discussants are unable to do so, the dialectical impasse of deep disagreement has not been ruled out, thus rendering discussants incapable to resolve the primary difference of opinion.

Mixed disputes provide an additional challenge, since both discussants have to take up the roles of both antagonist and protagonist. Both discussants have to put forward their starting points and cast critical doubts on these, constructing further subordinate critical discussions concerning the starting points of each discussants until the resolution is complete concerning the starting points and the discussants are ready to move on to the actual argumentation stage.

4. How are we to select starting points?

What the previous analysis tried to show is that discussants have to resolve certain subordinate differences of opinion concerning the starting points that have to be mutually accepted before the actual difference of

opinion is to be resolved. Concerning the Schiavo case the resolution of the subordinate discussion concerning the starting points – how to label her mental state – is impossible due to the lack of conclusive evidence. Adams (2007) analyzes this as a case of deep disagreement which is a difference of opinion that cannot be resolved by rational means (pp. 74–75). The methodology of how the actual starting points are selected has to be explained.

In order to cope with the above objections I would suggest that the pragma-dialectical framework could be amended with meta-discussion rules that facilitate both the selection of the proper starting points used by the discussants and the resolution of subordinate differences of opinion.

The construal of accepted starting points in the discussion is bound to stand to critical doubts raised by the antagonist. However, certain questions might arise which could not be considered as critical argumentative steps that move in the direction of the collective aim of resolving the difference of opinion, but as questions serving the rhetorical interest of persuading the audience. An antagonist might continue to raise doubts concerning the starting points of the protagonist's standpoint *ad nauseam* in order to hinder the resolution process. I would consider this as an argumentative fallacy and thus a case of fallacious strategic manoeuvring despite the standpoint rule (rule 6) not being explicitly violated. It could be beneficial for further research to examine how the conception of critical reasonableness could encourage discussants to accept certain labels in order to advance the process of the resolution of the difference of opinion, and how certain seemingly critical questions primarily serve the aim of rhetorical effectiveness and hinder the resolution process.

In the Schiavo case a similar fallacy could be shown. Considering that it was a mixed dispute, both Terri's husband and her parents were participating as protagonists presenting a standpoint and as antagonists raising a critical doubt. The resulting dialectical impasse was primarily the result of the inconclusive medical evidence in the face of which neither of the discussants on the opposing sides were willing to accept the starting points of the other parties; thus, critical discussion concerning the selection of proper material starting points was hindered. Both parties could be accused of fallacious strategic manoeuvring in the subordinate critical discussion. This is clearly shown by the inability to resolve the subordinate difference of opinion in a critical discussion and her state of limbo between PVS and MCS for 15 years. Finally, her fate was decided not in critical discussion but in a federal court case.

5. Conclusion

The main aim of the paper was to show that there is a certain strategic manoeuvre in the pragma-dialectical framework that is not regulated by the rules of critical discussion. The issue of the selection of starting points was examined, and how the selection of these affects the critical discussion procedure. The case of Terry Schiavo was presented, where discussants in this mixed discussion adopt different labels to describe the same medical state. Due to inconclusive medical evidence, the resolution process of the subordinate difference of opinion resulted in a dialectical impasse. Both the discussants could be considered to have committed the *ad nauseam* fallacy, where discussants keep repeating the same arguments until either of the sides are exhausted to discuss the issue further.

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NOTES

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[1] A label could be understood as a decision frame which is to affect the outcome of the discussion in favour of the discussant advancing the frame. For a further discussion on framing effects see Tversky & Kahneman (1981) and Corner & Hahn (2010).

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