

Argumentation Library

Frans H. van Eemeren
Bart Garssen *Editors*

Reflections on Theoretical Issues in Argumentation Theory

 Springer

Reflections on Theoretical Issues
in Argumentation Theory

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Preface

Reflections on Theoretical Issues in Argumentation Theory contains a selection of papers reflecting upon theoretical issues in argumentation theory. The papers are selected from the contributions to the Proceedings of the 8th Conference of the International Society for the Study of Argumentation held in Amsterdam in 2014. After selection the papers have been reviewed and revised where this seemed useful.

The volume consists of six Parts: I. General Perspectives, II. Analysis of Argumentation, III. Evaluation of Argumentation, IV. Argument Schemes, V. Contextual Embedding of Argumentation, VI. Linguistic Approaches to Argumentation. Each part includes several papers dedicated to the specific theme concerned.

In Part I, *General Perspectives*, Frans H. van Eemeren identifies in “[Bingo! Promising Developments in Argumentation Theory](#)” three promising developments in the treatment of argumentation in argumentation theory: (1) the trend towards empiricalization, (2) the attention paid to the institutional macro-contexts in which argumentative discourse takes place, (3) the movement towards formalization. According to van Eemeren, if they are integrated with each other and comply with pertinent academic requirements, these developments will mean “bingo!” for the future of argumentation theory.

J. Anthony Blair describes in “[What Is Informal Logic?](#)” the emergence of two themes that are key to the constitution of informal logic: (1) the development of analytic tools for the recognition, identification and display of so-called “non-interactive” arguments, (2) the development of evaluative tools for assessing deductive, inductive, and other kinds of arguments. He also mentions current interests of informal logicians.

G.C. (Geoff) Goddu presents and analyzes in “[Towards a Foundation for Argumentation Theory](#)” principles that argumentation theorists agree upon and some closely related ones on which they do not agree. He argues that this set offers at best limited grounds for cross-theoretical evaluation.

Douglas Niño and Danny Marrero outline in “[The Agentive Approach to Argumentation: A Proposal](#)” an agent-centered theory of argumentation. Their working hypothesis is that the aim of argumentation depends on the purposes of the agents, their “agendas”.

In part II, *Analysis of Argumentation*, Sharon Bailin and Mark Battersby argue in “[Conductive Argumentation, Degrees of Confidence, and the Communication of Uncertainty](#)” that there is an epistemic obligation to communicate the appropriate degree of confidence when asserting conclusions in conductive argumentation. They argue that such conclusions frequently are, and should be, expressed with appropriate qualifications.

David Hitchcock argues in “[The Linked-Convergent Distinction](#)” that this distinction, introduced by Stephen Thomas in 1977, is primarily a distinction between ways in which two or more reasons can directly support a claim, and only derivatively a distinction between types of structures, arguments, reasoning, reasons, or premises.

James B. Freeman summarizes in “[Identifying the Warrant of an Argument](#)” Hitchcock’s procedure to extract the warrant from an argument and notes that applying it in specific cases may be problematic. He then extends the procedure by indicating how symbolization in a formal language addresses the problems.

Jens E. Kjeldsen observes in “[Where Is Visual Argument?](#)” that argumentation theory suffers from a lack of empirical studies of how audiences actually perceive and construct rhetorical argumentation from communicative stimuli. This is especially pertinent to the study of visual argumentation, because this argumentation is fundamentally enthymematic, leaving most of the reconstruction of premises to the viewer. Kjeldsen uses the method of audience analysis from communication studies to establish how viewers interpret instances of visual argumentation such as pictorially dominated advertisements.

In part III, *Evaluation of Argumentation*, Daniel H. Cohen explains in “[Missed Opportunities in Argument Evaluation](#)” why do we hold arguers culpable for missing obvious objections *against* their arguments but not for missing obvious lines of reasoning *for* their positions.

According to Maurice A. Finocchiaro in “[Ubiquity, Ambiguity, and Metarationality: Searching for the Fallacy of Composition](#)” “ubiquity” is the hypothesis that fallacies of composition are ubiquitous; “ambiguity” the hypothesis that “fallacy of composition” has at least three distinct and often confused meanings; “metarationality” the hypothesis that the best places to search for fallacies of composition are meta-arguments whose conclusions attribute this fallacy to ground-level arguments.

Scott Aikin and John Casey survey in “[Don’t Feed the Trolls: Straw Men and Iron Men](#)” the three forms of straw men that are recognized in the literature: the straw, weak, and hollow man. The cases of inappropriately reconstructing stronger versions of the opposition’s arguments they call *iron man* fallacies.

Paula Olmos proposes in “[Story Credibility in Narrative Arguments](#)” a multi-dimensional and explicit meta-argumentative approach to the assessment of arguments involving narratives.

In part IV, *Argument Schemes*, Manfred Kraus contributes in “[Arguments by Analogy \(and What We Can Learn about Them from Aristotle\)](#)” to the debate about arguments by analogy. He concentrates in particular on the distinction between ‘deductive’ and ‘inductive’ analogies and on the question of how such arguments can be ‘deductive’ yet nonetheless defeasible.

Fabrizio Macagno analyses in “[A Means-End Classification of Argumentation Schemes](#)” argument schemes as prototypical combinations of two distinct levels of abstraction.

In part V, *Contextual Embedding of Argumentation*, Harvey Siegel argues in “[Argumentative Norms: How Contextual Can They Be? A Cautionary Tale](#)” that, although argument quality sometimes depends upon criteria that are context-relative, the contextual dimension of argumentative norms depends upon a kind of context-independence.

A. Francisca Snoeck Henkemans and Jean Wagemans discuss in “[Reasonableness in Context: Taking into Account Institutional Conventions in the Pragma-Dialectical Evaluation of Argumentative Discourse](#)” the question of how to take institutional conventions into account in a pragma-dialectical evaluation of argumentative discourse.

Sally Jackson argues in “[Deference, Distrust, and Delegation: Three Design Hypotheses](#)” that in argumentation theory a design hypothesis is a broad notion about how argumentative practice can be shaped toward greater reasonableness. Different design hypotheses do not compete in the way empirical hypotheses do.

In part VI, *Linguistic Approaches to Argumentation*, Thierry Herman observes in “[A Plea for a Linguistic Distinction Between Explanation and Argument](#)” that there is no clear consensus about the difference between explanation and argument. After having explained why traditional points of view in informal logic raise a problem, he argues for a linguistic point of view and shows how rhetorical strategic moves can exploit the blurry frontier between explanation and argumentation.

Johanna Miecznikowski and Elena Musi examine in “[Verbs of Appearance and Argument Schemes: Italian *Sembrare* as an Argumentative Indicator](#)” the role of verbs of appearance as argumentative indicators. They analyze the uses of the Italian verb *sembrare* (‘seem’) in a sample of 40 texts chosen from a corpus of reviews, editorials and comment posts.

Pierre-Yves Raccah argues in “[Linguistic Argumentation as a Shortcut for the Empirical Study of Argumentative Strategies](#)” that discourses provide empirical hints that inform the observer about the institutional conventionalized practices involved in the study of strategic manoeuvring.

April 2015

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Bart Garssen

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The Agentive Approach to Argumentation: A Proposal

Douglas Niño and Danny Marrero

1 Introduction

The main goal of this paper is to outline an agent-centered theory of argumentation. Our working hypothesis is that the aim of argumentation depends upon the agenda agents are disposed to close or advance. The novelty of this idea is that our theory, unlike the main accounts of argumentation (i.e., rhetorical, dialogical and epistemological theories of argumentation), does not establish an a priori function that agents are expected to achieve when arguing. Instead, we believe that the aims of argumentation depend upon the purposes agents are disposed to achieve (i.e., their agendas).

We borrow the concept of *function of argumentation* from the instrumentalist view of argumentation by Christoph Lumer (1990, pp. 43–51, 1991, p. 99–101, 2005, p. 219–220). The main principle of this view is that arguments are instruments, which fulfill a certain function. Lumer’s terminology clarifies this tenet. An *instrument* is a system with a certain function. A *function*, respectively, is a relationship of an input producing certain output. Thus, instruments are systems aimed to produce certain outputs provided an appropriate input. For instance, the output of a screwdriver is to turn by driving or removing screws, and its input is the appropriate force applied to its handle, which is connected to the shaft with a tip that the user inserts into the head of the screw to turn it.

With this instrumentalist terminology in mind, Lumer interprets the main theories of argumentation as accounts fixing the function of argumentation, as follows:

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Rhetorical Theories:	The goal of argumentation is to persuade (e.g., Perelman and Olbrechts-Tyteca 1969; Hamblin 1970; Tindale 2004)
Dialogical Theories:	The goal of argumentation is to achieve a consensus resolving a difference of opinion (e.g., van Eemeren and Grootendorst 1984, 2004; van Eemeren 2010)
Epistemological Theories:	The goal of argumentation is to establish truth and justified belief (e.g., Biro and Siegel 1992; Feldman 1994; Goldman 1999; Johnson 2000; Lumer 1990, 1991, 2005; Siegel and Biro 1997).

From our perspective, the problem with fixing an a priori function for argumentation is that some argumentative practices do not fit into the proposed end. Our concern is that when an agent does not aim for the fixed function of argumentation, his/her argumentative practice could be misunderstood or overlooked. That is why our agentive theory suggests that the agendas agents are disposed to close or advance by means of argumentation determining the goal of such communicative activity. If our intuitions are right, our account shows a broader understanding of the diversity of argumentative practices than each of the main theories of argumentation individually considered.

Given the formal constraints of this paper, we are not going to do a thorough reconstruction of each of the aforementioned theories of argumentation. Instead, we are going to do cautious generalizations. First, we will use a counter-example showing that the methodology of fixing an a priori and unique function for argumentation is wrong. Second, we will present the main concepts of our approach and show how it deals with the proposed counter-example. Finally, we will present a potential objection for our account and provide a response for it.

2 A Counter-Example

As we already mentioned, the problem with fixing the aim of argumentation beforehand, is that some argumentative practices do not adjust to the fixed goal, and, consequently, the theorists analyzing and evaluating argumentation tend to misunderstand or overcome such argumentative practices. Justifying this claim, we are going to use one fragment of the following counter-example proposed by Marianne Doury in the paper “Preaching to the Converted. Why Argue When Everyone Agrees?” (2012). For future reference, we will refer to Doury’s case as CAR RESTRICTION.

In Doury’s words, this case is meant to show that “the goal of persuasion is but one goal among others that can be assigned to argumentation, and that, as a result, persuasion cannot be considered as the central element in the definition of argumentation” (2012, p. 100). To contextualize, CAR RESTRICTION is a

transcription of a conversation between a vendor and two clients. All of them have seen each other before, but they know very little about each other.

CAR RESTRICTION

Vendor: Actually, what do you think of the law, er ... we were actually talking about er... this law, there, that was just voted, that is in effect, you know, the law about traffic restriction for odd-even numbered license plates for the cars.

Client 1: Listen, I will tell you what I think, for Paris, we should be doing this all the time.

Vendor: All the time.

Client 2: Exactly. We all agree then.

Client 1: I find this a great idea. First of all because at last, every day, there is already a maximum number of people who could find a way to organize their transportation... People do not need their cars all the days!

Vendor: The opposition parties, actually, were against it at the beginning and we do not hear them speak anymore, now.

Client 2: They showed women who...who were actually commuting in the car of their friends, of a friend who came to pick them up; they can do this all the time.

Client 1: Of course! There are people...well, the problem is, that there need to be jobs or... or certain obligations that allow one to leave at a fixed time and to return at a fixed time. For example, in my case, this is not possible. But, ninety-nine percent of the time, I do not take the car!

Vendor: Yes, you are all the time using public transportation.

Client 1: Exactly. ...(Doury 2012, p. 101).

According to Doury, CAR RESTRICTION is just an example of argumentative situations in which a debatable issue is proposed, and even though all the arguers agree on one same view, they provide arguments for their own positions (p. 103). To be sure, the debatable issue is posed by the vendor when asking “what do you think of the law ... about traffic restriction for odd-even numbered license plates for the cars?” Doury interprets this as an *argumentative question*, which is a question inviting one to express positions for and against the proposed topic (p. 101). In CAR RESTRICTION, it is the restriction for odd-even numbered license plates. The agreement between the arguers becomes explicit when *Client 1* states “... we should [impose the restriction for odd-even numbered license plates for cars] all the time,” *Vendor* assents saying “All the time,” and *Client 2* responds claiming, “Exactly. We all agree then.” Finally, without a detailed reconstruction, some of the arguments put forward are the following. *Client 1* “finds [the idea of imposing

restriction for odd-even numbered license plates for the cars all the time] great” because, in her words, “at last, every day, there is already a maximum number of people who could find a way to organize their transportation”. Additionally, from her perspective “People do not need their cars all the days.” *Client 2* agrees with [the idea of imposing restriction for odd-even numbered license plates for cars all the time] because [with this restriction “[t]hey showed women who ... were actually commuting in the car of their friends [that] they can do this all the time.”

For Doury, CAR RESTRICTION is a counter-example against the idea that the aim of argumentation is persuasion. Shortly, if “to persuade” is defined by the Merriam-Webster dictionary as “to move by argument, entreaty, or expostulation to a belief, position, or course of action,” then persuasion is not the goal of argumentation in CAR RESTRICTION. The reason for this is that one cannot “move” someone to believe something that he/she already believes (pp. 104–105). To illustrate, for Perelman and Olbrechts-Tyteca (1969), “[i]t is evident that the aim of oratory, the adherence of the minds addressed, is that of all argumentation” (p. 6). However, to look for the adherence of the participants of the conversation is not the goal of argumentation in CAR RESTRICTION because, in it, all the arguers adhere to the issue under discussion before any argument is provided. To clarify, the point is not that persuasion is never the end of argumentation, but to provide a negative instance for the claim that all argumentation aims to persuade.

We believe that CAR RESTRICTION is also a counter-example for the claims that all argumentation aims to resolve a difference of opinion, and that all argumentation aims to establish justified true belief. To recall, from the pragma-dialectical approach, “[a]rgumentation is basically aimed at resolving a difference of opinion about the acceptability of a standpoint by making an appeal to the other party’s reasonableness” (van Eemeren and Grootendorst 2004, pp. 11–18; van Eemeren 2010, p. 1). In this sense, argumentation arises from a disagreement and ends with the dissolution of the difference of opinions. Yet, in CAR RESTRICTION the argumentation does not finish with agreement. Instead, even though the arguers recognize the agreement on the issue under consideration, they put forward arguments. Therefore, the aim of argumentation is not only to resolve a difference of opinion. Similarly, CAR RESTRICTION presents a counter-example for the epistemological theories of argumentation. For instance, Biro and Siegel (1992) claim that “[a]n argument aims at, and a good one succeeds in, leading an inquirer or an audience from some proposition(s) whose truth or justifiedness they accept, to others whose truth or justifiedness they will see themselves as having good reasons to accept *on its basis*” (p. 92). Yet, in CAR RESTRICTION the arguments provided do not seem to aim at a further epistemic support for a proposition. Better yet, they justify a belief that the arguers already have. Therefore, the goal of argumentation is not the achievement of justified truth belief.

3 The Agentive Proposal

Our proposal is that the problems posed by CAR RESTRICTION are explicated if we understand argumentation as a type of sub-agenda an agent has. We distinguish *argumentation*, as an activity, from an *argument*, as a set of bounded propositions. Shortly, such propositions are subdivided in two groups: the *premises* from which the *conclusion* would follow given an illative relation, identifiable by linguistic marks known as *premise* and *conclusion-indicators*, and having different degrees of conclusiveness, force or warrant. In contrast with other approaches mentioned above, we believe the purposes of arguing vary accordingly with the agendas and sub-agendas advanced by the agents. This implies that arguing is an activity performed by agents (as so far as argument-users) embedded in other activities and as a part of the requirements of the fulfillment of other agendas. The theoretical background of our account comes from two sources: the multivolume of Practical Logic of Cognitive Systems by Gabbay and Woods (2003, 2005), Woods (2013), and Agentive Semiotics by Niño (2015). Given the specific goal of this paper, we are not going to provide a systematic reconstruction of these accounts; better yet, we will use some of their central concepts to illuminate the issue under account.

In our theoretical background, an *agent* is an entity with capacity for acting and the objective he/she is trying to do is his/her *agenda* (Gabbay and Woods 2003, pp. 183–185, 195–219; Niño 2015, p. 39).¹ This objective is a type (in the sense of something that comprises variation) of outcome for which something is selected (Short 2007, p. 92–93). In the English language, the word *agentive* is used as an adjective referring to the performer, or agent, of an action, and we will follow this use. Additionally, we are going to use the word *agentive* to refer to the agenda or sub-agendas to be closed or advanced.

When an agent acts, he/she tries to achieve, fulfill or close his/her agenda. The conditions by which an agent would attain his/her agenda are the *agentive resolution conditions* (Niño 2015, p. 94–95). For instance, if the agenda is to put a 1000 piece jigsaw puzzle together, the resolution conditions involve the things that should happen for the puzzle to be properly assembled; the final product should look exactly like the picture of the puzzle—usually found on the front of its box. Each of its pieces should fit together smoothly; there should not be leftover or missing pieces, and so on. Notice that the agentive resolution conditions are determinable before the agent starts the jigsaw puzzle. In this sense, agentive resolution conditions are not merely capricious of the agent, but are conditions that the agent subdues himself/herself to in order to accomplish his/her agenda. These

¹There is a remarkable difference between Gabbay and Woods's and Niño's approaches. While in Gabbay and Woods's proposal, the agenda is understood as the aim plus the plan for its realization, in Niño's account, the agenda is just the objective, and it is distinguished from its conditions of resolution. As a consequence, while in the former, if something is not planned, it is not an agenda, in the latter, everything that appears as an aim for an agent, either deliberately planned or not, is recognized as an agenda.

conditions, then, are like a reference point by which the agentive performance can be evaluated.

The *agentive performance* consists of the set of actual actions an agent performs in order to obtain the agentive resolution conditions of his/her agenda (Niño 2015, p. 104). To illustrate, an agent wanting to put a 1000 piece jigsaw puzzle together could perform activities such as selecting a working area (e.g., a table or a desk) large enough to facilitate the total number of pieces laid out individually, turning all the pieces up at the same time, selecting the edge pieces and putting them to one side, arranging the other pieces by color group, and the like. It is in relation to the previous agentive conditions of resolution that the actual agentive performances are contrasted and evaluated. In our example, it is in relation to the agentive resolution conditions of assembling a jigsaw puzzle that the agentive performance is evaluated. If the agent meets the resolution conditions, then he/she can expect to *close* his/her agenda. If those conditions are met partially, the agenda is *advanced*, but not closed. The agentive resolution conditions include constrictions concerning the degree of accuracy and precision required for the closure of the agenda. This demands precision in elements such as the time required for the closure of the agenda, the type of information needed, and the capacity of processing and enacting it (Gabbay and Woods 2005, p. 11). For instance, one thing is to try to resolve a practical problem under the pressure of time, such as the problems an internist has to deal with in an emergency room, and another thing is to try to resolve a purely theoretical problem, as in a laboratory of immunology.

These constrictions demand a *standard of precision* for the fulfillment of the agentive resolution conditions. This is the degree of accuracy, fluency, and exigency with which the agent expects to close his/her own agenda (Niño 2015, p. 108). Imagine that *X* and *Y* are contestants in a reality television singing competition and they are about to perform their song. While *X* would be satisfied just singing one time because this allows him/her to meet the judges of the competition who are very famous people in the music industry, *Y* would be frustrated if he/she does not win the whole competition. Thus, *X*'s agenda of meeting famous musicians has a lesser standard of precision than *Y*'s agenda of winning the competition. The *standard of precision* contrasts with the standard socially imposed on the agents in the resolution of their agendas because what counts as "good enough" for the agent does not necessarily coincide with what it is socially expected for someone like him/her to do. This is why one expects major accuracy, fluency, and exigency in the performance by a professional singer contrary to that of the performance by an amateur. We refer to this socially imposed standard as *standard of strictness* (Niño 2015, p. 128). An agent can align or not align his/her own standard of precision with the socially imposed standard of strictness. Thus, the standard of precision is the standard an agent him/herself adopts. The standard of strictness is a standard socially assigned to an agent. The *degree of precision* is the actual level of specificity to which an agent advances his/her agendas in relation to his/her standard of precision (Niño 2015, p. 131). The *degree of strictness* is the actual level of his/her performance according to the social standard of strictness (Niño 2015, p. 128). To illustrate, the degree of precision is the level of preciseness with which

X and *Y* perform their songs in relation to their own expectations. In this sense, the degree of strictness is the socially expected level of accuracy of a professional singer who is the participant in the reality TV singing competition.

Different societies establish different kinds of standards of strictness for clusters of agendas associated to social roles. This is what we call *agentive roles* (Niño 2015, p. 125–126). Examples of agentive roles are actors, doctors, scientists, musicians, teachers, lawyers and parents. Each role is composed of different activities having their own purposes. For instance, it is expected that doctors perform an anamnesis and physical examination in order to get a diagnosis, prescribe tests in order to verify it, supervise and control collateral effects, and so on. Another example is that teachers are expected to prepare their classes in order to facilitate learning, select relevant information to discuss in class, grade students in order to evaluate their level of learning, and the like. In this sense, activities have sub-agenda-like purposes, and agentive roles can be considered as clusters of activities. Agentive roles do not emerge *in vacuum*. They are socio-historic products. Because of their intersubjective nature, they behave in tandem: we have judges, juries, defendants, and prosecutors; scientists, laboratory auxiliary, experimental subjects; professors, teacher assistants, monitors, students, etc. We claim that a *context* is something where agentive roles are intersected (Niño 2015, p. 146–147), and we call *topic* the crosslinking of these role purposes. Practically, the topic of the context where the roles of student and teacher interact would be the interest for learning (Niño 2015, p. 150–151). In the case of patient and doctor, the topic would be the interest in the preservation of health or healing from a disease.

When an agent accepts the purposes, enacts the activities or assumes the responsibility of carrying an agentive role, he/she endorses an *agentive role* (Niño 2015, p. 146–147). As before, agentive roles are evaluated by contrast with the corresponding agentive roles. Therefore, the activities an agent carries out should be assessed in the frame of the activities attributed to its agentive role. Therefore, the actual performance of the lines that Hamlet says to Ofelia can be differently evaluated if the standard of strictness is that required from an amateur, or the one required from a professional actor. Finally, the topic in which the performance is embedded can change depending on the role the performer is playing. To illustrate, the topic changes if the actor is interacting with the director of the play, or with his/her theatre-audience.

The following T-chart will ideally help facilitate the grasping and recollection of the concepts presented until now (Table 1).

Agendas can be classified in several ways. For our actual interests, two distinctions are important. On one hand, with regards to the agents required for the closure of an agenda, there are agendas whose resolution conditions only demand the performance of the agent trying to close or advance them. Alternatively, there are agendas whose resolution conditions demand the participation of another agent who is not the one trying to close or advance the agenda in course. On the other hand, taking into account the actions required for the closure of the agenda, there are agendas that are closed at the very moment the actions required by its resolution conditions are performed. Differently, other agendas, are closed by the ulterior

Table 1 Agendive and agentive conceptual background

Agendive concepts	Agentive concepts
<i>Agenda</i> : the objective an agent has	<i>Agent</i> : entity with capacity for acting
<i>Standard of precision</i> : level of accuracy and exigency with which an agent expects to accomplish his/her own agenda	<i>Degree of precision</i> : actual degree of performance an agent does, in the frame of a standard of precision
<i>Standard of strictness</i> : socio-historic level of exigency and accuracy attributed to an agenda for its accomplishment	<i>Degree of strictness</i> : actual degree of performance an agent does, in the frame of a standard of strictness
<i>Agendive role</i> : cluster of activities socio-historically bounded to fulfill a social role	<i>Agentive role</i> : agendive role an agent endorses by assuming or accepting its agendas, as well as the responsibilities derived from that acceptance
<i>Context</i> : intersection of several agendive roles	
<i>Topic</i> : issues that the agendas of contextual agendive roles have in common	

effects those actions bring about. If these elements are combined, four types of agendas are obtained. Given the limited scope of this paper, we will mention only the two of them most useful to grasp the practice of argumentation. First, we will mention agendas whose resolution conditions only demand the performance of the agent trying to close them, and those which are closed directly by the proper performance of the actions required by their resolution conditions. Second, we move to agendas whose resolution conditions demand the participation of an agent different from the one trying to close them, and which are closed by the consequences of the actions required by their resolution conditions. Concerning the first type, if one’s agenda is to raise his/her own hand, there is no need of another agent for closing this agenda, and one’s agenda will be closed at the very moment he/she raises his/her own hand. A case of the second type appears when one wants Jones to raise his hand. Here there are at least three sub-agendas: to pronounce the words “Jones, raise your hand”, and to do so in a sensible way so Jones understands, and to make Jones to move his hand in the requested way. In this case, although there is only one speech act, the agenda would be obtained as an effect on the other agent’s agency through the proper closing of the first two sub-agendas. We refer to this as *per-agendas* (from the Latin “per” which means “action carried out until its end”). Their resolution conditions involve agency-modifications of another agent as effects of some previously performed action (Niño, pp. 120–121). These modifications can be actual, as in face-to-face communication, or idealized, as when a writer makes a cognitive model of his/her possible readers (cf. Lakoff 1987, pp. 68–76, 118–135).

With this terminology in mind, we claim that argumentation is an activity an agent performs in order to rationally modify other agent’s agency. Therefore, argumentation is a kind of per-agenda. Among the multiple per-agendas an agent can pursue, argumentation has to do with *doxastic agendas* (i.e., agendas concerned with belief formation, maintenance, and defensibility). The resolution conditions of

these agendas could vary enormously. Broadly speaking, the most stringent extreme of the spectrum only authorizes belief formation when most possibilities of error are scrutinized and/or complete information is achieved, while the other extreme allows for fallibilist belief formation with incomplete information. To illustrate, when argumentation takes place in scientific discovery, its aim can be taken to be the fixation of a justified belief triggered by scientific doubt. Yet, such a demanding goal is not a requirement for argumentation that is directed towards practical purposes, such as putting a hypothesis under probation or justifying a practical decision against a background of incomplete information. The practice of arguing should be understood as part of an activity associated with different social roles, but it does not constitute an agentive or agentive role by itself. In consequence, the standard and degree of strictness of argumentation are relative to the role or roles to which it belongs. This is why the practice of arguing is very different for a scientist, a medical doctor, a prosecutor or an educator. Therefore, a complete account of what argumentation is should involve the kind of agentive role and standard of strictness in which that practice is supposed to be embedded.

One thing is good argumentation, and another is a good argument. *Good argumentation* is one in which the agenda in course is properly closed, i.e., the argumentation causing the expected agency modification and using the arguments according to the soundness they are supposed have for the advancement of the agenda in course. Just as in the jigsaw example, the agentive resolution conditions demand the accurate assembling of the jigsaw pieces, in argumentation the agentive resolution conditions are not merely agent-dependent, but it demands normative standards for its resolution. We distinguish three kinds of agendas in which the act of arguing can intervene. These agendas are not presented in the spirit of showing an exhaustive list, but only as an example of the fruitfulness of our approach.²

The first type of agenda served by argumentation is the *agendas of doxastic arrival*. In these agendas, agents aim at forming a particular belief. A paradigmatic case of this kind of agenda is the verification of a scientific hypothesis. Typically, a scientific hypothesis is advanced where some fact, f_1 , is expected and appears either a $\neg f_1$, which is an *anomaly*, or some new f_2 , that is a *novelty* (Aliseda 2006, pp. 184–185). The purpose of a scientific hypothesis is to pose an explanation of the surprise coming from anomalies or novelties. In this sense, at the moment of putting forward a hypothesis, an agent gives reasons to someone or to him/herself for accepting, or at least for taking into consideration, the hypothesis. If the hypothesis were true, it would explain the anomalous or novel facts (Peirce 1903, p. 231).

To give scientific hypothesis as a reason is an activity with a very high standard of strictness. That is why, a scientific hypothesis, *prima facie*, should not create the expectation of forming a new belief, but a mere suggestion or suspicion about it. The inductive work, common in scientific contexts, consists of drawing some consequences of the hypothesis and putting them to the test through experience. If

²A previous version of these types of agendas was proposed in Niño (2013, pp. 233–236).

these tests falsify those consequences, it is necessary to pose another hypothesis. Yet, if the consequences are confirmed, the hypothesis is verified, and it could be accepted as more than a mere suspicion. When verification is considered good enough, the hypothesis has gained its right to be believed. In this sense, each instance of verification can count as a reason for accepting “more and more”, and for the time being, the truth of the hypothesis under study.

Let us illustrate these ideas with the case of Kepler, as he reported himself in *Astronomia Nova* (Voelkel 2001). At that time, a circle was considered a paragon of perfection and the orbit of planets was understood as circular. However, taking Tycho Brahe’s observations into account, Kepler realized that Mars’ orbit could not be circular. This was his doxastic reason for doubting, insofar as it was a doxastic surprise. After a series of hypotheses, Kepler put forward the hypothesis that Mars’ orbit was elliptical. Then, he calculated, from that hypothesis, different apparent positions of Mars, and the observations were in accordance with the predictions. This was the doxastic reason for belief formation. Notice that if Kepler had given the hypothesis the status of a belief at the moment of suggesting it, and before his observations, this would have been a doxastic irresponsibility, given the standard of strictness required in scientific contexts. Fortunately, Kepler’s standard of precision was as high as the context demanded.

Normative epistemological approaches provide an account of these kinds of examples (cf. Blair 2004, pp. 139–141; Lumer 2005, p. 219). However, not all agendas of doxastic arrival are as strict as the verification of a scientific hypothesis. Some cases call for reasons in the absence of complete information in order to take an immediate course of action, for instance, the reasons given by an internist taking care of a patient in an emergency room. If we maintain the standard of strictness of a scientific agenda of epistemic arrival, it would demand more time and, accordingly, the delay would turn out to be fatal, literally. There are times when, given the risks at hand, aiming at an immediate educated guess is better than waiting for a warranted but temporally mediated truth.

A second type of agenda to reflect on is the *agenda of epistemic defensibility*. These agendas intend to present and defend a belief previously fixed by an agenda of epistemic arrival. This includes examples such as political harangues, prosecutor accusations, and attorney’s allegations. This being so, the resolution of agendas of epistemic defensibility function as a means for an ulterior practical agenda, such as making a decision, endorsing a position, taking a course of action, among others. Notice that these agendas do not seek the formation of the arguer’s beliefs, but the fixations of others’ beliefs. Therefore, the admissibility conditions change in respect to the agendas of epistemic arrival. Cases of persuasion are paradigmatic examples of agendas of epistemic defensibility. There are at least three sub-agendas here: to assert that so and so is the case, to communicate this to someone, and the belief-formation in someone that so and so is the case (i.e., to gain his/her adherence of opinion). Persuasion is not a homogeneous phenomenon because the persuasive activity can vary along the spectrum of different standards and degrees of strictness as well as multiple admissibility conditions for a variety of audiences. Imagine that the arguer is a scientist who previously has formed the belief that a

certain medication is a promising cure for a disease. He/she could confront a standard of strictness if he tries to convince a group of colleagues about his findings, and face another standard of strictness if he/she tries to convince a non-expert or possible sponsors for further research. The challenge faced by this scientist would also be different if his/her colleagues previously have formed the belief that the medication is useless than if they have not formed a distinct belief about it. Furthermore, this scenario would be different if the scientist is not aware of the doxastic position of his/her colleagues. In that sense, the resolution conditions of the agendas of doxastic defensibility take into account the admissibility doxastic system of the arguments-receiver.

The admissibility of reasons includes the plausibility of the facts and the acceptability of the values presented in the arguments. In empirical science, ideally, a high standard in methodology rules the factual plausibility: an arguer can give arguments to accept his/her conclusions because of the rigorous performance of the scientific method. In another context, such as politics, in so far as there can be different axiological positions, this would be not the case, and the acceptability would be as important as plausibility. In consequence, it would be useful for the arguer to anticipate if the addressee's doxastic system is more conservative or more liberal. Besides, it is not the same to present arguments to a hostile audience as to a sympathetic one. Of course, the belief system of any interlocutor may not be equally conservative or liberal. Some *topics* are more sensitive and more debatable than others. To illustrate, it is not the same to give reasons either for or against the acceptability of abortion or euthanasia as it is to give reasons for or against the acceptability of dining at a certain place for a dinner in a foreign country.

The third type of agenda is the *agendas of doxastic maintenance*. These agendas aim at ratifying a belief previously fixed by the agenda of epistemic arrival. This is clearly the case in CAR RESTRICTION. In this example, the arguers advance their arguments in order to have a surplus of reasons for maintaining and preserving a particular doxastic position. The peculiarity of this scenario is due to the fact that multiple agents carry out the agenda in a joint manner. But there are no obstacles for an agenda of doxastic maintenance to be an individual agenda (as in Peirce's 'tenacity' method for fixing belief) or a collective one. In any event, the collective case can become a mechanism of ideology preservation.

Let us observe that all these agendas are actually sub-agendas, that is, agendas that are carried out as a means with respect to an ulterior end. In this sense, their role is primarily 'methodological' (in the etymological sense of the word). Indeed, in the examples discussed above, *agendas of doxastic arrival* serve as a means for determining truth, saving a life, or arriving at some place. In the *agendas of doxastic defensibility* examples, persuasion is pursued in order to obtain votes or to make a decision about the innocence or culpability of someone. In *agendas of doxastic maintenance*, arguing serves the self-assertion of the arguers' belief system. In this sense, the agentive approach to argumentation explains why arguing is not an end in itself most of the time. Although it can be imagined of as an immediate agenda, as when agents argue as a way of training in argumentation,

argumentation is an activity agents engage in, in order to obtain things different than more arguments.

4 An Objection

A possible objection to our account comes from the notion of the standard, or proper function of argumentation.³ From Lumer's perspective, the result an instrument is expected to produce is its *standard output* and its correlative terms are *standard input* and *standard function*. A case in point is a drill. "The standard output of a drill are holes of a certain size in solid material; the standard input consists of: supplying the drill with a bit, pressure against the solid material and electric current; and the standard function is: to drill holes" (Lumer 1991, p. 99). A drill satisfying its standard function is a *functioning* drill. That is, a functioning drill makes the expected hole when provided with a bit, pressure against a solid material, electric current, and so on. In a general way, an instrument is a functioning one if when provided with the standard input, it produces the standard output. However, things can go wrong: "[o]ne can use a good instrument in the wrong situation or for the wrong purpose" (p. 99), such as when a drill is expected to make a hole in concrete, but it is supplied with a bit made for drilling into wood. Additionally, instruments have *non-standard functions*, which are results that can be achieved by an instrument, but that are not the outputs the instruments are expected to produce, such as when a drill is used to whip cream. In Lumer's words: "the input, in this case, is to supply the drill with a whisk, to put this into the cream and to supply the machine with electric current; the output is whipped cream or butter" (p. 99).

With this instrumentalist approach, Lumer builds his epistemic account of argumentation. For him, "arguments as such are functional entities, instruments that shall be useful for some aim. The way here to conceptualize this is to say that they have a standard (or proper) function" (2005, p. 219). In this sense, although arguments have different functions, they have a proper function to meet. On one hand, the standard input of arguments is that they are presented to a linguistically proficient, open-minded, attentive, discriminating addressee who has certain knowledge, but does not have sufficiently founded knowledge of the argument's conclusion. On the other hand, the standard output of arguments is a justified belief that the thesis is true or acceptable (Lumer 1990, pp. 43–44, 1991, p. 100, 2005, p. 219). If this is right, the agentic approach to argumentation is wrong because it includes non-standard functions of argumentation such as the ones contemplated by the agendas of doxastic defensibility and doxastic maintenance. This is tantamount

³Here we are paraphrasing one of the main concerns that Lumer had about our proposal at the ISSA conference in 2014. We strongly appreciate his insightful ideas.

to say that a drill is expected to make whipped cream, but this is wrong because this is not the proper function of a drill.

From our perspective, the core of this criticism is in the analogy between arguments and instruments. Let us make explicit such an argument:

Premise 1: Instruments are systems designed to produce a specific output in a controlled manner by providing the structure with a certain input.

Premise 2: Arguments are like instruments

Conclusion: Arguments are systems designed to produce a specific output in a controlled manner by providing the structure with a certain input

From our perspective, this analogy is not sound. First, Lumer only takes into account instruments with one function, as in the drill example. This could be misleading because it may suggest that arguments just have one standard function. What happens with instruments that have more than one function? Think about an item like an aspirin: for certain purposes, it can be used as a painkiller and for others as prevention for heart attacks or strokes. In Lumer's account, there is not standardly multifunctional items, and this does not seem right.

Second, if for the sake of argument, we were to accept that instruments have standard, or proper, functions, how are they assigned and by whom? How is it to be decided that a certain function has been *well* assigned, and under which warrants or grounds? Notice that in the case of instruments, their functions are dependent on the agendas in course. Think of expressions as instruments, as in that “red pencil”. This expression can be used to signify a pencil that leaves red marks when used or just as a pencil that is colored red on the outside. Thus, different meanings are at the service of different purposes. And, there is nothing in the expression itself that can tell us which one of those underspecified meanings are appropriated to use when the occasion comes. On the contrary, it is in the contextualized occasion—with its roles, standards, activities, and agendas—where the agents specify those possible uses. This happens with arguments, too. The inference that “from *C* and if *A* then *C*, hence *A*” is commonly interpreted as a fallacy of deductive logic. However, this is the standard logical form of abduction (Peirce 1903, p. 231). In this sense, the deductive and abductive uses of the conclusion-indicator “hence” are different. On one hand, its purpose is truth-preserving and authorizes classical consequence (with the properties monotonicity, reflexivity, cut, and compactness). On the other hand, its purpose is to get a possible solution to an ignorance problem (Woods 2013, p. 367). This abductive use only allows for the possibility of the conclusion in order to put it to the empirical test. This does not mean that the aforementioned argumentative scheme has two standard functions. Instead, it means that agents can use it of different manners according to their agendas in course. Just as the expression “red pencil” underspecifies its use conditions, the schema in question underspecifies its argumentative conditions. The agents are who specify those conditions in each context. It is not the case, however, that agents are allowed to use arguments at will. As we already mentioned, when using an argument, an agent is usually engaged in an argumentation activity that has its own agentive resolution conditions, with a

certain standard of precision and strictness. This puts a normative bearing beyond the caprices of the agent who is trying to advance and close a specific agenda. It is in relation to these purposes that argumentation should be evaluated. If an agent uses an argument deductively when the agendive resolution conditions impose that the force of the argument should be non-deductive, he/she is advancing *bad* argumentation. By the same token, the use of a good argument in argumentation does not imply by itself that it is going to be good argumentation. This is so because a perfectly valid and sound argument can be irrelevant. Now, something is relevant insofar as it contributes positively to the fulfillment of its purpose (Gabbay and Woods 2003, pp. 158–163). In the case of argumentation, this implies the contribution the argument has in the modification of the addressee's doxastic system. Finally, what distinguishes argumentation from other kinds of activities with per-agendas as their aims, such as telling a story or making a joke is that argumentation modifies the addressee's agency as an effect of the arguments, and not as an effect of other things such as coercion, drugs, or even good luck.

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