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C O N T E N T S

Editorial
Remembering Stephen Edelston Toulmin

Our field of study has suffered a great loss. On Friday the 4th of December, 2009, Stephen Edelston Toulmin died in Los Angeles, California, at the age of 87. The cause of his death was pneumonia. His fourth wife, four children and thirteen grandchildren were part of his most intimate circle.

In an obituary for the *Los Angeles Times* (December 13, 2009), Elaine Woo quoted Toulmin as having said: "It is time for philosophers to come out of their self-imposed isolation and reenter the collective world of practical life and shared human problems".[1] Toulmin's statement and his "way of life" overlapped beautifully as is evidenced by the fact that he and his last wife Donna, a lawyer-training director at the USC's School of Social Work Center on Child Welfare, Los Angeles, were living in a campus dormitory at the University of Southern California with 550 other students for almost a decade until 2003; and they used to welcome students in their room to share pizza, coffee, and cookies every Wednesday until 2 a.m.

These facts about his life cohere with his approach to ethics, argumentation, reasoning, logic, and the philosophy of science, to select just some areas of study he covered for almost 50 years of uninterrupted intellectual production. This approach could be characterized, although this is quite a generalization, by his constant appeal to the practitioners and the contexts of ethics, argumentation and reasoning. In another obituary William Grimes (*The New York Times*, December 11, 2009), remembers Toulmin's reception by colleagues and students: "He was an intellectual giant, a true Renaissance man," said Uffe Juul Jensen, professor of philosophy at Aarhus University, Denmark. "Like Wittgenstein, he believed that philosophy should not be a

[1] The quotation comes from the interview that Toulmin gave to Al Seib, *Los Angeles Times*, February 5, 1997.

scholastic discipline, with philosophers just analyzing the works and arguments of other philosophers."

Nevertheless, all this only partially describes his impact and legacy. At a technical level, discussing the structure of reasoning and the philosophy of argument, he was genuinely one of the driving forces, if not the main one, behind argumentation theory and informal logic in the 20th century. Of course, none of these subjects was precisely named or defined at that time. He is one of the bedrocks of the fields that *Cogency* covers. His work will be read and re-read over time. No doubt about it.

There are always surprising similarities between Toulmin's writings and the works of contemporary argumentation scholars. All their inclinations, approaches or philosophies of argument, such as the informal logic account, rhetorical angles, pragma-dialectics, deliberative perspectives, pragmatic readers, or discursive accents, coincide with one or more aspects of his work, some better framed than others. Others point out that, indeed, all these approaches in one way or another just re-write Toulminian terms. This discussion will continue; that is exactly Toulmin's effect.

Just as *Blade Runner* or *Pulp Fiction* are classics in their genres of cinema, *The Uses of Argument* is a classic in the field. It is an obligatory reference in Bachelor, Master or Ph.D. programs in the field of argumentation and informal logic. For specific topics and interests we, as researchers, may perhaps be able to avoid it, but Toulmin's other publications can also help to discuss and clarify part of our concepts and perspectives. For example, *Reason in Ethics* elucidates Toulmin's early philosophy on ethics and reasoning of which, in a sense, *The Uses of Argument* is a continuation; *Human Understanding* helps studying early evolutionary explanations of epistemology; *Introduction to Reasoning* (co-authored with Richard Rieke and Allan Janik) shows second thoughts on *The Uses of Argument*; *The Return to Cosmology* confronts us with the postmodernist discussion in which the notion of reasonableness takes form; certainly *Cosmopolis* and *Return to Reason*, his historical and philosophical view on modernity, respectively, may help integrate dialectics, rhetoric and pragmatics; nonetheless, other books of his do not have much in common with our topics in argumentation and informal logic, for instance the book with co-author June Goodfield *The Discovery of Time*, although well informed and entertaining.

I truly believe that Stephen Toulmin deserves an explicit major place in our field, especially considering his commitment to his students, his intellectual legacy, and personality, evidenced especially by the obituaries from the USA.

Although not a special issue on this British author, the current volume is nevertheless a tribute to the memory of Stephen Edelston Toulmin. The opening paper of this volume comes from Johan van Benthem who explicitly challenges the traditional view on logic and argumentation theory, which divides them as different subject-matter fields, by means of commenting upon Toulmin's criticism of a mathematics-centered logic angle and his perspective on practical reasoning. Just as Toulmin suggested a long time ago, van Benthem today clarifies, with a very rich and balanced account, the role of argument schemata and the features of the procedural aspects of reasoning, considering the links between its practical and formal dimensions. For van Benthem, theory of practical reasoning and formal logic are not rivals, they are allies.

In the second paper of this issue, Lilian Bermejo treats the relation between logic, dialectics and rhetoric and proposes an interesting reading of Aristotle with regard to argumentation theory. Bermejo traces the contemporary origin of argumentation theory to Chaïm Perelman, Charles Hamblin and, once again, Toulmin. The main question Bermejo's paper addresses is whether Aristotle's work should be considered as an origin or an obstacle for argumentation theory. She points out that Aristotle's work is more the origin than an obstacle; among other reasons, because, for Bermejo, the normative study of syllogism in Aristotle should not be taken as a dimension of formal logic, and the dialectical sphere should be taken as a procedure to establish critics and a method of investigation, rather than a model to test proofs. Logic and dialectic, in Aristotle, are the basis of argumentation, this is to say: the activity to demonstrate and evaluate judgments and justifications.

In the third paper of this issue, Daniel Cohen reflects and advises us on the need of a bridge between virtue-based approaches to epistemology and argumentation theory. According to Cohen, by using the results of the debate regarding Virtue Epistemology, new and more urgent questions for argumentation theory could be posed. For example, the question that arose from the idea that virtue epistemology is not about the process or procedure

of justification but rather about agents, conveys benefits to argumentation theory which should also ask *when*, *why* and *with whom* to argue, questions that "often get lost in the shadow of the primary question, *how* we should argue". For Cohen, these should be considered as defining parameters of argumentation theory, open-mindedness and sense of proportion being two main qualities of a Virtue Argumentation theory.

In their paper *Cultural Keywords in Arguments. The Case of Interactivity*, Andrea Rocci and Marcio Wariss Monteiro investigate the role and place (*endoxa* and *termini medi* respectively) of cultural keywords in chains of reasoning. They also offer an account of how they intend to go one step further in balancing the logical and communicative function of keywords in argumentative processes. For them, keyword interactivity is a case in which this balance is more difficult to achieve, because it is a vague and polysemous term. The advantage of using the keyword *interactivity*, Rocci and Monteiro suggest, is its persisting positive connotation which gives a sort of *ad hoc* dialectical (perhaps also rhetorical) power.

In *Non-cogency misjudged: Reconstructing a three-stage mistaken argumentation-process*, José Miguel Sagüillo points out that good intentions are not enough for cogent argumentation. Cogency is inherently epistemic and it is sustained in some prior conditions. First, it is necessary to establish the universe, or subject-matter. Second, statements that convey information of that subject-matter must be coherent, they should *say* something. Third, chains of reasoning leading from one statement to another must be correct. These three conditions feature cogency as it is realized in argumentative practice. This article tracks misjudged non-cogency and uncovers the mistakes involved by means of a two-vector analysis. The first arrow exhibits the *unfortunate* genealogy of a three-step sequence of errors. The converse arrow regains cogency by reconstructing the previous vitiated process. It exhibits a way out of the paradox so obtained by reclassifying it as a fallacy due to the prior commission of a category mistake.

In the book review section, Adelino Cattani reviews the 2008 edition of the Italian title *Logica e argomentazione. Un prontuario*; according to Cattani this handbook "is an excellent didactic survey and a collection of rules and formulae for free reasoning, with clear examples and useful exercises, a course book that an Italian student of logical argumentation and 'argu-

mentative logic' needs to have, also in order to skim it when necessary." In the second review, Anca Gata evaluates M. Agnès van Rees's *Dissociation in Argumentative Discussions. A Pragma-Dialectical Perspective* (2009) as a pleasant and useful reading, well informed by the literature and innovative in terms of the view taken on the topic. In her opinion, it is the only systematic account of dissociation so far, and the abundance of examples sometimes discussed from different perspectives in various chapters of the book provides the researcher with a "panoramic" view of this long neglected argumentative technique. In the third book review, Niki Pfeifer reviews Lorne Szabolcsi's *Numerical Term Logic* (2008). In his opinion, the major strength of this book is its clear and unified logical treatment of a broad variety of interpretations for natural language quantifying expressions. According to Pfeifer, the author notably shows how logical validity can be determined by relatively simple algebraic manipulations.

This second issue of the first volume of *Cogency* is also the second step of an *endurance run*. The metaphor "ACADEMIC PROJECTS ARE COMPETITIONS" conveys that behind the names of the journal's board members there is a chain of wills without which this project wouldn't be possible, just like running competitions would not be possible if there were not different people helping at each stage of the competition. Putting the right correlation of the *competition* metaphor onto the academic activity, we would like to repeat our expression of gratitude to those who support us in each phase of the preparation and distribution of Cogency: Cristóbal Marin, academic vice-rector of Diego Portales University; Adriana Kaulino, Dean of the Faculty of Psychology, where we pleasantly work; and Ana Vergara, Director of the Department of Psychology. We would also like to acknowledge Margarita Bravo (Secretary of the Dean of the Faculty), Antonia González (student of Psychology), and Miguel Ángel Fernández (IT manager of the Faculty); all of them a part of this chain of wills. The team of *Cogency* as well as CEAR will stay on track to improve this initiative.

Cristián Santibáñez Yáñez[2]

Santiago / Amsterdam, December 2009

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One Logician's Perspective on Argumentation

La perspectiva de un lógico sobre la argumentación

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Abstract: Logic is often considered a technical subject, far removed from the concrete reasoning and discussion that we all practice in daily life. Understanding and improving that ordinary reasoning is then seen as the task of argumentation theory, which has operated independently from logic for a long time. But the discipline of logic has been undergoing a practical turn over the last decades, with my own work on logical dynamics of agency and intelligent interaction as an example. On the occasion of the death of Stephen Toulmin, a pioneer in modern argumentation theory and a prominent critic of mathematics-centered logic, I take a fresh look at what are usually considered major differences between daily practice and logical theory: the role of richer argument schemata and of procedural aspects of reasoning. I argue that these are in fact shared interests, making logic and argumentation theory allies rather than rivals.

Keywords: Logic, argumentation theory, dynamics, procedure, inference schema.

Resumen: La lógica a menudo es considerada como un tema técnico, lejos del razonamiento concreto y las discusiones que practicamos en nuestra vida cotidiana. Comprendiendo y mejorando esto, el razonamiento ordinario es entonces visto como la tarea de la teoría de la argumentación, la que ha operado independientemente de la lógica por un largo tiempo. Pero la disciplina de la lógica ha estado promoviendo un giro hacia lo práctico en las últimas décadas, siendo mi propio trabajo en lógica dinámica de agentes e interacción inteligente un ejemplo. Con ocasión de la muerte de Stephen Toulmin, un pionero en la teoría moderna de la argumentación y un prominente crítico de la primacía de la lógica matemática, aquí desarrollo una mirada al día de los que usualmente son considerados los mayores puntos de diferencia entre la práctica cotidiana y la teoría de la lógica: el rol de una más rica esquematización argumentativa y los aspectos procedimentales del razonamiento. Sostengo aquí que

estos puntos son en realidad de interés compartido, colocando a la lógica y la teoría de la argumentación como aliadas antes que como rivales.

Palabras clave: Lógica, teoría de la argumentación, dinámica, procedimiento, esquema de inferencia.

1. Introduction: Logic and argumentation theory

When I was a student around 1970, two courses on the subject of reasoning were taught in the same semester at the University of Amsterdam. One was on logic, attracting a small band of students in a marginal classroom; the other was on argumentation theory, packing a whole auditorium in the historic city centre with hundreds of students from many disciplines keen on improving their skills. Things have not changed much, I think, and the same difference would show if our students were offered a free choice today. Now this may be just the choice between Broad and Narrow Paths in life (Bunyan 1678). But there is more to the connection between logic and argumentation theory than relative popularity. Logic may be a normative mathematical study of valid inference patterns, but it is not disjoint from the realities of human reasoning – and logical theory has been influenced by ideas about common sense reasoning.[1] And practical reasoning and the practice of argumentation have an undeniable stability that gives logic in some form of grounding in reality, even though logic textbooks hardly reflect any of this.[2]

I have been interested for a long time in the connections or lack thereof, between logic, general argumentation theory (van Benthem 1996B) and legal reasoning (van Benthem 2001). And that interest came from reading 'forbidden books' in my days as a logic student, namely, Perelman & Olbrechts-Tyteca 1958 and Toulmin 1958. Both Perelman and Toulmin knew

[1] Logic and artificial intelligence meet in the area of common sense reasoning: see Gabbay, Hogger & Robinson, eds., 1995. Logic and multi-agent systems in computer science are another thriving area: cf. Wooldridge 2002, Shoham & Leyton-Brown 2009. Finally, Hodges, Hodges & van Benthem 2007, van Benthem 2007A discuss current connections between logic and empirical cognitive science. And we will mention bridges between logic and argumentation theory later.

[2] The standard philosophical and mathematical textbook image of the field ignores the many links of logic with practice. A shining exception is Bennett 2004, who takes in psychology of reasoning.

modern logic well, and became disappointed with what it delivered in terms of understanding real argumentation. Both then abandoned it in favour of other approaches (traditional rhetoric, new styles of argument analysis) in a way that created alternative schools. Both authors also looked for a counter-weight to the mathematics-centered modern logic, turning to the Law as the major other paradigm of reasoning in human culture, at least as old as mathematics. Stephen Toulmin just died last year (http://www.nytimes.com /2009/12/11/education/11toulmin.html). This paper is a very brief commentary on his ideas in the light of modern developments in logic.

2. Rich formats of inference: the Toulmin Scheme

Inference formats Standard logic offers us only a simple binary scheme for the notion of inference:[3]

Toulmin's scheme for the structure of argument is more natural and evident, once you see it. Instead of a bare binary transition from premises to conclusions, it offers a format

For instance, I may claim that my trip will probably not end in Amsterdam today, given current snow conditions (the data) and some unfortunate

[3] Incidentally, modern logic has several richer non-binary inference schemes with ideas not found in Toulmin. In particular, *situated inference* grounds discourse in reality (Barwise & Perry 1983, van Benthem & Martinez 2008), and most entailment then works *across situations,* with a much richer structure of information flow in argument (Barwise & Seligman 1995, Barwise & van Benthem 1999).

general features of the Dutch railway system (the reason). These features are based on many things, including the laws of physics and social contracts. But my claim is not absolute (claims seldom are), as there can be circumstances that defeat it, such as a sudden dramatic change in the weather. More generally, we make claims on the basis of data at our disposal, but there also needs to be a connection (the reason, or 'warrant') that itself may need further backing. Moreover, we usually make a claim with some force, stronger or weaker, marked by qualifiers like "certainly", "probably" that may come with an indication when the claim can be overridden ('rebuttals'). While not every concrete inference needs to have all these elements present, the scheme is a rich way of seeing many crucial aspects of ordinary reasoning. Finally, unit schemes can be linked to get broader maps of argument.

A practical turn: logic, common sense, and cognition My first point is simply that none of this is controversial today. While Toulmin's views may have been in sharp contrast with mathematical logic at the time, things have changed. The idea that inference comes in different forces, depending on the task at hand, has become widely accepted since the 1980s. One engine of change here has been the *semantics of natural language*, where ever more subtleties of ordinary speech and reasoning made their way into logical theories (cf. van Benthem & ter Meulen, eds., 1997). But a more powerful influence has been the study of *commonsense reasoning* in AI, that turns on just the above default character of most practical tasks (McCarthy 1980). The resulting systems for practical reasoning are often called *nonmonotonic logics*, since a conclusion based on some data may have to be withdrawn when more data come in. This has resulted in a broad stream of literature (cf. Gabbay, Hogger & Robinson, eds., 1995; Restall 2000), and even a philosophical doctrine of Logical Pluralism seeking the essence of logic in a broad arsenal of reasoning styles. Another take on this diversity, related but technically different in the end, shifts the focus a bit. Our actions are based on beliefs, rather than knowledge, since that is all we can go by. This may result in claims that may turn out to be wrong, but then a second major cognitive ability swings into action, namely, the ways in which we can *correct ourselves*, retract conclusions, and *revise beliefs*. Inference and revision go hand in hand in modern logical theories.

Toulmin's view seemed threatening at the time: standards of inference are task-relative, and logic with its universal claims must be rejected. But the opposite has happened. The diversity experience has enriched the discipline of logic, and given it much wider scope.[4] With a time lag of a few decades, logic has absorbed similar ideas to Toulmin's, largely through meetings with computer science and artificial intelligence. These richer views extend into cognitive science, witness the role of default logics in cognitive psychology and brain research (cf. the papers in Hodges, Hodges & van Benthem 2007).

Logic and argumentation theory today There is a lot to be compared, and merged, then between parallel research tracks in argumentation theory and modern logic. But I am not claiming any originality for this view. After all, this is precisely the point of the efforts of Walton & Krabbe 1995, Gabbay & Woods, eds., 2002, Prakken 1997, and many other authors bridging the divide between the two fields. Perhaps, to add something less irenic, some informal paradigms in current argumentation theory might acquire some more dynamics with a dose of logical insights from the last decades, while they would also benefit greatly from linking up with cognitive science, the way logic is trying to.[5]

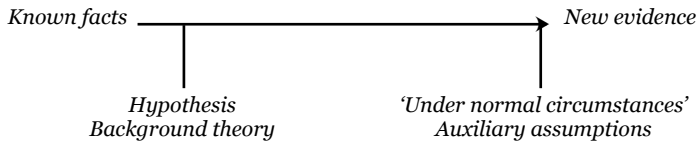
Two historical analogies Going back to the Toulmin scheme, I end with two historical analogies. The first is with *Bernard Bolzano*, the great pioneer of modern logic (Bolzano 1837, cf. van Benthem 2003). Bolzano saw the task of logic as charting different natural styles of reasoning in different settings: deductive, probabilistic, or strict philosophical. Bolzano also predates Toulmin in not placing the central emphasis on logical forms with key words like "not", "and", "or", "all", "some". But he does not dismiss form altogether. He acknowledges the crucial role of function words versus content words in natural reasoning (this is just a simple evident fact) and indicates how this is not an alien mathematical abstraction, but a feature

[4] Many specific features of the Toulmin schema are in fact topics in current logical research. The two-tier structure of Warrant and Backing is reflected in modern accounts of informational data bases, where inferences from data are often crucially determined by a hierarchically organized background theory, ranging from core laws to less entrenched assumptions. Likewise, the Qualifier and Rebuttal are central to non-monotonic logics and various explicit triggers for belief revision.

[5] As for the opposite direction from argumentation theory to logic, see below.

that arises naturally in our linguistic reality.[6] [7] Bolzano's logic was not well known in Toulmin's day - but my next example gets closer.

Another analogy that strikes me is with the *Hempel-Oppenheim* scheme of explanation (Hempel & Oppenheim 1948), predating the Toulmin schema by a decade. Philosophers of science had long noted that standard logical consequence will not do for the variety of reasoning found in science: explanation, prediction, confirmation, refutation, and so on. One famous scheme for explanation that was then proposed was this:



A new piece of evidence is derived from known facts with the help of some hypothesis in a background theory. Moreover, the inference is only 'under normal circumstances', a crucial rider in common sense default reasoning as well as much of science.[8] Now this scheme has been criticized. Its applications tried to assimilate too much into a classical logic after all, making things complex (neopositivism died from internal complexity rather than external criticism) – where one would opt for nonmonotonic logics today. But my point remains. Right in Toulmin's 1950s, we see parallel observations on a practice that clearly goes beyond standard logic. But logic is *not abandoned, but enriched.*

[6] Just Google for a list of most frequent words in English, and you will be amazed how dominant function words are in our actual natural language discourse, with logical ones high up. Here is one list out of many http://www.edict.com.hk/lexiconindex/frequencylists/words2000.htm.

[7] Of course, the variety of reasoning is also still a central theme in the 19th century with C. S. Peirce, as in his famous triad of deduction, induction, and abduction (Peirce 1933).

[8] The inference can be made classically valid by filling in all relevant auxiliary assumptions, but these are seldom available. The more insightful formalization leads to studies of conditional reasoning, initiated by Goodman and brought to logic in the 1960s by Lewis and Stalnaker (see the survey in van Benthem 2006). Conditional logic and the above nonmonotonic logics have much in common, as both emphasize conclusions that hold, not in all models of the premises, but only in the 'closest' or 'maximal' ones in some relevant task-dependent ordering of all the possible situations.

Toulmin's decision to break away from logic was fateful, and in the light of the above, I wonder how justified it really was.

3. Logical dynamics: Toulmin's form versus formalities

Toulmin's opposition to the role of logical form as the engine of reasoning may have been somewhat extreme, but it did lead to one wonderful insight. In one passage, he speaks of replacing mathematical form by juridical *formalities*, i.e., the procedure by which we draw inferences, and the importance of procedure in argumentation generally.

Logical dynamics Now this, to me, is right on the mark – and it does point at a major theme that has been neglected in modern logic. Reasoning is an *activity*, functioning among many forms of information flow, and agents like us are constantly performing acts of observation, inference, belief revision, or evaluation that guide our behaviour. Moreover, crucially, we do not do this in isolation, but *interactively* with others: pure deduction on one's own is an extreme case. Now modern logic just studies some products of such acts, such as inference forms, or static instantaneous knowledge and beliefs of agents. It does not study those acts themselves, even though only the latter create the products, and make sense of them. Making the actions that drive rational agency first-class citizens is the program of Logical Dynamics that I have long pursued (van Benthem 1991, 1996A, and in the guise of 'dynamic epistemic logic': van Benthem 2010).

It would be tedious to make an extended plea for my own views here, and even more tedious to try and enlist Toulmin's 'formalities' for my own purposes. Suffice it to say that I think that logic should, and can, incorporate a wide variety of dynamic viewpoints, without giving up its classical methodological standards. In particular, current systems of dynamic epistemic logic describe both what agents know or believe or prefer at a given moment, and how these attitudes change as events happen that are part of the logical system: observations, questions, commands, or any acts of communication.[9]

[9] Logical Dynamics is new to most logicians or philosophers. But I am confident that procedural views will prevail: they reflect a cognitive reality that cannot be denied.

History once more In fact, again in the 1950s, seminal dynamic ideas were around already. The analysis of reasoning in the famous *dialogue games* of Paul Lorenzen (cf. Lorenz & Lorenzen 1978) makes success in argumentation a matter of winning strategies for proponents of claims against opponents granting the premises. And casting reasoning in this way so did two things. First, it put the traditional logical constants in an entirely new light, as functional *control expressions* for moves in games, such as choosing options for continuing the debate, or switching roles between defense and attack. But also, it highlighted the crucial role of *procedure* (who speaks when, who can attack or defend what) in determining which inferences come out valid: classical, intuitionistic, or otherwise. Thus, years before Toulmin's book, logic had already started developing tools for some of the very things he was asking for: formalities, and task dependence.[10]

Logic, procedure, and games I conclude with a few points strengthening the connection between formalities and dynamics. First, on the Logical Dynamics stance, the Toulmin schema is a static 'product projection' of dynamic activities that can be studied explicitly. Take the role of the qualifier. This is a minimal code for actual *acts of revision* that agents undertake when forced by new information, either by observation of external facts or by internal pressures of discourse.[11] Thus, the scheme calls for a richer theory beyond classification, adding explicit accounts of the dynamics of changing claims over time, as new events happen.[12] Thus, I claim that one should go further than Toulmin's own scheme – and one very effective tool for doing that is using not less, but *more logic*!

This fits with a more general perspective on the controversy (if there is one left) between logic and argumentation theory. Historically, logic probably had its origins in dialectical and legal practice, but it was the *combination*

[10] Significantly, modern informal argumentation paradigms like *pragma-dialectics* (van Eemeren & Grootendorst 2004) merge ideas from the Lorenzen and Toulmin traditions.

[11] I agree that logicians could still pay more attention to the study of explicit qualifier vocabulary, as well as related discourse particles like "but" and "even so". But there is no taboo on this subject, and some interesting formal studies of discourse dynamics can be found in the semantics of natural language.

[12] Another hook for dynamics is the slot for Warrant and Backing, but I skip that here.

of these origins with mathematical methodology that produced its great strength and staying power.[13] [14] To show this beneficial coexistence more concretely, Toulmin's opposition of 'form' and 'formalities' is untenable. Formalities have procedural structure, and that structure can be studied by bringing out the major operations creating it in a mathematical formalism. Put simply, *formalities have form*, there is no opposition. And as we saw with Lorenzen dialogues: one very powerful locus of procedural form are precisely those logical constants that Toulmin held in so little esteem, now in their game-theoretic interpretation.

4. Joint concerns: argumentation perspectives in logic

My final thoughts continue the juxtaposition of logic and argumentation.

Argumentation can enrich logical systems One key theme in logics of information flow and procedure is a multi-agent perspective. Information is usually obtained with others in conversation, experiment, or in education with students and teachers. Even our individual actions are typically driven by a mixture of what we know about physical facts and about what others know or do not know. Now, argumentation is a paradigmatic setting for this, as it is typically done with *others*, and it provides what logical theory needs: a concrete source of experiences and intuitions. Lorenzen dialogue games and others (cf. the survey in van Benthem 2007A) have provided some logical models for 'many-mind problems'. But more can be done, since the phenomenon is so rich. Agents can argue among themselves, or with a referee,[15] debates can have many purposes with different features, from common sense to specialized legal practices. Also, the nature of the assertions on the table can vary widely, and so can procedures of deliberation. There is room for logics of scenarios, and a systematic description of what

[13] As I have put it elsewhere, Plato's *Dialogues* had to meet with Euclid's *Elements*.

[14] The same can be seen today. *Pace* Toulmin and Perelman, Logic and the Law are not competing cultural paradigms, but complementary ones with many fruitful interactions.

[15] Lorenzen games naturally invite further players: a *Judge*, or even a *Jury*.

information flows in them, following up on the seminal work that has been done (cf. Gabbay & Woods, eds., 2002).[16] [17]

This said, argumentation has not yet penetrated Logical Dynamics as it should. Consider the key topic of belief revision, a corrective mechanism to over-eager non-monotonic inference. Most logics so far have anonymous signals that trigger belief changes in single agents, rather than a setting of argument where being contradicted *by specific other agents* is one of the most powerful levers for change. It seems promising then to merge dynamic logics of information flow with concrete models of argumentation.[18] [19]

6. Conclusion

Looking back at Toulmin's seminal work, I feel a lot of resonance with the broad program of logical consequence (and in my case, dynamics) that many of us are pursuing today. He was right in many of his major observations, but I would say that he was wrong in his decision to leave the party. Working together, argumentation theory and logic can advance along Toulmin's lines extending both practical coverage and theoretical insight. And while

[16] For illustrations in games, look at the analysis of game-theoretic conversation scenarios with disagreements in beliefs or assertions of rationality of players in van Benthem 2007B, Dégrémont & Roy 2009, Baltag, Smets & Zvesper 2009. These should dispel any lingering idea that logicians cannot analyze subtle conversational scenarios with surprising outcomes.

[17] This need not be monopolized by Lorenzen dialogues. Indeed, these have special features that may be less suitable, for instance, the fact that Opponent is doing nothing much except obstructing Proponent in his flights of fancy. Other logic games give equal weight to a proponent making a claim and an opponent claiming consistency by building a model verifying specified assertions. This is closer to existing practices like the roles of prosecutors and lawyers in court.

[18] Some attempts in this direction exist: cf. Rahman & Keiff 2005.

[19] *An obstacle: semantics versus syntax?* Things may not be entirely smooth. One barrier in merging logic and argumentation may be the different notions of *information* that play in multi-agent activities. There is semantic information in the style of Carnap and Hintikka as ranges of options, but also fine-grained syntactic information produced by inference (cf. van Benthem & Martinez 2008), and perhaps even a third kind of 'procedural information' (van Benthem 2010). It has been proposed to merge things in terms of *awareness*, where the point of an inference is to turn implicit knowledge induced by the premises into explicit knowledge (van Benthem & Velázquez-Quesada 2009). But this may not be the crux in argumentation, where the major notion seems to be neither awareness nor information, but *commitment* with respect to assertions on the table. There are no good dynamic epistemic logics with commitment dynamics yet.

logic has many interdisciplinary partners for romantic walks these days, including philosophy, mathematics, computer science, game theory, and cognitive science, I am not sure where argumentation theory is heading if it stays on its own.

Finally, I did hear Toulmin speak a few years ago in the historical Westindisch Huis in Amsterdam, and the above issues were already on my mind. But he was speaking on a very different subject, standing in a cocoon of fame, and shielded from the audience by throngs of cultural officials. I just went home without talking to him – and now wish I had not.

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La distinción aristotélica entre Lógica, Dialéctica y Retórica y su lugar en la Teoría de la Argumentación

The Aristotelian distinction between Logic, Dialectic and Rhetoric, and its role within Argumentation Theory

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Resumen: ¿Debemos considerar la obra de Aristóteles como el origen de la Teoría de la Argumentación o más bien como un obstáculo que, al menos en parte, explicaría el desarrollo tardío de ésta? En este artículo intento mostrar que hay buenas razones para defender ambas posiciones. Con ello, pretendo ilustrar cierto modo de concebir las relaciones entre Lógica, Dialéctica y Retórica. Dicha concepción resultaría más afín a los objetivos de la propia Teoría de la Argumentación que la visión fragmentaria que, durante siglos, se ha visto no obstante más respaldada por la labor de quienes, desde una u otra disciplina, se han ocupado del estudio normativo de la argumentación. En la medida en que esta visión fragmentaria es una herencia de la que aún no se ha deshecho del todo la moderna Teoría de la Argumentación, la lectura de los trabajos aristotélicos que aquí se propone trata de aportar elementos de reflexión útiles para nuestra labor actual, especialmente, los relacionados con la concepción de la Lógica como teoría normativa de la inferencia y del *entimema* como silogismo retórico.

Palabras clave: Dialéctica, Lógica, *Organon* aristotélico, Retórica, Teoría de la Argumentación.

Abstract: Should we consider Aristotle's work on argumentation as the origins of Argumentation Theory or rather as an obstacle that, at least in part, would explain its late emergence and development? In this article I try to show that, in fact, there are good reasons to defend both views. By doing so, I aim to illustrate a certain way of thinking of the relationships between Logic, Dialectic and Rhetoric. Such conception of the relationships between these disciplines would be more suitable for the goals of Argumentation Theory than the fragmentary view that, for centuries, has been endorsed by most scholars working on each of them. As long as this fragmentary view has been

inherited up to our days, our proposed reading of Aristotle's texts aims to offer some conceptual elements for current developments, mostly regarding the conceptions of Logic as the normative theory of inference and of the *enthymeme* as the rhetorical syllogism.

Keywords: Aristotle's *Organon*, Argumentation Theory, Dialectics, Logic, Rhetoric.

1. Introducción

¿Debemos considerar la obra de Aristóteles como el origen de la Teoría de la Argumentación o más bien como un obstáculo que, al menos en parte, explicaría el desarrollo tardío de ésta? Como intentaré mostrar en las siguientes páginas, creo que hay buenas razones para defender ambas posiciones.

Si bien ésta puede verse como una cuestión histórica interesante en sí misma, lo cierto es que al considerar el rol de la obra de Aristóteles respecto de la Teoría de la Argumentación, lo que pretendo es más bien ilustrar cierto modo de concebir las relaciones entre Lógica, Dialéctica y Retórica. Creo que dicha concepción resulta más afín a los objetivos de la propia Teoría de la Argumentación que la visión fragmentaria que, durante siglos, se ha visto no obstante más respaldada por la labor de quienes, desde una u otra disciplina, se han ocupado del estudio normativo de la argumentación. Más aún, en la medida en que esta visión fragmentaria es una herencia de la que aún no se ha deshecho del todo la moderna Teoría de la Argumentación, la lectura de los trabajos aristotélicos que aquí se propone trataría de aportar elementos de reflexión útiles para nuestra labor actual. Es por ello que lo que sigue a continuación pretende ser de interés más conceptual que historiográfico: no se trata de ofrecer una tesis sobre la "verdadera" interpretación de la obra aristotélica, sino más bien de considerar un enfoque distinto que permita plantearnos hasta qué punto la interpretación tradicional no se halla sesgada, al menos en parte, por las mismas contingencias históricas que han postergado el desarrollo de la Teoría de la Argumentación.

Como es sabido, los orígenes de la Teoría de la Argumentación en tanto que disciplina académica son bastante recientes. A mediados de la segunda mitad del pasado siglo, autores como Chaïm Perelman y Lucie Olbrecht-Tyteca(1958), Stephen Toulmin (1958) o Charles Hamblin (1970) hicieron hincapié en el interés e idiosincrasia del estudio normativo de la argumentación en lenguaje natural. El desarrollo de la Teoría de la Argumentación

vino así a aglutinar los esfuerzos de aquéllos que, bien desde una perspectiva lógica, bien dialéctica o bien retórica, se habían interesado por las condiciones del buen argumentar.

Así, en *Acts of Arguing*, C. Tindale (1999) recogía las observaciones de J. Wenzel (1979) y J. Habermas (1984), al identificar la distinción aristotélica entre Lógica, Dialéctica y Retórica con tres concepciones diferentes de la argumentación como objeto de estudio. Según Tindale, se trataría, respectivamente, de los argumentos en tanto que producto de la comunicación argumentativa, de los procedimientos de intercambio comunicativo que dan lugar a cierto tipo de práctica argumentativa, y de los procesos en los que dichas prácticas se implementan.

> A la Lógica le conciernen los productos PPC (premisas-conclusión) de la argumentación, los textos y discursos en los que se profieren afirmaciones con evidencia que las apoya, los cuales pueden ser juzgados como válidos o inválidos, fuertes o débiles. La Dialéctica se interesa por las reglas o los procedimientos que se requieren para que la argumentación se efectúe correctamente y logre sus objetivos de resolver disputas y promover las discusiones críticas. La Retórica se centra en los procesos comunicativos inherentes a la argumentación, en los medios que utilizan los hablantes para lograr la adhesión de los auditorios a sus afirmaciones (Tindale 1999, 3-4).

El principal objetivo de este trabajo es ofrecer una lectura de la obra de Aristóteles sobre argumentación que muestre que el tradicional desencuentro entre los tres saberes que conforman el estudio normativo de ésta –la Lógica, la Dialéctica y la Retórica- no es una consecuencia natural de dicha obra, sino más bien del modo en que fue recibida, habida cuenta del interés que el propio Aristóteles manifestó por uno de ellos y el modo en que éste se desarrolló posteriormente.

2. Teorías lógicas, dialécticas y retóricas de la argumentación

En la actualidad, la Teoría de la Argumentación contiene propuestas representativas de los enfoques lógico, dialéctico y retórico. Las concepciones de la argumentación de las que parten cada una de estas propuestas tienen el

objetivo común de servir de base a una teoría normativa para el fenómeno cotidiano de la argumentación. De este modo, por ejemplo, el propio Tindale elabora su modelo a partir de una concepción de la argumentación como proceso pues, en su opinión, ello permite una visión integral que resultaría inasequible desde otros presupuestos. Por ello propone una recuperación del trabajo de Perelman, y de lo que podemos denominar el *enfoque retórico* de la Teoría de la Argumentación. Por su parte, la propuesta más representativa del *enfoque lógico* dentro de la Teoría de la Argumentación, la llamada "Lógica Informal Canadiense", recoge un conjunto de trabajos desarrollados a partir de los años setenta, principalmente por Trudy Govier, J. Anthony Blair y Ralph H. Johnson, que tratan de proporcionar una Lógica no-Formal para argumentos en lenguaje natural, pues según estos autores, un enfoque retórico resulta insuficientemente normativo. Su punto de partida ha sido la asunción de los límites de la Lógica Formal para habérselas con las falacias argumentativas y con la dimensión dialéctica de la argumentación. Finalmente, el *enfoque dialéctico* estaría representado principalmente por la Pragma-dialéctica, también llamada "Escuela de Ámsterdam", cuya obra fundacional, *Speech Acts in Argumentative Discussions* (1984), de Frans H. van Eemeren y Rob Grootendorst, desarrolla una concepción de la argumentación como procedimiento de discusión crítica que tiene por objetivo resolver racionalmente una diferencia de opinión. La concepción dialógica de la argumentación también ha supuesto el punto de partida de distintos sistemas de dialéctica formal, tales como Barth y Krabbe (1982), así como una característica fundamental del trabajo de D. Walton (1989) y de Walton y Krabbe (1995).

Dados sus distintos focos de interés –i.e. los argumentos, los procedimientos de intercambio argumentativo o los procesos de comunicación argumentativa- podría parecer que las teorías que componen hoy día la disciplina no son, en absoluto, propuestas rivales. Pero sí lo son: como proyecto general, la Teoría de la Argumentación es un intento de ofrecer un modelo normativo adecuado para dar cuenta del fenómeno de la argumentación cotidiana, y los distintos enfoques no caracterizan modelos paralelos o complementarios, sino rivales, pues cada teoría pretende haber encontrado el punto de partida óptimo para habérselas con ese fenómeno. Ciertamente, al definir la argumentación de un modo u otro, estas teorías definen su propio objeto de estudio. Pero la representatividad de este objeto respecto

del tipo de fenómeno cuyas condiciones normativas se trata de analizar resulta entonces un criterio esencial para decidir sobre el valor teorético y práctico de dichas teorías y, con ello, para comparar modelos cuyos objetos, en principio, difieren entre sí.

3. El lugar de la obra de Aristóteles

Así pues, si bien en los últimos tiempos la mera aparición de la Teoría de la Argumentación ha logrado integrar en una única disciplina los distintos ámbitos del estudio normativo de la argumentación en lenguaje natural, lo cierto es que subyace en ella la idea de que Lógica, Dialéctica y Retórica son, a lo sumo, enfoques alternativos. Sigue sin articularse una propuesta capaz de integrar estas tres disciplinas en tanto que perspectivas complementarias para la elaboración de un modelo del buen argumentar, por más que, en justicia, debamos reconocer los esfuerzos de las distintas teorías por incluir elementos ajenos a su punto de partida.

¿Cuál es entonces la causa de esta fragmentación que ni siquiera el importante desarrollo experimentado por la Teoría de la Argumentación en las últimas décadas ha logrado superar aún? En mi opinión, para hallar una respuesta deberíamos indagar, en buena medida, en la evolución histórica del modo en que tuvo lugar la recepción de los estudios aristotélicos sobre argumentación y el subsiguiente establecimiento de la Lógica, la Dialéctica y la Retórica como disciplinas consolidadas y completamente independientes entre sí. Ahora bien, como intentaré mostrar a continuación, este resultado no tendría por qué verse como una consecuencia "intrínseca" a las propuestas aristotélicas mismas, sino que también sería posible considerarlo fruto de ciertas contingencias históricas; entre ellas, las que determinaron el papel de Aristóteles como padre de lo que, posteriormente, se constituyó como Lógica Formal.

Tal como he argumentado en Bermejo-Luque (2008) y Bermejo-Luque (2009), la preponderancia de la Lógica Formal ha constituido un verdadero obstáculo para el desarrollo de la Teoría de la Argumentación al promover la creencia de que un modelo normativo para la argumentación en lenguaje natural no era más que el resultado de añadir a los sistemas lógicos formales una teoría adecuada para la formalización de los argumentos reales. Du-

rante siglos, la normatividad argumentativa ha venido a equipararse con la normatividad lógica, entendida, más aún, como de naturaleza meramente formal. Esta visión dejaba al margen los condicionamientos pragmáticos de la argumentación en tanto que actividad comunicativa. Así, por ejemplo, todo lo relacionado con el estudio de las falacias informales aparecía, a lo sumo, como un capítulo pintoresco y asistemático en algunos manuales sensibles a la cuestión de la aplicabilidad de la Lógica para la evaluación de la argumentación cotidiana.

Dado este prejuicio, no es de extrañar que, hasta el surgimiento de la Teoría de la Argumentación, se hubiera pensado que la contribución más importante de Aristóteles al estudio normativo de la argumentación consistía en haber sentado las bases de la Lógica como teoría formal de la inferencia válida. Ciertamente, el propio Aristóteles parece considerar la silogística analítica de la *Analítica Primera* como el núcleo de esta empresa, y sus estudios sobre las categorías, las proposiciones y los juicios constituirían elementos complementarios en ella; por el contrario, trabajos como la *Retórica*, e incluso aquéllos sobre falacias informales –las *Refutaciones Sofísticas*- serían, en el mejor de los casos, reflexiones adicionales, cuando no meros elementos extraños al programa de elaborar una ciencia formal para la evaluación de los argumentos. Tal concepción de su obra haría de Aristóteles el padre de la Lógica Formal contemporánea; pero en la medida en que esta disciplina se ha presentado, durante siglos, como el único modelo propiamente normativo posible para la argumentación, Aristóteles habría sido más bien un obstáculo para el desarrollo de la Teoría de la Argumentación, tal como la conocemos hoy en día.

Ahora bien, ¿es ésta la única lectura posible de la obra aristotélica sobre argumentación? En mi opinión, también es posible ver la silogística analítica tan sólo como una parte de un todo más amplio cuyo núcleo no es la inferencia formal, sino la práctica de la argumentación en tanto que instrumento para la Filosofía y el conocimiento. Desde este punto de vista, el conjunto de trabajos que Andrónico de Rodas habría aglutinado bajo el título *Organon*, "instrumento", representaría la empresa de fundar metodológicamente el quehacer teórico aristotélico, más que la de acompañar y complementar la elaboración de una ciencia formal sobre el método. Para esta empresa, no sólo la silogística analítica, sino también las reflexiones aristotélicas sobre la Dialéctica, los tópicos y las falacias serían piezas fundamentales a las que,

además, habría que añadir las reflexiones de la *Retórica*, e incluso, como ha sugerido Covarrubias (2006), la misma *Poética* aristotélica: pues este proyecto, como un todo articulado, se ocuparía de la comunicación argumentativa en general, y no sólo de la teoría de la prueba y la inferencia formal.

Es cierto que, desde un punto de vista meramente histórico, la primera de estas interpretaciones de la obra de Aristóteles resultaría más exacta. Seguramente, ello explicaría por qué, después de Aristóteles, el estudio de la argumentación quedó dividido en tres disciplinas que corrieron suertes muy distintas: por un lado, la Lógica, que desarrollada bajo el influjo de la silogística analítica evolucionó como un conjunto de teorías formales sobre la inferencia válida. Por otra parte, la Retórica que, tras un largo periplo, acabó casi olvidada y parcialmente denostada por su supuesta preferencia por el ornamento sobre el argumento. Y, por último, el estudio de las falacias informales, una materia que, prácticamente hasta los trabajos sobre Dialéctica de Hamblin (1970), no llegaría a recibir tratamiento sistemático alguno.

Sin embargo, desde la perspectiva de la moderna Teoría de la Argumentación, cabría cuestionar tal devenir. Desde este enfoque se trataría de poner de manifiesto que la concepción aristotélica de la argumentación era lo suficientemente amplia como para tener en cuenta, no sólo que los argumentos son el medio por excelencia de justificar nuestras afirmaciones y creencias, sino también que la argumentación suele usarse para intentar persuadir a otros de aquello que afirmamos y creemos.

No pretendo hacer de esta intuición una tesis sobre la interpretación adecuada de la obra de Aristóteles sobre argumentación. Pero quisiera mostrar, al menos, que tiene sentido leer así a Aristóteles y, más aún, que esta lectura nos permite entender de manera más fructífera las relaciones entre Lógica, Dialéctica y Retórica.

4. Platón y el estereotipo de la contraposición entre dialéctica y retórica

Las primeras reflexiones teóricas sobre la argumentación supusieron, a su vez, una primera demarcación entre la Dialéctica y la Retórica. Como es sabido, el modo de concebir las relaciones entre discurso y verdad articuló, en tiempos de Sócrates y Platón, el debate ético-político y epistemológico

entre sofistas y filósofos, el cual puede considerarse como el origen del estudio normativo de la argumentación. Tradicionalmente, la contraposición entre las propuestas sofistas y las de Sócrates o Platón se ha representado como la contraposición entre defensores de la Retórica y defensores de la Dialéctica, concebidas respectivamente como una disciplina con un interés meramente instrumental en la argumentación y el discurso, frente a una disciplina teorética que ve la argumentación y el discurso como el método mismo del conocimiento. En todo caso, tales eran las premisas logocéntricas de la reflexión griega.

Es un lugar común oponer a sofistas y filósofos diciendo que, en lugar de un compromiso con la verdad y el conocimiento, los sofistas tenían un compromiso con sus clientes, a quienes adiestraban en las artes del discurso como forma de prosperar en un contexto social y político que había elevado el arte del discurso a medio de interacción pública por excelencia, e incluso a espectáculo en sí mismo. Por el contrario, a Sócrates, y especialmente a Platón, esta concepción del discurso como espectáculo les habría bastado para hacer culpables a los sofistas del cargo general de preferir la simple opinión al verdadero conocimiento. Esta caricaturización de las relaciones entre sofistas y filósofos subyacería a la ulterior concepción peyorativa de la Retórica como "arte de la persuasión": para Platón, la Retórica sería un mero instrumento -ni siquiera un arte, pues carecería de un objeto propio- para desarrollar la dudosa habilidad de confundir a los auditorios eficazmente, presentando como verdadero lo que sólo es opinable. Al menos, ésa es la visión estereotipada de las sospechas de Platón contra la Retórica.

Ciertamente, Platón oponía la fiabilidad de la Dialéctica a la maleabilidad de la Retórica, destacando la diferencia entre la adquisición de conocimiento y la mera promoción de creencias más o menos populares y acertadas. De hecho, éste es uno de los principales temas en diálogos como *Gorgias* o *Fedro*. Pero de cara a inferir de ello una preferencia por parte de Platón, deberíamos presuponer que ambas disciplinas serían comparables en sus logros, al perseguir los mismos objetivos. Sin embargo, tal hipótesis parece contradecir otro de los estereotipos sobre la filosofía platónica, a saber, la idea de que la Dialéctica era el método por excelencia para alcanzar el conocimiento, mientras que la Retórica sería sólo un conjunto desarticulado de técnicas cuyo fin era el adiestramiento en habilidades persuasivas: una

disciplina de tan corto alcance no podría suponer tal amenaza para el conocimiento, al menos, por sí misma.

Por su parte, autores como J. Benjamin (1997) o C. Griswold (2004) han argumentado que Platón habría reconocido explícitamente la naturaleza retórica de toda comunicación, distinguiendo entre buenas y malas prácticas del arte de presentar los discursos. Así, a la luz de textos como el libro III de *La República*, donde Platón parece no ocuparse tanto de lo que debe ser dicho sino del modo en que debe ser dicho, encontramos cierta concesión: una importante función para la "buena" Retórica dentro de su gran proyecto político, el cual estaba basado en la promoción de una educación (*paideia*) adecuada para cada grupo social. De este modo, si bien Platón habría tratado de prevenirnos contra la perversión del arte del discurso que practicaban los sofistas, no estaría simplemente oponiendo la Retórica a la Dialéctica, pues incluso los grupos destinados a recibir verdadero conocimiento habrían de avanzar en su educación, entre otras cosas, gracias a las habilidades discursivas de sus maestros. Más aún, en el *Gorgias*, Platón incluso llega a hablar de una verdadera Retórica cuyo objetivo no sería producir el mayor placer del auditorio, sino producir lo que es el máximo bien por su verdad (*Gorgias* 451d-452d-e).

5. Lógica y dialéctica desde la perspectiva de la *Retórica* de Aristóteles

Lejos de la cautelosa valoración de la Retórica que hayamos en Platón, Aristóteles, como es sabido, incluso le dedicó un tratado. Es cierto que con ello pudo afianzar su carácter de disciplina autónoma, cosa que Platón habría tratado de evitar. Pero también es cierto que en las primeras líneas de la *Retórica* insiste en que, a pesar de considerarla un arte, ésta sería correlativa de la Dialéctica, con la que compartiría el carecer de un contenido específico, el ser independiente de los principios de las ciencias, el estar abocada a la consideración de lo probable, de la opinión, de lo posible, y el remitir siempre a las dos caras de todo asunto. Para Aristóteles, más que ciencias, Dialéctica y Retórica serían técnicas que pueden ser aplicadas a cualquier saber, lo cual resultaría coherente con la idea de que su interés por la argumentación remite a inquietudes metodológicas más que al deseo

de elaborar una ciencia –en el sentido de un saber demostrativo semejante a la Lógica Formal contemporánea.

Según la lectura tradicional, más que oponer entre sí la Dialéctica y la Retórica, Aristóteles opondría ambas disciplinas a la Lógica en tanto que ciencia de la demostración, al mantener que mientras la demostración se remite a la verdad, Dialéctica y Retórica versan sobre lo plausible. Sin embargo, también subyace en sus reflexiones sobre la argumentación como práctica la idea de que, en general, valorar cualquier argumento es proceder mediante el mismo tipo de facultad, a saber, la facultad de juzgar que algo debe o debería ser el caso, dadas ciertas condiciones. Desde esta perspectiva, a la Lógica le competería determinar la corrección de estos juicios en tanto que inferencias, mientras que la Retórica se ocuparía de estudiar el modo en que podemos inducir tales juicios en los demás, de manera que éstos resulten persuadidos. Por su parte, la Dialéctica tendría por objeto determinar la aceptabilidad de los principios y evidencias de los que partimos a la hora de elaborar tales juicios, pues como instrumento para el conocimiento, su función es la de ver cuáles de nuestras opiniones (*endoxa*) son capaces de resistir el escrutinio.

Ahora bien, ¿existiría, a juicio de Aristóteles, una antítesis entre los objetivos persuasivos que motivan la Retórica y los propósitos científicos de la Dialéctica y la Lógica como instrumentos para la demostración? Lo cierto es que, en el capítulo I de la *Retórica*, Aristóteles comienza criticando a aquéllos que, estudiando el arte del buen decir, sólo se ocupan, sin embargo, de lo más accesorio de los discursos, en lugar de ocuparse del argumento, que sería su núcleo. A continuación señala que existen argumentos dialécticos y retóricos, y que la principal diferencia entre éstos y los argumentos demostrativos es que sólo logran deducciones probables, y no necesarias. A la luz de estas observaciones, se diría que, más bien, lo que Aristóteles hace es poner de manifiesto que Lógica (entendida como teoría de la inferencia), Dialéctica y Retórica están igualmente concernidas con las condiciones normativas de la argumentación. La complementariedad de estas disciplinas sería un reflejo de la compatibilidad que Aristóteles ve entre persuasión y justificación. Y sería precisamente la duplicidad del argumento como instrumento para justificar y para persuadir lo que haría de éste un elemento clave tanto a la hora de fijar y transmitir el conocimiento en el ámbito de la ciencia, como a la hora de conducirnos racionalmente en el ámbito de las decisiones ético-políticas.

Así, al contrario que Platón, Aristóteles no sólo no encontraría oposición alguna entre persuadir y justificar, sino que asumiría que la persuasión se logra dando a juzgar a los demás que las cosas son de tal o cual modo. En esta tarea, la credibilidad del hablante y las emociones del auditorio ciertamente juegan un papel fundamental; pero también lo juega la fuerza de los argumentos empleados. El *ethos* del hablante, el *pathos* del auditorio y el *logos* del discurso mismo resultan igualmente constitutivos del acto argumentativo y todos ellos determinarían, por tanto, las condiciones del buen decir, no sólo en lo que se refiere a su capacidad de persuadir a otros, sino también en su capacidad de justificar, de mostrar que ciertas afirmaciones son correctas.

Idealmente, en un proceso comunicativo se trata de persuadir de aquello que es verdad. Pero a menudo nuestras afirmaciones sólo pueden proponerse como plausibles o razonables. Para Aristóteles, tal es, de hecho, nuestra situación en gran parte de asuntos importantes. Y, sin embargo, la racionalidad también debe ser accesible en estos casos: las decisiones correctas sobre qué creer y qué hacer se llevan a cabo a la luz de los buenos argumentos. La Retórica, como ámbito de estudio del discurso en tanto que mecanismo persuasivo, incluye el estudio de aquellos argumentos que se emplean para persuadirnos unos a otros sobre asuntos en los que la prueba y la demostración resultan esquivas y la búsqueda de la verdad ha de dejar paso a la búsqueda de la verosimilitud. Pero esta constatación carece de las connotaciones negativas con que la filosofía platónica impregna la idea de opinión: en el uso de la razón descartamos lo falso y la verdad se nos plantea como horizonte, pues para Aristóteles las cosas verdaderas y las mejores son, por naturaleza, de mejor inferencia y más persuasivas.

De este modo, aunque el objetivo de la Retórica no es el conocimiento sino la persuasión, Aristóteles asume –al igual que Platón en diversos pasajes- que decir la verdad es inútil si carecemos de modos efectivos de persuadir a los demás de ella. No habría pues conflicto sino correspondencia entre conocimiento y Retórica, al igual que la habría entre la ciencia de un médico y los consejos que éste puede dar a su paciente, como vendría a señalar el propio Platón. Sin embargo, en Aristóteles encontramos razones más importantes para defender la legitimidad de la Retórica. En primer lugar, su visión de nuestra capacidad para preservar la racionalidad incluso en ámbitos donde la demostración no es posible: a menudo, conocimiento y verdad quedan

fuera de nuestro alcance, pero aún podemos aspirar a formarnos creencias correctas conduciendo nuestras opiniones de manera adecuada. Pero, más significativamente, en Aristóteles encontramos también la idea de que justificar es hacer evidentes a los otros la verdad de lo que afirmamos, y para lograr este objetivo, la dimensión retórica de la argumentación habría de aportar elementos normativos que debemos tener en cuenta.

Así pues, nuestra tesis es que en las reflexiones de Aristóteles sobre la argumentación como práctica encontramos la idea de que, en tanto que mecanismo justificatorio y persuasivo, ésta incluye condiciones normativas lógicas, dialécticas y retóricas. Según esta perspectiva, más que definir disciplinas, la obra aristotélica sobre argumentación estaría tratando el fenómeno de la comunicación argumentativa en sus tres dimensiones fundamentales.

En lo que sigue, intentaré ilustrar dicha perspectiva apoyándome en una lectura un tanto heterodoxa de algunos de sus textos clásicos, y más concretamente, en una concepción general del silogismo como mero argumento, y no como una forma particular de éste.

6. Lógica formal vs. silogística aristotélica

En los *Primeros Analíticos*, Aristóteles caracteriza el *silogismo* como un discurso en el que, "al hacerse determinadas asunciones, se sigue necesariamente, del hecho de haberse verificado de tal manera determinada las asunciones, una cosa distinta de la que se había tomado" (*Analítica Primera*. I.2, 24b18-20. Trad. Samaranch, 1977: 276). En esta obra, Aristóteles estaría desarrollando el estudio de los principios que rigen el *silogismo*, esto es, su silogística analítica, como una teoría formal de la inferencia, al analizar el tipo de relaciones de consecuencia que se dan entre algunas clases de proposiciones.

Tradicionalmente, el silogismo se ha entendido como cierto tipo de razonamiento formalmente válido. En particular, como un conjunto de proposiciones en las cuales, de una premisa menor (una proposición que contiene como sujeto el término que es a su vez el sujeto de la conclusión) y una premisa mayor (una proposición que contiene como predicado el término que es a su vez el predicado en la conclusión), se sigue, necesaria-

mente, cierta conclusión. Sin embargo, como vamos a ver, esta concepción tradicional del silogismo se enfrentaría al hecho de que Aristóteles también define el entimema como un silogismo, en este caso, retórico, y no como un silogismo incompleto, tal como habrían convenido, desde una concepción netamente deductivista, la mayoría de intérpretes posteriores. Además, este deductivismo formal chocaría con la importancia que Aristóteles le concede a la condición de que las premisas sean relevantes para la conclusión. Nuestra propuesta va a ser, por el contrario, concebir el silogismo como sinónimo de argumento o proceso inferencial, en general, y no como un tipo particular de éste.

Según Aristóteles, el silogismo procede a través de proposiciones universales (*Analítica Primera* I.27 43b11-14). Bajo la concepción deductivista tradicional, estas proposiciones universales se han identificado como las premisas del silogismo. Sin embargo, tal como M. Frede (1987: 117) ha argumentado, eso supondría descartar como silogismos ejemplos aristotélicos típicos en forma Darii (premisa universal afirmativa, premisa particular afirmativa, conclusión particular afirmativa). Quizá entonces cabría pensar que tales proposiciones universales mediante las que "procede" el silogismo son en realidad los principios de inferencia que, en su aplicabilidad general, confieren justificación a toda proposición deducida a partir de ellos. De este modo, podría decirse que una de las causas de que un razonamiento no fuese un verdadero silogismo, sino sólo un silogismo aparente, sería que no existiese un principio que garantice que de las premisas se sigue efectivamente la conclusión.

En la *Analítica Posterior*, Aristóteles mantiene que los principios de una demostración han de ser verdaderos, primarios, mejor conocidos en sí mismos, anteriores a la conclusión y la causa de la conclusión. Pero si reparamos en que para Aristóteles existen cuatro tipos de causas –material, formal, eficiente y final– habríamos de colegir que existirían cuatro tipos de principios del silogismo según el tipo de causa que se establecería entre lo expresado en las premisas y aquello que se dice en la conclusión. Así, mantener que la validez del silogismo depende de la existencia de un principio que garantice la inferencia desde las premisas a la conclusión conllevaría admitir que la normatividad silogística no sería exclusivamente de carácter formal, sino que también podría ser material (relaciones de pertinencia), eficiente (relaciones causales) o final (razonamientos prácticos). Como vamos a ver,

siguiendo esta interpretación, podríamos dar sentido a la idea de que los entimemas son silogismos cuyos principios de inferencia no serían formales, sino materiales, teleológicos o "causales", en nuestro moderno sentido de "causa". Asimismo, podríamos definir la noción aristotélica de silogismo perfecto como aquél cuyo principio de inferencia es un principio formal.

Tanto en el caso de los silogismos perfectos como en el de los imperfectos, los principios sólo garantizarían la validez del silogismo, no la verdad de la conclusión: si se aplican a premisas falsas, pueden servir para deducir conclusiones falsas. Como es sabido, Aristóteles concibe la deducción científica como un silogismo con premisas necesarias, las cuales serían los *primeros principios* de su ciencia (*Analítica Primera*, I.1 24a 29).

Ahora bien, de algún modo, su propia teoría de la inferencia podría a su vez considerarse una ciencia cuyos principios primeros son todos aquéllos que Aristóteles resume en el capítulo 25 de los *Primeros Analíticos*. Así, proposiciones como que toda demostración se realizará por medio de tres términos y no más, o que todo silogismo procede de dos premisas y no más, o que la adición de un término incrementa el número de conclusiones posibles en un número menos que el número original de los términos, serían algunos de estos primeros principios de la silogística, pues tales principios no sólo garantizarían, en última instancia, las inferencias silogísticas en general, sino que serían las premisas necesarias del propio razonamiento sobre el silogismo, una vez caracterizados los conceptos de término, premisa, conclusión, etc. (*Analítica Primera*, I.4 25b 26-27). De este modo, la silogística aristotélica se presentaría como una ciencia sobre el razonamiento en general, mientras que la silogística analítica, en particular, vendría a estudiar las relaciones formales que se dan entre cierto tipo de proposiciones.

La silogística se ocuparía entonces de los argumentos en general, de su capacidad para mostrar que ciertas proposiciones se siguen de otras. Pero, entendida de este modo, no sería identificable con la Lógica Formal, tal y como la conocemos hoy en día: ciertamente, habría principios formales que relacionarían unas proposiciones con otras; pero también habría principios que relacionarían material, causal o teleológicamente una premisa con su conclusión. Los principios formales serían necesariamente verdaderos, pero la necesidad misma no sería una condición necesaria para la validez del silogismo: un buen argumento sería un argumento que se atiene a un principio, tanto si éste es una verdad necesaria, como si no. El hecho de que, para

buena parte de cuestiones importantes carezcamos de principios formales, o tan siquiera necesarios, el que no tengamos "demostraciones" para ellas no debería llevarnos a pensar que la manera de dirimirlas no puede ser ofrecer buenos argumentos. Tal intuición estaría en la base del interés de Aristóteles en la argumentación en general como respuesta a la demanda de encontrar garantías para nuestros juicios sobre lo que no admite demostración.

7. El entimema como silogismo retórico

Según Aristóteles, los entimemas son silogismos retóricos y los silogismos son "el cuerpo del argumento" (*Retórica*, I.1 1354a, 15. Trad. Samaranch, 1977: 116). Tradicionalmente, la definición de los entimemas como silogismos retóricos ha sido fuente de dificultades, principalmente, porque no parece evidente que exista una traducción a forma silogística, tradicionalmente concebida –esto es, como un argumento compuesto de premisa mayor, premisa menor y conclusión– de los ejemplos de entimema que Aristóteles ofrece. Por eso se ha sugerido que los entimemas son silogismos incompletos. Tal concepción estaría avalada por dos razones: por un lado, Aristóteles explícitamente dice que los entimemas tienen menos premisas que las demostraciones científicas. Pero lo cierto es que no es tan evidente que ésta fuese para Aristóteles una condición necesaria de los entimemas (véase, por ejemplo, Braet, 1999: 107). Podría ser que el hecho de que los entimemas sean silogismos retóricos, esto es, argumentos usados para persuadir a un auditorio, conlleve que no deban ser demasiado complejos, si es que han de ser entendidos y suscitar aceptación.

Si adoptamos la concepción tradicional del silogismo, ciertamente resulta difícil reescribir en forma silogística los entimemas que Aristóteles ofrece como ejemplo. Sin embargo, todo argumento puede convertirse en un argumento formalmente válido si le añadimos un condicional redundante cuyo antecedente es la premisa o conjunto de premisas y cuyo consecuente es la conclusión. Eventualmente, este condicional puede traducirse como una afirmación universal, de manera que, efectivamente, parecería posible entender el entimema como un silogismo incompleto que carece de la premisa mayor. Así, un entimema como "Ella ha dado a luz, ya que tiene leche en los pechos" debería interpretarse como:

Premisa mayor: Todas las mujeres que tienen leche en los pechos han dado a luz
Premisa menor: Esta mujer tiene leche en los pechos
Conclusión: Esta mujer ha dado a luz

Pero lo cierto es que el principio que hace válido un silogismo como éste es el principio según el cual, si una propiedad Q se aplica a todos los sujetos a los que se aplica una propiedad P, entonces un sujeto que tiene la propiedad P, tiene la propiedad Q. Éste es un principio formal, aplicable a todo sujeto y propiedades P y Q, y como tal, es necesario y *a priori*. Sin embargo, el principio que justificaría el entimema original sería algo así como "las mujeres que tienen leche en los pechos han dado a luz". Éste no es un principio formal, ni necesario, ni *a priori*, sino una generalización empírica. Por esa razón, la deducción que garantiza el primer principio tendrá propiedades distintas que la que garantiza el segundo: en realidad, cuando intentamos adecuar un entimema a la forma silogística estándar lo que hacemos es modificar su verdadero sentido. Más aún, en este caso, al intentar conferir una estructura formalmente válida a nuestro entimema original, lo que hemos hecho ha sido convertir un argumento suficientemente sólido en un mal argumento, pues una de sus premisas (la premisa mayor) resulta ser simplemente falsa: no todas las mujeres que tienen leche en los pechos han dado a luz.

Como mencionábamos en la sección anterior, ésta es una de las razones para pensar que el concepto de silogismo excede el de deducción formal, y que, por tanto, los silogismos no deberían caracterizarse como conjuntos de premisa mayor, premisa menor y conclusión. Al menos, ésta no parece ser la estructura profunda del entimema, que sí es en cambio definido por Aristóteles como un silogismo retórico.

¿Qué querría decir entonces Aristóteles con esta definición? Si pensamos que la Lógica es el ámbito de la decisión sobre la validez de los argumentos, tanto formales como materiales, teleológicos o causales, podríamos igualmente concebir que la Retórica es el ámbito de la inducción de creencias, bien mediante argumentos, bien mediante otros mecanismos persuasivos. El entimema sería la forma del argumento cuando no se concibe como un medio para determinar la corrección de una conclusión, sino como un medio para inducir creencias. En este sentido, mientras que la función del principio de inferencia en la justificación de una conclusión es garantizar la deducción de ésta, su función en la inducción de creencias sería motivar

nuestros juicios. Como tal motivación, no sería parte explícita del argumento por medio del cual trataríamos de inducir la creencia en la conclusión. De ahí la apariencia de "incompletos" de los entimemas, respecto del modelo silogístico tradicional en tanto que representación del argumento.

El error de considerar la forma silogística estándar como la estructura profunda del entimema se basa, a mi juicio, en la creencia de que mostrar que una afirmación se sigue de ciertas premisas aceptadas es suficiente para producir la persuasión de nuestro auditorio. Pero esta creencia es errónea: persuadir a alguien de una afirmación es hacerle juzgar que tal afirmación es correcta. Al inducir creencias mediante argumentos intentamos producir juicios indirectos, juicios que pivotan sobre juicios previos respecto de cierta evidencia que nos ha sido presentada. Estos juicios previos nos aportan razones para inferir, siempre y cuando nuestro proceder esté motivado por un principio de inferencia que, en caso de ser correcto, avalará las conclusiones a las que llegamos a partir de ellos. Sin esta motivación inferencial, el mero hecho de juzgar que *p* tras juzgar que *q* no contaría como un proceso de razonamiento, sino, a lo sumo, como un caso de asociación de ideas.

8. Conclusión

En las últimas secciones he intentado hacer plausible la idea de que la Lógica aristotélica, entendida como el estudio normativo del silogismo en general, no debe asimilarse sin más a la Lógica Formal, tal como la conocemos hoy día, pues, además de incluir condicionamientos, como la pertinencia, que son ajenos al concepto de validez de ésta, aquélla contemplaría la posibilidad de admitir como válidos silogismos, como los entimemas, cuyos principios de inferencia no son formales.

Como es sabido, la caracterización aristotélica de la Dialéctica hace de ésta más un método de investigación que un modelo de prueba: en la investigación dialéctica, examinamos ciertas proposiciones para establecer su coherencia respecto de otras proposiciones. Es un procedimiento de crítica; de hecho, Aristóteles mantiene que el principio que subyace a su práctica es el de no-contradicción. Sin embargo, en tanto en cuanto lo más que puede hacer es mostrar contradicciones, su habilidad para establecer afirmaciones es limitada: nos puede servir para desestimar opiniones problemáticas, pero

no para demostrar las contrarias. La Dialéctica sería un complemento de la demostración al permitir la evaluación de los primeros principios de toda ciencia (*Tópicos* 101a 27–28, 101a 34). En este sentido, podría hablarse de una complementariedad entre Lógica y Dialéctica como disciplinas concernidas por las condiciones de la argumentación en tanto que medio para la justificación. Sin embargo, este tándem parecería dejar fuera a la Retórica, ya que su interés por la argumentación no remitiría a la justificación sino a la persuasión.

No obstante, también he intentado ofrecer una lectura que desvinculase el interés aristotélico por la Retórica del ámbito de la deliberación ético-política, insistiendo en su complementariedad respecto de los métodos de justificación y de prueba en la medida en que, por un lado, es posible determinar la racionalidad del discurso incluso en los ámbitos donde la demostración científica resulta esquiva, y más importante aún, en tanto en cuanto la justificación requiere de métodos para mostrar, para persuadir, para hacer evidente aquello que se intenta establecer.

Así pues, no sólo la legitimidad de la persuasión sino la mera habilidad de justificar, hablarían en favor de una integración de las dimensiones lógica, dialéctica y retórica del discurso. Del lado de la persuasión porque, efectivamente, aunque su dimensión retórica manifestaría la capacidad de la comunicación de inducir creencias y, sin duda, éste es un logro que puede obtenerse no sólo mediante buenas, sino también mediante malas razones, lo cierto es que, para determinar la racionalidad del discurso y de nuestras reacciones frente a él –esto es, si nuestra aquiescencia a las palabras del hablante cuenta o no como un caso de persuasión racional– deben valorarse los condicionamientos retóricos, dialécticos y lógicos de la comunicación. Asimismo, del lado de la justificación, la mera corrección de nuestros argumentos no sería suficiente para producir conocimiento si éstos no son conducidos de manera adecuada y, con ello, sirven para revelar dicho conocimiento, *i.e.*, para hacérselo evidente a nuestros semejantes.

A nuestra tesis de la complementariedad entre Retórica, Dialéctica y Lógica en Aristóteles se opondrían autores como C. Kock (2009), quien ha defendido la existencia de un tipo de argumentación esencialmente retórica, cuya principal característica sería el tipo de temas de los que trata –esto es, la deliberación sobre decisiones prácticas, principalmente, de naturaleza política. Kock se apoya en el hecho de que Aristóteles pareciera restringir

el ámbito de la Retórica al debate sobre asuntos públicos, que son aquéllos en los que las decisiones sobre qué creer o qué hacer admiten más de dos opciones. De esa manera, cabría pensar que lo definitorio de cada una de estas disciplinas es su ámbito de competencia: mientras que la Retórica parecería remitir al espacio de la razón práctica, Lógica y Dialéctica serían los métodos propios de la demostración científica y de la investigación filosófica, respectivamente.

Por mi parte, considero que las caracterizaciones aristotélicas de estas disciplinas no avalan una diferenciación temática sino metodológica y de foco. Cada una de ellas cumpliría funciones esenciales tanto en el ámbito de la razón práctica, como en el de la razón teórica. Ahora bien, como he manifestado anteriormente, mi propósito no ha sido ofrecer una tesis sobre el modo adecuado de interpretar a Aristóteles, sino más bien una lectura de su obra que pudiera señalar el camino hacia una mayor integración de la Lógica, la Dialéctica y la Retórica dentro de la Teoría de la Argumentación.

Desde la perspectiva que hemos propuesto, la Retórica se ocuparía de estudiar el modo en que el discurso se torna un medio para la decisión razonable. Por esa razón resultaría especialmente adecuada en la esfera práctica, donde prevalece la necesidad de actuar racionalmente a pesar de que la verdad y el conocimiento resulten esquivos. Lo que la Retórica posibilitaría en la esfera práctica sería el estudio de los discursos como medios de persuadir a seres racionales, la posibilidad de articular esta esfera como ámbito de lo razonable. Según esta lectura, Aristóteles desestimaría la idea de un conflicto entre la Retórica como arte de la persuasión, la Dialéctica como método de investigación, e incluso la Lógica como método de prueba.

La idea de que Lógica, Dialéctica y Retórica son disciplinas complementarias inspira hoy en día el trabajo de muchos teóricos de la argumentación: desde el interés de la Lógica Informal Canadiense sobre el componente dialéctico de los argumentos al estudio de los condicionantes retóricos de los procedimientos argumentativos de la Pragma-dialéctica. Pero lo cierto es que esta visión integradora es apenas reciente. Los trabajos de Perelman, Toulmin y Hamblin, que hoy en día se consideran como el origen de la Teoría de la Argumentación, pueden verse, respectivamente, como un cuestionamiento de la concepción meramente instrumental de la Retórica como arte de la persuasión, de la concepción de la Lógica como mera Lógica Formal o teoría de la inferencia formalmente válida y de la asunción de la imposibilidad de

desarrollar un tratamiento sistemático de los intercambios dialécticos, y con ello, de las falacias argumentativas. Estos autores pusieron de manifiesto el interés de la argumentación, la necesidad de dedicar esfuerzos a su estudio y la escasez y debilidad de los tratamientos anteriores. Sus propuestas fueron claves para el ulterior desarrollo de la Teoría de la Argumentación, y todavía resultan fructíferas en muchos aspectos. No obstante, en la medida en que cada uno de ellos representa los orígenes del enfoque retórico, lógico y dialéctico, respectivamente, de algún modo, abundarían en la visión disociada del estudio normativo de la argumentación.

Como he intentado mostrar, la idea de considerar a la Lógica, la Dialéctica y la Retórica no como tres enfoques, sino como tres dimensiones constituyentes de la argumentación es algo que, de un modo u otro, podía haberse encontrado ya en la obra Aristotélica, si la preeminencia de la Lógica Formal no hubiera dificultado el desarrollo de una teoría normativa de la argumentación en lenguaje natural. Avanzar por esta senda supone asumir que el desarrollo de una teoría normativa adecuada requiere considerar la práctica de la argumentación como un compuesto de propiedades lógicas, dialécticas y retóricas. En mi opinión, ésta sería la lectura más provechosa que podríamos extraer de los trabajos aristotélicos sobre argumentación respecto de la Teoría de la Argumentación: no un conjunto de obras inconexas, sino un proyecto epistémico y cognitivo cuyo núcleo lo constituiría el fenómeno cotidiano y ubicuo de la argumentación.

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Keeping an Open Mind and Having a Sense of Proportion as Virtues in Argumentation

Manteniendo una mente abierta y teniendo un sentido de proporción como virtudes en la argumentación

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Abstract: Virtue-based approaches to epistemology have enjoyed notable success recently, making valuable contributions to long-standing debates. In this paper, I argue, that many of the results from Virtue Epistemology (VE) can be carried over into the arena of argumentation theory, but also that a virtue-based approach is actually better suited for argumentation than it is for justification. First, some of the unresolved challenges for VE, such as the limitations of voluntarism with respect to beliefs, do not have counterparts in argumentation. Second, a new argument for VE based on the concept of cognitive achievements broadens its applicability to arguments. Third, because virtue-based approaches shift in focus from products and processes to agents, and arguments are essentially inter-agent transactions, important new questions come into focus, along with signposts leading to their resolution. Questions about different roles in argument (protagonists, antagonists, judges, spectators) and the virtues needed for each, come into focus, as do questions about *when*, *why* and *with whom* to argue, which often get lost in the shadow of the primary question, *how* we should argue. Finally, two specific virtues - open-mindedness and a sense of proportion - are offered as test cases for Virtue Argumentation Theory.

Keywords: Argumentation, Epistemology, Virtue, Cognitive achievements, Open-mindedness.

Resumen: Los acercamientos a la epistemología basados en la noción de virtud han tenido un notable éxito recientemente, haciendo una estimable contribución a sostenidos debates en este campo. En este trabajo sostengo que muchos resultados de la epistemología de la virtud (VE) pueden llevarse a la arena de la teoría de la argumentación, pero también que tales acercamientos son en realidad mejores para el ámbito de la argumentación que para el problema de la justificación. Primero, algunos de los

desafíos no resueltos de la VE, tales como las limitaciones del voluntarismo con respecto a las creencias, no tienen contraparte en la argumentación. Segundo, un nuevo argumento para la VE basado en el concepto de logro cognitivo amplía su aplicabilidad a los argumentos. Tercero, y ya que los acercamientos basados en la noción de virtud cambian el foco desde los productos y procesos a los agentes, y los argumentos son esencialmente transacciones inter-agentes, nuevas e importantes preguntas ocupan el centro de atención, conjuntamente con... Interrogantes respecto de los diferentes roles en un argumento (protagonistas, antagonistas, jueces, espectadores) y las virtudes necesarias para cada uno, se alzan como los primordiales, en particular aquellos problemas respecto de cuándo, por qué y con quién argumentar, que a menudo se pierden en la sombra de la más bien básica pregunta respecto de cómo deberíamos argumentar. Finalmente, dos virtudes específicas –apertura mental y sentido de la proporción– son ofrecidas como casos experimentales para una teoría de la virtud argumentativa.

Palabras clave: Argumentación, epistemología, virtud, logros cognitivos, apertura mental.

Introduction

Virtue epistemology was consciously modeled on virtue ethics theories with the hope that some of their conceptual breakthroughs and achievements in ethics might be re-created in epistemology. The results exceeded expectations: virtue epistemologies are flourishing, having already made significant contributions to the discourse of epistemology. The change in perspective turned out to be a *broader* perspective, with good effect not only for the answers to traditional epistemological questions, but also for determining which questions to put on the agenda and for understanding how they relate to one another.

I have argued elsewhere that a similar turn in argumentation theory could well have similar results.[1] Because the new perspective is agent-based, it has to pay attention to all the roles that agents play in argumentation. The best arguments engage ideal arguers with worthy opponents before model audiences. Thus, this approach has to be a *broader* perspective, capable of bringing disparate parts of the field into a larger whole and re-shaping the disciplinary agenda. In particular, I will identify two peculiar but especially important critical virtues –open-mindedness and a sense of proportion– that can point to ways to answer a cluster of outstanding questions for argumenta-

[1] Cohen (2005, 2007). See also Aberdein (2006) for further extension and development.

tion theorists, viz., *when*, with *whom*, about *what*, and, above all, *why* we should argue. As a corollary, but of no less importance, it can help us answer *when*, with *whom*, about *what*, and *why* we should not argue. Together, these virtues provide the conditions to maximize the cognitive gains to be had from arguing. In addition, they provide the resources to help bring an argument to successful closure by managing several of the inherent features of argumentation that can make it an unwieldy, open-ended process.

1. The Argument from Cognitive Achievements

It is a great virtue of virtue ethics approaches that they enable us to look very broadly on all the goods in a good life without restricting ourselves to interpersonal actions. Acquired habits and learned skills can be counted as virtues when they are conducive to *any* of those goods. The goods in question have positive value, of course, or else they would not be counted as goods, but they need not be specifically *moral* goods. If we take ethics to be the concern with value generally and morality to be concerned more specifically with actions, we can put it this way: there are ethical but non-moral values and there is more to our ethical lives than our interactions with others. Virtue ethics is better situated than its consequentialist and deontological counterparts to recognize, accommodate, and appreciate these values without flattening them into moral values.

An example commonly used in this context is friendship: it is immediately recognizable as an ethically important good insofar as it contributes value to a life. But someone who is without friends would not be morally blameworthy on that account. It is ethically good but not morally obligatory to have friends. Of course, if one does have friends, then the moral judgment that one is, or is not, a good friend is a separate matter.

There is a parallel point to be made concerning virtue epistemology. Although the VE movement was initially motivated by a traditional epistemological agenda,[2] it broadens our horizons in similar ways. What began as an attempt to circumvent the debates about justification between foun-

[2] Sosa (1980) is sometimes cited as a starting point for VE discourse. Zagzebski (1996) and Greco (1999) are other good sources. Zagzebski (2001), along with the other articles in that volume, provide a good entry into the literature.

dationalists and coherentists, and between internalists and externalists, has become a discourse with more than just justification in its sights. As is often the case with significant changes in methodology, the side effects on the disciplinary matrix were significant. Traditional epistemology is all about knowledge and justified belief, but there is more to our cognitive lives than simply believing and disbelieving discrete propositions. Just as there are moral but non-ethical values, so too, there are cognitive but non-epistemic states. Virtue epistemology, I believe, is perfectly situated to recognize, accommodate, and appreciate *cognitive but non-epistemic* values without having to flatten them into the standard epistemological categories. This is all to the good when it comes to thinking critically about critical thinking.

This point deserves to be emphasized because it provides the starting point for what I believe is an important, original, and compelling reason in favor of VE approaches. Traditional epistemologies ostensibly direct their attention to the general concept of *justification*, but what really attracts their attention is a narrower concept: the justification *of belief*. There are many other propositional attitudes we take, including doubting, considering, and supposing, which also can be justified or not. What is it, for example, that justifies considering some alternatives in decision-making processes but not others? Can we simply assume that it is the same kind of justification that justifies justified belief? Doubt presents a case with greater contrast: if there are beliefs that are innate, have squatters' rights, or come with a presumption in their favor, then it would be doubt rather than belief that would have to be justified in those contexts.[3] Does doubt get justified in the same way as belief? Even if, in the end, we conclude that it does, that is a substantial thesis deserving its own supporting argumentation.

The importance of this in the big picture for epistemology is two-fold. First, it will allow us to provide a check on philosophy's methodological bias towards skepticism – the bias manifest in the recognition that, *prima facie*, everything is fair game for argument. We are taught to approach others' arguments with suspicion, with our guards up, apparently to make really

[3] Harman (1984) argues in favor of according a presumption in favor of already accepted beliefs. That approach disarms some varieties of skepticism. Others, beginning at least with Bertrand Russell and continuing through to some evolutionary epistemologists, have thought this might be a way to deal with Hume's problem concerning the justification of induction.

sure that no one will ever be able to convince us of anything. And we seem to pass this on to some of our students, often the best ones. But surely there is something wrong with this picture!

The second point concerns cognitive states, accomplishments, and abilities that are not themselves reducible to propositional attitudes: are there justifications for them? Consider our moods, emotions, and feelings. We certainly do talk as if some of our feelings are justified and some are not. Even if feelings may be largely beyond our control, some of them are not. They are not so different from beliefs in this regard. And they are not so different when it comes to justification. Our critical thinking skills do not get put into blind escrow accounts when it comes to our emotional states.

One particular cognitive achievement that has attracted philosophical attention from time to time is *understanding*. One might have expected that understanding, especially insofar as it is not reducible to knowledge or justified belief, would be a central topic for philosophical investigation, but oddly, that has not been the case. Some kinds of understanding may be reducible to propositional knowledge. That may be true of scientific understanding, but the kind of understanding that applies to such things as persons and poems seems to be of a different sort.[4] The latter achievement embodies different cognitive virtues than the former. They are virtues that critical thinking ought to help inculcate.

And then there is wisdom, the loftiest philosophical and cognitive achievement of all. Shouldn't epistemologists, argumentation theorists, and other philosophers have something to say about it?

The syllogism is patent: Values, attitudes, understandings, feelings and other cognitive states are things that can be justified. Justification involves argumentation. Thus, these are all things that can be argued for. Actually, there is a third premise, so I suppose it is really a sorites: Whatever can be argued for is subject to critical thinking. Therefore, critical thinking must be possible when it comes to cognitive states that are not epistemic, and to cognitions that are not thoughts in propositional form.

Virtue epistemology helps us see that there are questions to be asked about non-epistemic cognitive states and it helps us answer them. After all, we are cognitive agents as well as epistemological ones; we do more than

[4] See, e,g,. Kvanvig (2003, chapter 8), and Cohen (2006).

simply believe or disbelieve discrete true-or-false propositions, with varying degrees of commitment and justification. If epistemology is to make us better epistemological agents, or at the very least, help us to *understand* what it is to be a better epistemological agent, then it needs to consider everything that good epistemological agents do.

Arguing, of course, is one of the things we do as epistemological agents, but it is not the only thing. Argumentation is, however, undeniably central to such projects as inquiry and justification. Conversely, we become arguers for many reasons, not all of which are related to epistemological or even cognitive projects, but epistemic considerations never move very far from center stage.

2. Cognitive, critical and epistemic virtues: The case of Open-mindedness

In order to bypass the debates as to exactly what sort of thing a virtue is, let us stipulate that argumentative or *critical* virtues are the acquired habits and skills that help us achieve the goals of critical thinking.[5] Listening carefully, reasoning well, interpretive charity, and the ability to access and synthesize fields of information all stand as examples. Cognitive virtues are aids on the way to cognitive achievements; critical virtues are aids on the way to achievements in argumentation. Many of the virtues identified by virtue epistemology are virtues for arguers, and conversely. Analytic and inferential acumen, for example, are virtues with respect to many of our goals as epistemic agents as well as to our goals as participants in argumentation.

The traditional paradigm of a cognitive achievement is knowledge. Whatever is conducive to knowledge, then, would have at least a *prima facie* claim to counting as a cognitive virtue. Thus, inferential skill qualifies as a virtue due to its role in producing justifications, and to justifications' role in constituting knowledge from belief. That is why logic can appropriately be included in critical thinking courses. Insofar as having a good memory and keen powers of observation are conducive to knowledge, and insofar as

[5] For suggested lists of epistemic virtues, see Zagzebski (1996); for a debate on the nature of epistemic virtues, see Zagzebski (2000, pp. 457ff), and Elfin (2003).

they can be developed and cultivated by practicing mnemonic and focusing techniques, they too could be epistemic virtues.

What are the critical virtues? Critical virtues can be defined by the goods that they help us procure and by the accomplishments that they help us achieve in the course of argumentation. That means we need to identify the positive goods that can be achieved by argumentation. Logic, rhetoric, and dialectic all have their own distinctive accomplishments: logical success is valid derivation; rhetorical success is rational persuasion; dialectical success is critically-achieved consensus. Arguments are more than just logical, rhetorical, and dialectical moments, however. There are other accomplishments to consider.

One important thing that we can accomplish by arguing is discharging our responsibilities as potential arguers. We have very specific obligations to argue if, for example, we are attorneys or politicians representing clients and constituencies, but I believe we also have general obligations to reason, argue, explain, and justify simply because we are rational beings who are members of linguistic communities. That thesis, however, is beyond the scope of this paper.

Additional examples of goods that can be brought about by argument, besides proof, persuasion, and resolution are not hard to find. They include:

– a deepened *understanding* of one's own position;
– *improvement* of one's position;
– *abandonment* of a standpoint for a better one, other than the opponent's;
– a deepened understanding of an *opponent*'s position;
– *acknowledgement* of (the reasonableness of) another's position;
– greater *attention* to previously over-looked or under-valued details;
– better *grasp* of connections and how things might be fit together in a big picture.

These examples do not fit neatly into the logical, rhetorical, and dialectical categories, but each one represents an appreciable and positive cognitive change.

The cognitive gains above generally do not come about as the direct result of logical inference. Arguments effect cognitive changes in many ways. They

provide *reasons* for inferences to conclusions, of course, but that is only a part of it. They also act as *causes* for change. For example, arguments may upset its more confrontation-averse participants to the point that their judgments are clouded. Or they might positively energize and stimulate us to re-think and re-evaluate our beliefs more deeply. In addition, insofar as arguments are events in the world and in our lives, they can themselves be *data* and *evidence* to be incorporated into our world-views. I may, for example, infer from the mere fact that someone is arguing, rather than from the content of anything she says, that she is passionate about the subject matter and confident of her knowledge in the area.

In these examples, however, arguments mostly serve as occasions and catalysts for the cognitive changes that occur. It is not *qua* arguments that they bring about changes. Cognitive gains like these tend to occur over extended periods of time, sometimes long after the actual argument has ended. The participants and observers need a chance to reflect on what they said and what they could have said, as well as what they heard and what they could have heard.

There is one very important critical virtue on display in every one of my examples: *open-mindedness*. Part of open-mindedness is the ability to listen carefully, the willingness to take what others say seriously, and, if called for, the resolve to adopt them as one's own.[6] That is the part that most textbooks on critical thinking note. There is another, complementary part, however. Open-mindedness has to include the willingness, ability, and resolve to re-examine one's own beliefs and, if called for, to let them go. Belief revision is not just a matter of belief-acquisition; it also involves belief modification and even belief rejection.

In order to identify the ways that open-mindedness is an important virtue for arguers specifically, it will help to contrast open-mindedness as a critical virtue with its status as a cognitive virtue and, especially, its status as an epistemic virtue. The key contrast is that while open-mindedness is almost

[6] As Hare (2003) emphasizes, the crucial feature in an adequate definition of open-mindedness is the willingness to entertain objections and, if appropriate, revise one's positions. In the relevant sense, this concerns how beliefs are managed rather than their content.

uniformly a cognitive virtue, *open-mindedness is not always or necessarily an epistemic virtue*!

Because others have argued so well for the value of open-mindedness as a cognitive virtue, it will not be rehearsed here.[7] It will suffice to note out that it plays crucial roles in interpretation, in education (both learning and teaching), in communication, and in gaining understanding. Instead, I will consider, first, the ways in which open-mindedness fails to contribute, or even detracts from the principle epistemic project, successful knowledge acquisition, and second, the ways in which it succeeds in contributing to argumentation.

At the risk of overstating the case that open-mindedness should *not* be counted as an epistemic virtue, we can point to a variety of circumstances in which open-mindedness can be detrimental to the pursuit of knowledge. Open-mindedness puts our beliefs on the table for discussion. Even though open-mindedness is consistent with strong commitment to our beliefs, simply allowing that they be up for discussion calls them into question – and calling beliefs into question, even ones that are well-justified, runs the risk of losing them. Open-mindedness, then, is most important for people whose beliefs are mostly unjustified or wrong. For people whose beliefs are mostly in order, however, it is epistemologically risky, unnecessary, and unwise. It will lead away from justified beliefs. In the limiting case – an omniscient being in possession of all and only true beliefs – open-mindedness could not have any beneficial effects.[8] For omniscient beings, nothing would be gained by keeping an open mind.

We are not omniscient beings, of course, but what this shows is that, if virtues are understood as character traits with the propensity to increase positive outcomes, then whether or not open-mindedness is an epistemic virtue is highly contingent upon certain empirical facts about humans as epistemic agents. For example, if Donald Davidson is correct that we have to assume that by and large our world-view is fact-based, so that we are mostly

[7] Hare (1985) may be the best point of entry into the literature. Gardner (1996) and Hare (2003) offer a nice dialectical exchange on the subject.

[8] Miler and Cohen (2008) identify and argue for the occasional and situation-relative merits of closed-mindedness.

right about most of our beliefs, then the epistemic value of keeping an open mind is actually quite circumscribed.[9] Similarly, if the reasoning we use in evaluating reasons for and against a candidate for belief is generally more like *post hoc* rationalization rather than unprejudiced deliberation, and thus no more reliable than our initial belief-acquiring methods, then whether and to what extent open-mindedness is a "virtue" will vary greatly from individual to individual and from situation to situation.[10] By that same token, if Malcolm Gladwell is right in claiming that we our first impressions are often more trustworthy than our later reflective judgments, the willingness to revise our beliefs might in fact be more negative than positive.[11]

Nothing that has been said should be read as implying that open-mindedness is never a positive epistemic trait. In designing an ideal inquirer, open-mindedness would feature prominently. Its value, however, is dependent on context and situation. It is more valuable locally than globally, for example. Applied globally and without any sense of proportion, it leads to skepticism. The willingness to entertain everything entails entertaining such possible defeaters for justifications as dreams and evil demons and alternative conceptual schemes. But to entertain these scenarios even just as possibilities already gives them all the footholds they need. The result, skepticism, is tantamount to a complete loss of knowledge and a disastrous end to that epistemic project.[12] Similarly, the value of open-mindedness might depend on the characters of others in the community. For example, a scientific research team might be well-served by consisting mostly of open-minded members, but the presence of an unduly tenacious member could be catalytic in a number of different ways.[13]

What these considerations point to is when it comes to the pursuit of knowledge, the value of being open-minded is a contingent matter. But isn't

[9] I take this to be the result of applying the argument from Davidson (1974) on the interdependence of belief and meaning to our own beliefs. The interpretative imperative is to interpret *another's* utterances and beliefs as largely true, meaning in agreement with what believe about the world – and thus to take our own as mostly true.

[10] Kornblith (1999, 2010) carefully explores these possibilities.

[11] This is the thesis of Gladwell (2007).

[12] There are other epistemic projects apart from the quest for certain knowledge, such as maximizing coherence, reaching reflective equilibrium, and increasing justification, so skepticism does not have to be an end to our epistemic lives.

[13] Miller and Cohen (2008) explore and develop several different scenarios involving valuable closed-minded members on research teams.

it *a priori* that being open-minded is intellectually more virtuous than being closed-minded? If it is, and I do think that that is the case, then it is so because there is more to open-mindedness than its role in epistemic pursuits.

What makes open-mindedness an important argumentative virtue, independent of its status as an epistemic virtue, is that closed-mindedness is an almost insuperable obstacle to the realization of any of the cognitive benefits of arguments listed above. While effective dialectical engagement of any sort obviously requires the ability to understand opponents' positions and objections, *sincere* engagement is necessary to achieve those gains. If all one is doing is merely listening to objections, but with the door closed on the possibility of actually revising one's standpoint as a result of them, then one might still produce a "good" argument – in the sense that it could be logical, effective, and so on – but it would not be a good argument as measured by what one takes from it. Winning the contested point is not the only thing that counts.

The war-metaphor and most agonistic models of argumentation share one dramatic failing: they foist off on us a very distorted understanding of arguments insofar as they count the arguers who come away from arguments having learned something new – that is, arguers who have acquired new, well-justified and closely-examined beliefs – as the "losers" of the argument. And it involves the same distortion when those who convince others are called the "winners" even when their own standpoints have not benefited in any way from having argued. An argument that is devoid of any good consequences for its protagonist should not be held up as an example of argumentation at its best.

When it comes our more general cognitive and critical projects, open-mindedness seems to be valuable across the board. It plays a pivotal role in all of the examples I offered of positive cognitive gains resulting from argument that were more than logical, rhetorical, or dialectical.

3. A Sense of Proportion

Although it is a necessary precondition for getting the most out of our arguments, open-mindedness can also be a counterproductive trait of mind in argumentation. The problem is that arguments are open-ended in a number

of different ways with the potential to be extended *ad infinitum*. Open-mindedness exacerbates matters. It needs the counterbalance provided by a sense of proportion.

First, the range of possible new objections that can be raised in an argument is limited mostly by our own imaginations. While we do want to keep an open-mind about such things, it would be intellectually paralyzing to try to give every objection a full hearing, no matter the provenance and regardless of how frivolous it might initially appear. Similarly, in non-deductive contexts, the epitome of the arguable, there is always the possibility of relevant, perhaps even decisive, new evidence. We want to keep an open-mind here too, but we cannot let it stymie us as we wait for it. Further, because everything is fair game for arguments, the implicitly accepted rules governing any particular argument can be made explicit and put on the table for discussion. Arguers always have the option of going "meta". This strategy may be abused often more often than not, either as a delaying tactic or a red herring, but there are also clear examples of its legitimate use.[14] Without a brake on our willingness to listen to reasons to reconsider our beliefs, we open ourselves up to endless filibusters.

As a virtue, open-mindedness fits into the Aristotelian mold of a mean between extremes. It is possible to be too open-minded. What is needed to complement and rein in open-mindedness is a sense of proportion. In the quest for knowledge and trying to makes sense of the world, a sense of proportion provides the perspective that enables us to choose and pursue our epistemic projects effectively. In arguments, it gives us license to ignore apparently frivolous and irrelevant objections. It is a virtue for many contexts.

For all its value, proportionality is a peculiar sort of virtue. It is unlike open-mindedness in that it does not fit comfortably into the Aristotelian pattern as a mean between two extremes. (Is it possible to have too much of a sense of proportion about things?) In that regard, it is something of a meta-virtue, perhaps like Platonic moderation: it operates to regulate other virtues. However, it is like open-mindedness in that a sense of proportion as a *cognitive* virtue can be at odds with its status as an *epistemic* virtue. Like open-mindedness, a healthy sense of proportion can get in the way of the acquisition of knowledge.

[14] See Cohen (2004, chapter 6).

Consider the so-called "telephone book problem". As epistemic agents, we seek to acquire knowledge. Why, then, when we are waiting in the doctor's office, don't we simply pick up and start memorizing the numbers in a telephone directory that is on the table in front of us? Whether it is telephone numbers, sports statistics, historical minutiae, or trivia of some other sort, there is an inexhaustible supply of easily acquired true beliefs, complete with justification, simply available for the taking![15]

There is an obvious answer: the ability to attach phone numbers to names and addresses or sports statistics to particular athletes may qualify as knowledge, but not particularly *valuable* knowledge. What piques and satisfies one person's curiosity is another's useless trivia. Easy as it may be, it is still not worth it. With apologies to Aristotle, we need to admit that mere knowledge in and of itself does not really have all that much intrinsic value. What may not be as obvious is that in our recourse to values in explaining this epistemic phenomenon, we are implicitly acknowledging that the fundamental epistemic project –the pursuit of knowledge– needs to be balanced against the rest of our cognitive projects and our other life-projects. A sense of proportion about our epistemic projects will often cut against that particular epistemic grain. It can actually prevent us from acquiring more knowledge. Of course, the knowledge that it prevents us from getting is mostly useless clutter of the sort that can be easily accessed when needed, so it is best left in the book on the table.[16] This may all be obvious, but it reminds us of the larger cognitive context for epistemology.

It is as a critical virtue for arguers that a sense of proportion may have its greatest value, especially in relation to the ways in which arguments are open-ended. One of the problems cited earlier concerned the persistent possibility of objections. In practice, major objections are raised right away

[15] There are two distinct problems here. One concerns the value of having true rather than false beliefs. The other concerns the value of knowledge over and above the value of simply having true beliefs. Kvanvig (2003) gives an excellent treatment of these problems. The true beliefs that can be acquired from telephone books would normally count as knowledge.

[16] An alternative reading would allow that a sense of proportion counts as an unqualified epistemic virtue, in that it takes into account our cognitive limitations: memorizing the phone books would use up too much of our memory capacity, forcing out other beliefs. Rather than working against the acquisition of knowledge, it enhances it. Thus, its status as a virtue in a narrow and strictly epistemological sense would be uncompromised. Is that really the reason why we do not memorize random facts that pass our notice?

with the sequence of objections degenerating into the trivial. With a sense of proportion about the relative significance of objections, we will neither give frivolous objections more attention than they deserve nor engage in such quibbling ourselves. Not every objection deserves a response. Conversely, just as there may be an endless array of pointless arguments against a position, there can be pointless arguments for a position: if the opponents have ceded the point, it is beating a dead horse to continue offering reasons. Not every argument deserves to be presented. The same perspective applies on a larger scale: there are differences that are too minor to be the focus of a critical discussion. Not every disagreement deserves an argument. Even great disagreements over weighty issues need not be the occasion for argument, if the dissent comes from someone mad, excessively dogmatic or insistent, or unreasoning some other way. Not every voice deserves to be engaged as an opponent in argument.

Conclusions

Argumentation has many roles in our intellectual lives, and we fill many roles as arguers. How successful we are when we argue is largely a function of the character traits and habits of mind that we bring to bear. Without a sufficiently open mind, we close ourselves off from many of the valuable gains that can come from arguing. With too open a mind, we become vulnerable to the kind of unreasonable and endless argument that can degenerate into a pathological skepticism. The sense of proportion that stands us in such good stead in other matters of our lives is no less important in epistemological matters, including, prominently, argumentation.

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Cultural Keywords in Arguments. The Case of *Interactivity*[1]

Claves culturales en los argumentos. El caso de Interactividad

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Abstract: Cultural keywords are words that are revealing of a culture's beliefs or values. As such they are typically associated with evaluative connotations. Keywords have been said to play a significant role in arguments, with some authors seeing their persuasive use as opposed to logical argumentation. Here we develop a theoretical approach to keywords that was first proposed by Rigotti & Rocci (2005) through a case study of a keyword of contemporary cyberculture: *interactivity*. Keywords are words that play a twofold role in enthymematic arguments: (a) from a logical point of view they appear as termini medi; (b) from a communicative point of view they point to *endoxa* in the cultural common ground. The paper applies this model to the words *interactive* and *interactivity*, using argumentative indicators to extract a corpus of argumentatively relevant occurrences from the Internet. The investigation shows that keywords can be used to provide evidence supporting the reconstruction of tacit premises in enthymemes. It also shows that a keyword such as interactivity is vague and polysemous and yet characterized by a persisting positive connotation across different meanings. This seems to allow a shallow strategy of premise recovery in enthymemes where the persistent connotation provides a rough and ready justification for *ad hoc* premises.

Keywords: Keyword, cyberculture, interactivity, endoxon, enthymeme.

Resumen: Las palabras culturales claves son palabras que revelan las creencias o valores de una cultura. Como tales, son asociadas típicamente con connotaciones eva-

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luativas. Se ha dicho que las palabras clave juegan un rol importante en los argumentos, indicando algunos autores que su uso persuasivo se opone a la argumentación lógica. Aquí desarrollamos un acercamiento teórico a las palabras clave que fue propuesto primero por Rigotti y Rocci (2005), a través del estudio de una palabra clave en la ciber-cultura contemporánea: *interactividad*. Las palabras clave son palabras que juegan un doble rol en los argumentos entimemáticos: (a) desde un punto de vista lógico ellas aparecen como término medio; (b) desde un punto de vista comunicativo ellas muestran endoxa del respaldo cultural común. Este trabajo aplica este modelo a las palabras *interactivo* e *interactividad*, usando indicadores argumentativos para extraer un corpus argumentativamente relevante de ejemplos obtenidos en la red. La investigación muestra que las palabras clave pueden ser usadas para proveer evidencia que apoye la reconstrucción de premisas tácitas en los entimemas. También muestra que las palabras clave, tales como interactividad, son vagas y polisémicas, y caracterizadas por una connotación persistentemente positiva que cruza distintos significados. Esto parece permitir una estrategia débil de recuperación de premisas en los entimemas donde la connotación persistente provee una justificación *ad hoc* instantánea y sin matices.

Palabras clave: Palabra clave, cibercultura, interactividad, endoxa, entimema.

1. Introduction

Cultural keywords are words that are particularly revealing of a culture's beliefs or values. As such, they are typically associated with evaluative *connotations*. In this paper we look at the relationship between keywords and arguments, taking the derivationally related words[2] *interactive* and *interactivity*[3] as cases in point. In the following pages, we first outline the

[2] From a morphological viewpoint the relation between *interactive* and *interactivity* is a simple case of semantically unmarked, or "cold", derivation where an abstract *name of a property* is derived from the corresponding adjective as in: *hostile* > *hostility*, *futile* > *futility*, *rare*>*rarity*. However, things are complicated by the fact that *interactive* is itself a deverbal adjective, derived from the verb *to interact*. From this same verb stems the deverbal noun *interaction*, with which *interactivity* is indirectly related. The different derivation path is reflected in the different semantic classes to which these abstract nouns belong: *interactivity* is a stative, uncountable, property name, while *interaction* is a non-stative, countable, event name. For a basic discussion of morphology in relation to semantics see Rigotti and Cigada (2004: 147-172, 207-210) and Polguère (2008 *passim*).

[3] Rabaté and Laurraire (1985: 21) had noted that French *interactif* was much more used than *interactivité* and hypothesized that the noun derived also diachronically from the adjective. This assumption coincides with Oxford Dictionary of English in which *interactivity* is not present as a specific entry but it appears as a derivative of *interactive*. Moreover, it is still interesting to remark that in spite of the fact that both terms were coined to cope with the development of the new media, *interactive* became the adjectival form associated with *interaction* as well.

view – first put forth in Rigotti and Rocci (2005) – that in order to decide whether a certain word is indeed a cultural keyword one should look at how exactly this word is used in arguments in a corpus of texts representative of the cultural community under consideration. As we will see, this approach not only offers a previously lacking decision procedure to test candidate keywords, it also offers us a deeper theoretical insight of what a keyword is by connecting it with the notion of *endoxon* from Aristotelian rhetoric.

Starting from this conception of keywords, we go on to argue that if, on the one hand, looking at argumentation lends precious insights to research on keywords conducted within lexical semantics, linguistic anthropology or cultural studies, on the other hand, the study of argumentation can similarly benefit at various levels from paying attention to cultural keywords.

First, keywords can be used by argumentation analysts to validate their hypotheses about the *reconstruction* of tacit premises in natural enthymematic arguments.

Second, the evaluative connotations attached to keywords deserve a close scrutiny in the *evaluation* of the quality of arguments. These connotations may point to complex systems of cultural beliefs, that are actually mobilized in the audience in working out the structure of the argument, yet because of their very prominence they can also provide "shallow" suitable premises for the enthymeme, discouraging further elaboration in the audience. Additionally, keywords can be the target of rhetorical strategies that exploit their polysemy or vagueness, through *equivocation* or *persuasive definition*, so that their connotations (and the readily available premises that come with them) are abusively appropriated by the arguer. Conversely, an arguer can employ the strategy of *dissociation* on a vague or polysemous keyword in order to restrict the applicability of an argumentatively relevant connotation.

2. Research traditions in the study of keywords

Before we develop the argument sketched above with the help of the words *interactive* and *interactivity*, it is worth pausing briefly[4] on how scholars

[4] A much more comprehensive literature review on cultural keywords can be found in Bigi (2006).

from various areas of linguistics, anthropology and cultural studies have tried to capture the haunting but elusive notion of cultural keyword and have defined a series of partially overlapping notions of keyword.

The *key* metaphor is easily grasped intuitively and, to some extent, provides a common schema, masking the diversity of concepts associated with this term: *keywords* are in some sense *representative* of a body of knowledge to which they are associated, and thus can be used to provide some sort of *access* to this body of knowledge – be it an individual text, a corpus of texts belonging to the same discourse genre, or discourse community, or a whole culture. Stubbs (2008: 1) provides a broad characterization of the family of notions that interests us here: "Keywords are words that are claimed to have a special status, either because they express important evaluative social meanings, or because they play a special role in a text or text type".

An early, influential, contribution to the study of keywords can be found in the works of Williams (1959, 1976). For him keywords are "[...] significant binding words in certain activities and their interpretation; they are significant, indicative words in certain forms of thoughts" (Williams 1976: 20). Williams composed a dictionary of keywords, including mostly learned, specialized words such as *alienation, class, democracy, industry*, which is meant to illuminate the understanding of the crucial arch-keywords *culture* and *society*. Williams refers to his work as "historical semantics" and argues that it can illuminate our understanding of social and cultural realities as the change in the use of some words corresponds to changes in the way people think about ordinary life. Interestingly, Williams (1976) says that every word included in the dictionary has "virtually forced itself" on his attention "in the course of some argument"; yet he does not provide a method for identifying keywords other than his subjective choice, nor does he systematically elaborates on their relation with arguments. More generally, the recourse to textual evidence in elucidating keywords is quite limited in Williams, as he only relies on dictionary examples.

A more linguistic take on the analysis of cultural keywords, rooted in lexical semantics and the anthropological linguistic tradition, is represented by the work of Wierzbicka (1997). Wierzbicka's research deals with the semantic analysis of areas in the lexicon where highly language specific distinctions reflect specific ways of living as well as "ways of thinking". Further, these

distinctions have, historically, shaped their communities and perpetuate the ways of living they reflect. The domains covered by Wierzbicka's analyses range from social and political values, to ethics, folk-psychology and ethnic identity, all of which she examines with respect to a number of European and extra-European languages. According to Wierzbicka (1997: 22), linguistic semantics provides a rigorous methodology for decoding culture specific meanings and, consequently, for elucidating the tacit assumptions which are linked with them. In fact, her work is based on a formal (though naturalistic) system for the representation of linguistic meanings called Natural Semantic Metalanguage (NSM)[5]. Many of the words analyzed by Wierzbicka, both prestigious, like *liberty*, and colloquial like the typically Australian verb *whinge* contain an embedded evaluative connotation. Consider, for instance, her characterization of *whingeing* in Australian culture:

> What exactly is 'whingeing'? Clearly, it is a concept closely related to that expressed by the word *complaining*. But, first, *complain* is neutral, and does not imply any evaluation of the activity in question, whereas *whinge* is critical and derogatory. Furthermore, *complain* is purely verbal, whereas *whinge* suggest something that sounds like an inarticulate animal cry. Being purely verbal, *complaining* can be seen as fully intentional, whereas *whingeing* can be only seen as semi-intentional and semi-controlled. Finally, *whingeing*, like *nagging* and unlike *complaining*, suggests monotonous repetition. (Wierzbicka 1997: 215)

Basically, the word *whinge* represents a morally condemned behavior, which runs directly counter to the traditional Australian colonial ethos characterized by the values of toughness, gameness, resilience, "die-hardness", comradeship, and good humor (Wierzbicka 1997). This whole characterization is seen as embedded in the word meaning and made painstakingly explicit in the NSM semantic analysis of the complex semanteme *whingeing*:

[5] The NSM was developed during 30 years by A. Wierzbicka, in collaboration with Cliff Goddard and others. The NSM makes a strong hypothesis on the universal nature of human concepts. It posits a finite inventory of basic universal human concepts, semantic primes (Wierzbicka 1996), which are lexicalized in all the languages of the world. The primes provide a natural metalanguage for semantic decomposition of complex meanings, and a touchstone and metric for evaluating differences across cultures.

(1) *whinge* (e.g. X *was whingeing*)
- (a) for some time, X was saying something like this: something bad happened to me
- (b) X was saying it as people say things
- (c) when they want to say something like this:
- (d) something bad is happening to me
- (e) I feel something bad because of this
- (f) I can't do anything ("about it")
- (g) I want someone to know this
- (h) I want someone to do something because of this
- (i) I think no one wants to do anything
- (j) I want to say this many times because of this
- (k) people think: it is bad if someone does this

(Wierzbicka 1997: 215-216)

While the method of semantic analysis followed by Wierzbicka is very explicit, the process of keyword selection remains largely intuitive[6]. Wierzbicka (1997) does mention a series of indicators that may help keyword selection (sheer frequency of occurrence, frequency of occurrence in a particular domain, frequency of occurrence in book titles, songs, proverbs, sayings, richness of the phraseological patterns in which the word occurs), but she also contends that the true justification of the choice of a keyword is given *a posteriori* by the insightfulness of the results of its semantic analysis. As regards the linguistic evidence used to support the analysis, it is still largely limited to dictionaries and other kinds of meta-linguistic texts, and does not involve systematic recourse to a corpus of culturally relevant texts.

Another major approach to the study of cultural keywords is the one developed by Stubbs. In several publications addressing the subject of keywords (Stubbs 1996, 2001a, 2001b, 2008), he discusses different aspects of the notion. Stubbs' contribution is noteworthy for our investigation because it addresses the issue of the persuasive power of keywords. At its core, Stubbs' approach is the direct descendant of Firth's (1935) proposal of a "systematic study" of the "contextual distribution of sociologically important words"

[6] Cf. Wierzbicka 1997: "there is no objective discovery procedure for identifying keywords in a culture".

– words which Firth called "focal" or "pivotal". For Stubbs the analysis of cultural keywords proceeds mainly through the examination of the recurrent linguistic contexts in which these words occur: typical collocates of keywords will provide evidence of their "cultural connotations". Through a study of recurrent collocation patterns, positive or negative "semantic prosodies" associated with a word can be discovered, providing evidence of the evaluative connotations attached to a word.

Stubbs places this inquiry within the study of *discourse* in the sense that Foucault gives to this word: "In phrases such as 'academic discourse', and 'racist discourse', 'discourse' means recurrent formulations which circulate in a discourse community." (Stubbs 2001b: 166). These recurrent patterns embody "shared meanings", "particular social values and views of the world" (Stubbs 1996: 158). As Stubbs puts it, "Such recurrent ways of talking do not determine thought, but they provide familiar and conventional representations of people and events, by filtering and crystallizing ideas, and by providing pre-fabricated means by which ideas can be easily conveyed and grasped" (ibid.).

It is particularly interesting, here, to consider the role played by cultural keywords and by recurrent patterns of discourse within argumentation. Stubbs (1996) opposes a logical/rational mode of argumentation to a mode of argumentation based on keywords. Examining a series of political speeches of British politicians, Stubbs (1996) observes how logically defective, if not outright fallacious, arguments derive their force from being part of "a discourse which calls up a set of linked key words, symbols and beliefs" and from the fact that they depend on a set of premises, which are *unstated* and *probably unconscious*" (Stubbs 1996: 162, we italicize).

3. Evaluative connotations and the persuasive power of keywords

The evaluative component of the meaning of many cultural keywords and its alleged persuasive power deserves particular attention in an investigation of the relationship between keywords and arguments. Also the fact that this evaluative meaning is to be considered a *connotation* of the word deserves some consideration. The term connotation has been used in widely

divergent manners in philosophy, linguistics, stylistics and semiotics (See Rigotti and Rocci 2005b for a review). What remains constant is the idea that connotations are additional, secondary meanings that are distinct and somewhat separate from the main meaning of the linguistic expression, be it conceptualized as the cognitive meaning, the denotation, or the truth-conditional meaning of the expression.

When Stevenson (1937, 1938, 1944) introduced the notion of *emotive meaning*, he had in mind words that seem endowed with a persuasive power of their own similar to those that we have been considering cultural keywords here. *Culture, dictator, democracy* are among the examples used by Stevenson. These words are endowed, alongside their conceptual meaning, with an emotive meaning, which Stevenson (1937: 23) defines as follows:

> The emotive meaning of a word is a tendency of a word, arising through the history of its usage, to produce (result from) *affective* responses in people. It is the immediate aura of feeling which hovers about a word. Such tendencies to produce affective responses cling to words very tenaciously.

For Stevenson this kind of meaning is wholly non conceptual, non representational. As a consequence the way in which these words persuade the hearer is totally unlike rational argument: it "depends on the sheer, direct emotional impact of words [...] A redirection of the hearer's attitudes is sought *not by the mediating step of altering his beliefs*, but by *exhortation*, whether obvious or subtle, crude or refined." (Stevenson 1944: 139-40).

With such a radical separation between the evaluative connotation and the representational content of words one cannot imagine that the evaluative component of keywords may play a role in an argument: we can only imagine that keywords yield their raw force to the persuasiveness of an argument from the outside at the level of rhetorical choice. Moreover, it becomes difficult to think of more specific and articulated evaluations attached to keywords that might go beyond the raw emotion and connect to a network of cultural values. As we will see later (§ 9), however, the analyses of Stevenson become useful when examining pathological situations, when evaluative connotations cling to polysemous or vague words irrespective of their denotative values.

As we have seen above, Stubbs (1996, 2001) proposes to look at the evaluative connotations carried by a keyword through the window of the *semantic prosodies* of the word in a corpus, which is seen as a more or less faithful approximation of the notion of *discours* elaborated by Foucault (1971). In this way the persuasive power of keywords coincides with the pressure to conform to the socially dominant discourse, and can be considered separate from rational argument. This view certainly contains a grain of truth as the persuasive power of repetition as a rhetorical technique cannot be discounted completely.

While this account of connotation and of its persuasive power does not completely eschew representations, it does not take into account the use of representations in reasoning, focusing instead on their involvement in sub-rational processes based on repeated association. As noted in Rigotti and Rocci (2005), relying just on this approach risks offering a dangerously simplified image of cultural reproduction. When processing the discourses circulating in a cultural community, language users do not simply register representations and remain impressed by their repetitions, they draw complex interpretive inferences, and, in the case of argumentative discourse they are able to reconstruct the inferential path proposed by the arguer.

In fact, Stubbs (1996: 162) does briefly comment on the reliance of keyword based arguments "on a set of premises, which are *unstated* and *probably unconscious*" but he does not develop an account of the relation between keywords and implicit premises. An account of this relation, on the contrary, forms the core of the present paper and, as we will see in the final sections of the paper, patterns extracted from corpus data can have an important role in illuminating this relationship.[7]

The treatment of evaluative meanings in Wierzbicka's work differs markedly from the notions of emotive meaning and connotation that emerge from Stevenson and Stubbs. As we have seen with the example of *whingeing*, the evaluative component is not only treated as representational, but even

[7] A somewhat similar line of investigation is pursued by O'Halloran (2009). While largely sharing "the spirit" of the position expressed by Rigotti and Rocci (2009), O'Halloran laments that their work lacks a proper empirical component and sets out, in his contribution to develop an approach that combines the reliance on a corpus as a proxy to cultural common ground with consideration for discourse structure and inferential processes. The account of the keywords *interactive* and *interactivity* presented in the following sections is spurred, in part, by this criticism by O'Halloran.

embedded within the semantic analysis of the word. Wierzbicka's analyses typically contain clauses like the following:

(2)
(a) people think: it is bad if someone does this (*whingeing*, Wierzbicka 1997: 215-216)
(b) everyone thinks: this is good (*liberty*, p. 154)
(c) it is bad if someone cannot think this (*freedom*, p. 154)
(d) people think: this is good (*omoiyari*, p. 280)

There are three aspects of this treatment that deserve comment: the representational nature of the connotations, the structure of the representation, and their inclusion in the semantic content of the word.

That connotations can be represented propositionally and are not simply some non-representational psychological force acting on the hearer is essential for having them entering reasoning and argumentation. In this respect, our approach follows Wierzbicka.

As for the form of these evaluative clauses, it is interesting that the properly evaluative component (let us call it: "x is good/bad") is often subordinated to a modal preface specifying the source of the evaluation ("people think"). This specification, in fact, allows us to distinguish the particular connotations associated with cultural keywords from what we might call expressive meanings (Potts 2007), which implicate an individual, often immediate, evaluation on the part of the speaker, like the word *bastard* in the following example:

(3) He dumped me! That bastard!
bastard (x) = "I think x is bad"

Moreover, the characterization of the source of the evaluative proposition as common belief is also important in view of the role this proposition might play as a premise in an argument, as it indirectly specifies its epistemic status, its degree of acceptability or plausibility (Cf. Rocci 2006: 429).

The straightforward inclusion of the evaluative proposition in the semantic analysis appears more problematic. The problem stems, in part, from a general feature of the NSM style of lexical semantic analysis, which, contrary

to other approaches (Seuren 1985, Fillmore 2003, Rigotti, Rocci and Greco Morasso 2006), does not set apart the proper semantic entailments of a lexical predicate from their presuppositions or from other kinds of inference (such as conventional implicatures) that may be triggered by the use of a word. It is dubious that this kind of evaluative propositions could be treated as semantic entailments of the word. If they were, an utterance such as (4.a) would contain an outright contradiction, just like (4.b):

(4)

(a) Nobody thinks *liberty* is a *good* thing.

(b) *Many surfers *killed* by sharks are still *alive* to tell their stories.

If we hear someone asserting (4.a) we may think they hold very strange beliefs that are patently empirically false, but we would not say that their assertion is contradictory or self defeating. On the contrary, if we hear (4.b) we think that the speaker not only happens to be wrong, but cannot possibly be right no matter what the statistics about shark attacks on surfers say. The falsity of (4.a) is an empirical matter, while the falsity of (4.b) is a semantic matter. For this reason we cannot consider "everyone thinks: this is good" as *part of the meaning* of *liberty*, at least not in the same way in which we consider "becoming not alive" as part of the meaning of *being killed*.

4. Keywords, enthymemes and *endoxa*

Rigotti and Rocci (2005) have suggested that in order to test whether a given word is a cultural keyword one should look at the role it plays in arguments. The proposed test adopts the model of the *enthymeme* inherited from Aristotelian rhetoric as a means of reconstructing natural language arguments and involves checking both (a) the logical role played by the candidate keyword in the reconstructed syllogistic structure of the enthymeme and (b) its role in triggering the pragmatic inferences required to supply the implicit parts of the syllogistic structure. Let us first illustrate the model with a rather trivial attested example[8]:

[8] The example is, intentionally, very similar to the invented one used in Rigotti and Rocci (2005).

(5) Polynices should not be buried because he is a traitor.
(Example extracted through WebCorp[9])

The first step in reconstructing (5) as an argument is recognizing that the speaker – who is, say, King Creon of Thebes – is advancing the standpoint *Polynices should not be buried* and presents the proposition *He is a traitor* as an argument in support of it. In order to make the standpoint follows from the argument we need to provide a suitable major premise, such as:

(6) Traitors should not be buried

Thus, we obtain the following syllogism:

(7)
Major Premise: Traitors should not be buried
Minor Permise: *Polynices is a traitor*
Conclusion: *Polynices should not be buried.*

It is important here that our readers set aside any repugnance for the simplicity of the example and for the seemingly "mechanical" nature of the syllogistic reconstruction and bear with us in examining the logical role played by the term *traitor* in the syllogism, as well as its role in the pragmatic processes that are essential for bringing about said reconstruction and for anchoring it to the cultural context.

4.1. Keywords are termini medi

From a logical viewpoint, the word *traitor* in (7) plays the role of *terminus medius* of the syllogism. A *terminus medius* (middle term) is a term that occurs in both premises but not in the conclusion. In order to ensure the

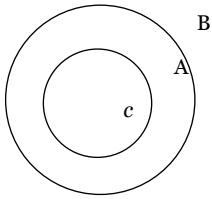
[9] Most of the attested examples used in this paper have been obtained simply by exploiting the Internet as a corpus through the excellent WebCorp (Cf. Renouf *et al.* 2007), a suite of tools for linguistic data search freely available at www.webcorp.org.uk. The main tool functions as a meta-search engine. WebCorp facilitates the formulations of linguistically relevant queries on a series of standard search engines (such as Google), collects the results and present them in an useable concordance format to the user.

validity of the syllogism the middle term has to be taken at least once in its full extension (e.g. *all those who…*).[10] Example (7) belongs to a very common deductive pattern traditionally called *Figure I* of the syllogism. In the Figure I the terminus medius occurs in the subject of the major premise and in the predicate of the minor premise:

(8) Underlying structure of (7), where the predicate **A** is the terminus medius.

Major premise: ∀ (x): **A** (x) → B (x)
Minor premise: **A**(c)
Conclusion: B (c).

The pivotal role of the predicate A is perhaps even more evident if translated in set-theoretic terms: A is a (proper or improper) subset of B, and *c* belongs to A. Therefore we must conclude that *c* also belongs to the superset B.



Interestingly, in the case of an enthymeme this logical centrality is matched by a crucial communicative role.

4.2. Keywords guide and justify the construction of contextual premises

Enthymemes are not just syllogisms with missing premises. They are first of all enthymemes whose premises are *endoxa*. In Aristotle the adjective *endoxos* (from *en* 'in' and *doxa* 'opinion' or 'fame') refers to propositions

[10] Failing to do so would result in the fallacy of *undistributed middle*.

that are in the common opinion and, as a consequence are generally accepted within a community. In the *Topics*, Aristotle gives an articulated definition of the *endoxa*:

> [*endoxa* are those opinions] which commend themselves to all, or to the majority, or to the wise – that is or to all of the wise or to the majority or to the most famous and distinguished of them (*Topics* I 100b 21-23).

It seems that for Aristotle the possibility of leaving implicit some of the premises was a consequence of this more fundamental quality of endoxicality:

> [the enthymeme] is deduced from few premises, often fewer than the regular syllogism; for if any one of these is well known, there is no need to mention it, for the hearer can add it himself (*Rhetoric*, I, 1357a)

As Bitzer (1959: 407) puts it, "to say that the enthymeme is an 'incomplete syllogism' – that is, a syllogism having one or more suppressed premises – means that the speaker does not lay down his premises but lets his audience supply them out of its stock of opinion and knowledge".

Let us observe more closely how endoxical premises are recovered in enthymemes. Where does the premise *Traitors should not be buried* come from? Speaking of "implicated premises", pragmaticists Sperber and Wilson (1986: 195) say that they are "supplied by the hearer, who must either retrieve them from memory or construct them by developing assumption schemas from memory". In discussing the role of keywords in enthymemes this distinction has interesting consequences. In the first case we can imagine that the presence of the word *traitor* in the explicit minor premise triggers the recovery by the hearer of a proposition like the following in the cultural common ground[11]:

(9) According to Theban law/custom: traitors should not be buried.

which is enough to conclude that *Polynices should not be buried*[12]. This is

[11] For a precise definition of the notion of *common ground* see Clark (1996: 92-121). On cultural common ground see Danesi and Rocci (2009: 137-172).

[12] Note that the *should* in the conclusion expresses here the same deontic modality of the Theban law/custom expressed by the modality in the major premise.

the most straightforward case. Many enthymemes, however, cannot be realistically modeled as a simple case of retrieval. For instance, a hearer may be unable to access a proposition like (9) in the cultural common ground and yet be able to work out the missing premise of the syllogism. For instance, the hearer could have easy access to a culturally shared proposition such as (10):

(10) People think: treason is a heinous crime

And then use (10) and other culturally available propositions to provide a backing for the logically sufficient proposition *Traitors should not be buried*. In these more complex cases it is important to distinguish between the *computation* of the missing premises and their *justification* in the cultural common ground[13]. Working out a missing major premise supplying the logical minimum for making the syllogism work is often an easy task for the interpreter, and one that can be sometimes achieved, at least in some cases, in the absence of any background propositions. The possibility of interpreting *paradoxical* arguments attests to that. For instance, if we read the following statement in Charles Baudelaire:

(11) Le commerce est naturel, donc il est infâme
(*Mon coeur mis à nu*, par. XLI, Baudelaire 1975-76: 703)
(Trade is natural, therefore it is vile)

We can provide a formally valid major premise providing the logical minimum:

(12) All that is natural is vile/ abominable

Also, in interpreting Baudelaire's argument we do not have to think that he gives to the word *natural* a different meaning: we only have to hypothesize that Baudelaire subscribes to a very unusual set of values or entertains very

[13] We take this distinction from the studies on the functioning of presupposition accommodation. Kamp (2001: 58) speaks of *presupposition computation* and *presupposition justification*.

peculiar beliefs about nature. The premise retains, however, an extremely shallow, "*ad hoc*" quality, because it is likely the result of a wholesale accommodation, which is not justified by any *endoxon* in the cultural common ground. We are able to reconstruct the logical role of *natural* as a *terminus medius*, but the logically sufficient major premise and the *endoxa* evoked by the word remain completely disconnected. Obviously, the argument is unlikely to be persuasive.

In the end, what happens behind the major premise of the syllogism appears to be the most interesting part of the story, as well as the most difficult to investigate. The richness of the *endoxa* evoked by the keywords and the quality of their inferential connection with the implicit major premise may vary enormously.

In a recent paper on the use of the Japanese cultural keyword *kyosei* in the corporate discourse of Japanese multinational companies, Filimon (2009) suggests that, in different circumstances, the same keyword may prompt different processing strategies in the hearer, and proposes linking keywords research with psychologically informed models of persuasion. When the cultural common ground is rich and the motivation to critically scrutinize the argument is high (high sufficiency threshold), the justification process might involve systematic processing based on a complex set of beliefs evoked by the keyword; while in the case of a limited cultural common ground and when the hearer is not motivated to effortful extended processing, the most accessible evaluative connotations may provide a "quick and dirty" justification for a major premise satisfying the logical minimum.

In the following pages, we look at the argumentative use of the keywords *interactive* and *interactivity* and we propose a complementary line of investigation into the quality of implicit premise justification, centered on the relation between the denotative meaning of the concerned keyword and the evaluative connotation it evokes.

5. Applying the model

Before moving to our case study, however, it is worth summarizing the approach that we have outlined above developing the proposal of Rigotti and Rocci (2005):

– Cultural keywords are words that are particularly revealing of a culture's belief system and values. As such, they are typically associated with "evaluative connotations".
– The "evaluative connotations" do not express online evaluations of the speaker, but have the pragmatic and epistemic status of cultural *endoxa* in Aristotle's sense.
– In order to test whether a given word has the status of a cultural keyword one needs to examine its use in arguments in a corpus of texts representative of the cultural community under consideration.
– We can consider serious candidates for the status of keywords, those words that play the role of *terminus medius* in an enthymematic argument, providing access, at the same time, to a cultural *endoxon* which either directly supplies the required major premise, or contributes to indirectly justify it, at least in part.

The core idea behind the testing procedure is simple: the presence of certain beliefs or values in a culture and their importance within it, is best attested by the finding that these beliefs or values *are indeed used*, maybe tacitly, by the members of the relevant cultural community to justify their positions in an argument.

Obviously, in order to provide meaningful results, the procedure needs to be applied to a corpus of culturally relevant texts. The first applications of the model (Bigi 2007, 2008, Filimon 2009) have been in-depth analyses of individual argumentative texts. Such analyses are important to flesh out and refine the model and can also offer relevant insights into the word investigated, provided that they independently make a case for the relevance of the chosen example (see, for instance, Filimon 2009). It seems clear, however, that, in order to make a convincing case for a keyword, larger-scale explorations are needed, and are indeed underway[14].

[14] In the context of the SNSF project *Endoxa and keywords in the pragmatics of argumentative discourse*, Agatha Filimon and Andrea Rocci are investigating the argumentative use of cultural keywords in two large corpora of corporate annual reports and sustainability reports. Márcio Wariss Monteiro is expanding the corpus investigation of the words *interactive* and *interactivity* for his Ph.D. thesis, which will also include a study of keywords in a corpus of Brazilian political speeches and policy documents concerning the introduction of digital television in Brazil.

Establishing the *key-ness* of a word through the extensive application of the above testing procedure will be a matter of degree, rather than a categorical decision. Moreover, the degree of key-ness will be best regarded as resulting from multiple dimensions, factoring in not only the *frequency* of the use of the word as a *terminus medius*, but also the *hierarchical position* of the uses within the overall argumentative structure of the texts, the *consistency* in evoking the same *endoxon* or the same constellation of related *endoxa*, and also their *sufficiency*, that is their capacity of providing a premise that does not need further explicit support. We can illustrate the dimension of sufficiency with an example of use of the word *interactive* in a *Wall Street Journal* article discussing the commercial future of e-book readers:

(13) Amazon had been hoping to target the [academic] market with its 9.7-inch screen Kindle DX e-book reader, for example, but schools said the device wasn't sufficiently *interactive* and lacked basics such as page numbers and color graphics. (*WSJ*, 1/22/10)

What is striking in this example is that the author presents the word *interactive* as sufficient to evoke an argument without further specification. Unlike the case of page numbers and color graphics, it may be not at all obvious what should be the kind and degree of interactivity that is sufficient for e-book readers to hope to supplant traditional textbooks – which are, by the way, usually not considered interactive devices at all. Despite this difficulty, *interactive* is deemed *sufficient* to evoke an argument and is not elaborated upon in the paper.

6. What is interactivity?

It is really not easy to find an unequivocal definition of the word interactivity. In fact, since the term was coined in the early 1980s many authors have been trying to conceptualize it.[15] These attempts involve quite different ideas

[15] The term *interactivity* was created in French (*interactivité*) by the beginning of the 1980s to designate a new technological-mediated communicative phenomenon. See Rabaté and Laurraire's (1985) pioneer research.

and taxonomies resulting in a practical impossibility of proposing a single definition. Trying to find some convergence, we can sum up the theoretical definitions and approaches we have found in the literature by saying that there are basically three types of *interactivity*: *user-to-user*, *user-to-machine* and *user-to-content*. Moreover, with respect to frameworks to deal with interactivity, basically we have found three approaches in which interactivity is conceived: as a *medium property*, as an *exchange process* and as the *result of a perceptional experience*.[16] According to the overwhelming majority of scholars, the notion of interactivity is *related to new media* and involves some kind of technological-mediated setting. Interactivity is often seen as the *novelty that adds value to new media*. It is said to be a new media founding principle, cornerstone, bedrock, central/key concept, and so forth (Lister *et al.* 2009, Dewdney and Ride 2006). The quality of "being interactive", in comparison with precedent media (press, broadcast etc.), conveys the idea of more *freedom*, more *participation* and *engagement*, more *equality of powers*, more *transparency*, more *possibilities to intervene in media contents*, more *decentralization*, more *entertainment* and so forth. It is these "more…", which we find in the literature, that make *interactivity* an interesting candidate for the status of cultural keyword in what we could call the contemporary global *cyberculture*.

Cyberculture could be defined as the contemporary sociocultural organization in which digital technologies play a crucial role. In this perspective, cyberculture should not be reduced to technological aspects neither should it be related only to what goes on in the so-called virtual environments. Actually, "cyberculture involves all the most socially important phenomena that arise in the contemporary world insofar as nowadays the predominant

[16] The first type (user-to-user) corresponds to CMC (computer-mediated-communication); the second (user-to-machine/media/system) is based on HCI (human-computer interaction); and the third (user-to-content/document) is associated to the possibility of changing content in a given computer/media system). In the first approach (medium property) interactivity is conceived as a technical characteristic closely related to other technological properties like multimedia, user-friendliness, hypertextuality; the second (exchange process) is focused on dialogical and conversational dimensions and generally the process is mediated by some infotechnological device; in the third (result of a perceptional experience) interactivity relies on users' perception, it is such a psychological variable that depends on subjectivity. See McMillan (2002) for a review of multiple research traditions on *interactivity*.

objects, procedures and processes depend in some extent on digital technologies" (Trivinho 2001: 60, our translation[17]). This same ideia of cyberculture – despite quite different approaches – can be found in many other authors (Lemos 2002, Lévy 1997) and sometimes it come up as *network society* (Castells 1996), *cyberworld* (Virilio 1996), *information society* and so forth.

In order to cast light on the presumed role of *interactive* and *interactivity* as cultural keywords we will proceed with a two-step investigation, both based on corpus data. First, we will try to have a better grasp of the functioning of different denotative meanings of the predicate *interactive* by applying certain techniques of semantic analysis based on Congruity Theory[18] – a particular approach within a broad tradition of linguistic semantics[19]. Then we will move to examine the behavior of the words *interactive* and *interactivity* in argumentative contexts to find confirmation of the positive *endoxa* that are associated with them by spotting them in action.

7. The predicate *interactive:* polysemy and vagueness

In Congruity Theory the semantic contribution of virtually every content word in a language can be represented in terms of a predicate opening one or more slots to be filled by its *semantic actants* (Mel'čuk 2004) – also known as "arguments"[20]. To analyse the meanings of a lexical item means, first of all, to establish what kinds of predicates it can manifest. Predicates predefine the number and the semantic types of their possible actants imposing presuppositional conditions on their actant slots. If these conditions are

[17] "A cibercultura está implicada em tudo o que de mais socialmente importante vem à luz no mundo contemporâneo, na medida em que todos os objetos, procedimentos e processos doravante predominantes dependem, em alguma medida, da matriz informática da tecnologia" (Trivinho 2001: 60).

[18] For a systematic presentation of Congruity Theory, see Rigotti (1993); Rigotti and Rocci (2001); and Rigotti (2005) and Rigotti, Rocci and Greco Morasso (2006).

[19] It would be beyond the scope of the present paper to mention all the approaches with which Congruity Theory is, in various ways, related. However, the reader can be directed to Mel'čuk (2004), to Seuren (1985, 1988) and to the first volume of Charles Fillmore's collected works (Fillmore 2003) as outstanding examples of the kind of semantic work with which Congruity Theory most closely relates.

[20] In fact, the word *argument* is the most widely used in the semantic literature. Here we prefer to use the term *(semantic) actant* to avoid the possible confusion arising from the homonymy with *argument* as a term of argumentation theory.

not satisfied by the filler of the slot an *incongruity* arises. At the same time, if two uses of a lexeme impose incompatible conditions on their actant slots or differ in the number of conceptually required actants we can say that the lexeme is polysemous and manifests different predicates. These incompatibilities can be established through appropriate semantic tests, such as the well known *zeugma test* (Cruse 2000), which allows us to see when different uses of a word depend on *diverging incompatible requirements* as in (14) – as opposed to *generic* or *vague* requirements.

(14) *Neither **Louis** nor **the word processor** were able **to read** the document.

Examining corpus evidence can be of help in discovering which kinds of actants can be selected by a given lexical item. In order to establish the kind of actants that can be selected by *interactive* we examined 100 occurrences extracted from the British National Corpus. Examples (15-24) show how puzzling the variety of uses of *interactive* is. The following ten occurrences are representative of the uses we found.

(15) **Interactive** media reformulates human interaction, minimalizing differences, maximizing control.

(16) The processor is scheduled in such a way that **interactive** machines get processor time more frequently than non-interactive (batch) machines

(17) But its game-oriented appeal will introduce basic **interactive** technology into thousand of homes.

(18) Twelve **interactive** computer terminals allow visitors to take an electronic walk through Pompeii's forum, amphitheatre, villas and baths, seeing from various perspectives.

(19) It is envisaged that the educational use of futures tools and techniques will require new, **interactive**, forms of software.

(20) In fact the brain has considerable anatomical scope for being **interactive**.

(21) Maintaining beautiful hair means finding a range of caring products and sticking with them **interactive** ingredients in products from shampoos through to mousses and sprays are formulated to complement each other, leaving your hair in maximum condition.

(22) Knowledge, rather, is an emergent of an **interactive** process between a collectivity of subjects and the objects that constitutes their environment.

(23) Tomorrow the Company hits Sandbach, where, at the Crown Hotel, patrons can see the **interactive** drama, which creates a pastiche of the Hollywood Wild West.

(24) All these lead to a decentralization of an organization's activities and the requirement of an **interactive** communications system.

In all the occurrences reviewed, *interactive* selects only one actant, i.e. it is always a one place predicate – which we can write as INTERACTIVE (x_1). In the broader scene other participants (e.g. *subjects*, *objects*, *visitors*, *hair* etc.) can be named and are even obligatorily conceptually present, but the narrow actancial frame of the predicate either spotlights only one participant (*brain*, *computer terminal*) or takes the whole situation as its actant (*process*, *drama*). Thus we can distinguish two broad classes of actant frames:

(a) x_1 = individual
(b) x_1 = process / system

In (a) the actant is often a piece of hardware or software, a technology as in (15-19), but there are also occurrences where x_1 is not a technology, such as *brain* in (20) and *ingredients* in (21). While (20) selects an actant which is able to process information, (21) does not. The involvement of human actors in the broader scene is likewise not obligatory as the whole scene may take place at a sub-human level (20), or refer to an entirely non-human situation (21). As for (b), the processes can be similarly non-technological as in (22) and (23). Thus, (a) and (b) should be split into at least 5 tentatively distinct actant frames:

(a.1) x_1 = technological element, capable of exchanging information
(a.2) x_1 = non-technological element, capable of exchanging information
(a.3) x_1 = non-technological element, not capable of exchanging information
(b.1) x_1 = technological information exchange process/system
(b.2) x_1 = non-technological information exchange process/system.

By applying the zeugma test across these frames we obtain results like (25) and (26) characterized by a more or less pronounced repugnance to the zeugma, which would corroborate the hypothesis of a polysemy of *interactive*:

(25) * It was an excellent hotel room: the digital TV set and the shower gel were both interactive.

(26) ?? The learning process should be interactive, just like the touch screen.

If we move from the conditions on the actant slots imposed by interactive to the proper semantic entailments of the predicate we are faced with a difficulty: in each of the frames outlined above, it is very difficult to sort out what are the necessary and sufficient conditions for *interactive* to be predicated truly. For instance, within (a.1) the possibility for the user to intervene to modify content is sometimes presented as a *necessary* condition for considering a technology interactive:

(27) The only downside to this method is that it isn't interactive (the user will not be able to complete any form-fields or modify the document in any way). (Example extracted through WebCorp)

One can wonder, however, whether this is a *sufficient* condition of interactivity. Someone could very well say that completing form-fields is not enough:

(28) That's not interactive: it's just a fillable form.

or, to cite an authentic example: choice between pre-scripted options may not seem *a sufficient degree* of intervention in the media content to truthfully predicate *interactive*:

(29) And everybody who's ever tried to use live actors in an interactive piece has only come up with multiple choice. That's as good as you can get, is multiple choice, basically. It's multiple choice, it's not interactivity. (Example extracted through WebCorp)

This seems to suggest that not only is the word *interactive* polysemous and that it selects fairly incompatible actant frames, but also that, within each frame the predicate expressed is scalar and *vague*.

In general, being able to discover polysemy – which is frequently observed in investigations of cultural keywords – and resolve it into distinct semantic representations can play an important preliminary role in argument analysis and evaluation, as it allows us to uncover fallacies of *equivocation* and semantic shifts in arguments. It can also play a role in evaluating rhetorical strategies such as *dissociation* (van Rees 2009), and *persuasive definition* (Stevenson 1938), which aim to partially restructure the semantic system. The study of polysemy is important to cast light on the relationship between the denotations of cultural keywords – in our case *interactive* – and its argumentatively relevant connotations.

8. *Because it's interactive.* Using corpus data to test keywords

We now move to test the status of keyword of the lexeme *interactive* by examining its behavior in arguments. In order to constitute a suitable corpus of occurrences of *interactive* in an argumentative context, we extracted texts from the World Wide Web by means of WebCorp including appropriate *argumentative indicators* in the query. According to van Eemeren, Houtlosser and Snoeck-Henkemans (2007) argumentative indicators are linguistic expressions or textual patterns that function as signs that a given argumentative move might be in progress. They need not be decisive signs or be directly connected with the move. It suffices that they exhibit, for whatever reason, a significant correlation with such a move. At this stage of our investigation it is sufficient to use relatively straightforward indicators, and the choice fell on the most obvious: the connective *because*.

Given the possible reading of *because* as introducing an argument, we can search for the string *because it's interactive* and obtain a number of

examples where *interactive* appears as the main predicate of a proposition presented as an argument in support of a standpoint – which usually appears as the proposition connected by *because*. It should be stressed here that what is meaningful in the results of this particular kind of probe of the uses of a predicate in arguments is not that we actually find these uses, nor that we find them in great number, but rather that we find a special *consistency* in the standpoints argued for. Adapting the term from corpus linguistics, we might call this consistency the *argumentative prosody* of the keyword. For instance, if we extract a string such as *because it's triangular* to investigate the use of the predicate *triangular* in arguments we find that it happens to be used to support all kinds of unrelated standpoints, as illustrated by examples (30-33).

(30) My question would be, does it hold up a lot of stuff? I'm concerned about the design **because it's triangular**. Maybe it could only accommodate people who travel light. (Extracted through WebCorp)

(31) It's an ackward area to deal with **because it's triangular** and has boundaries on each side: a chainlink fence, a brick garage and concrete stairs. (Extracted through WebCorp)

(32) And the pond, it must have been artificial **because it's triangular.** (Extracted through WebCorp)

(33) She said, this Empro pencil, however, didn't need to be sharpened and so easy to use **because it's triangular shaped**! (Extracted through WebCorp)

If we were to reconstruct the enthymematic structure of these arguments we will find very diverse major premises in which the denotation of *triangular* happens to play a role, like *There are no triangular natural ponds* for (32) or *Triangular shapes do not make spacious containers*[21] for (31), and so on. Interestingly, in all the examples triangular retains the same denota-

[21] This is, of course, a rough and ready commonsense formulation of an *endoxon*, not a meaningful statement in Euclidean geometry!

tive meaning. There is no polysemy and very little vagueness. If we look at the results of *because it's interactive* we are confronted with a completely different picture:

(34) Users are attracted to the WWW **because it is interactive**, because it is easy to use, and because it combines graphics, text, sound, and animation into a rich communications medium. (WebCorp)

(35) The use of computers in lessons is fun for my age group **because it is interactive**. My age normally like using computers. (WebCorp)

(36) Businessman Pg Anak Hj Awadi Pg Anak Latifuddin expressed his interest with the e-government's initiative, especially in the area of education. "The incorporation of ICT into the school curriculum by the Ministry of Education is good for children **because it is interactive**", he said. (WebCorp)

(37) Podcasting is an important tool that is used in the business world… It can serve as an advantage **because it is interactive**. There are more than just words to read, there is also someone or something to listen to. (WebCorp)

(38) I like this piece **because it is interactive** but does not require the user to do very much - only enter his or her name and the name of the piece. (WebCorp)

(39) Using the Promethean board is fun **because it is interactive** and we don't have to waste time. (WebCorp)

(40) Tilos Radio improves democracy **because it is interactive.** (WebCorp)

In the case of *interactive*, the standpoint argued for is unfailingly a positive evaluation: *attraction, fun, likeability, goodness, advantage, improvement of democracy*, etc. Examples (34-40) are only a small selection representative of the patterns that are repeated all over the sample of 153 occurrences that we examined. If we look for the string *because it is not interactive*, on the other hand, we land as expected on an uninterrupted series of standpoints expressing negative evaluations, such as those in (41-43):

(41) The TV is not an appropriate learning tool **because it is not interactive**. The child in front of the TV is totally passive. Children learn mainly by doing. (WebCorp)

(42) I don't think direct emailing system, as Obama's team is using, is effective **because it is not interactive**. (WebCorp)

(43) When the N Generation goes to school, it finds itself trapped in an offline space that is deadly boring. Teacher talk is boring **because it is not interactive** and only reinforces the rigidities of face-to-face conversation that the N Generation wants to free itself from. (WebCorp)

Most of the examples can quite easily be reconstructed as enthymemes where the word *interactive* plays the role of *terminus medius*. We will provide just an example of reconstruction using (35), reproduced below:

The use of computers in lessons is fun for my age group **because it is interactive**.[22]

Reconstructing the underlying syllogism, we get:

Major premise: (*endoxon*): ***Interactivity*** is fun. (for our age group)
Minor premise: (*datum*): The use of computers in lessons is **interactive**
Conclusion: The use of computers in lessons is fun (for our age group).

In most cases, the major premise of the syllogism seems to be directly supplied by a very generic and readily available evaluative *endoxon* evoked by the keyword:

People think: interactivity is good/fun/attractive

[22] It might be useful to provide a minimum of context for this example. We have a student who writes a text called "My ideal teacher". At a certain moment she says that "teachers should not be boring", and while remembering one of her teachers who used to propose games in classroom, she states that the use of computers in lessons is fun because it is interactive. Nothing else can be grasped from the co-text in order to help us to understand what she means by interactive in this argument.

Interestingly, it is very difficult to go beyond that in the reconstruction, even if we look at the broader co-text of each example. Typically, the arguers do not feel the need to provide further support or a rationale linking the denotative meaning of interactivity with the evaluation. Very often what they mean by *interactivity* remains remarkably vague, such as in (36).

In some cases the use of the word *interactive* remains completely puzzling at the level of denotation. For instance, it is not at all clear in (37) why one should consider interactive to listen to audio recordings (*podcasting*) – or, in (43), why exactly face to face conversation should be presented as rigid (!) and contrasted with interactivity.

In sum, what we find is that *interactive* is used consistently in the examples to effect the shallow recovery of a small constellation of related evaluative *endoxa* that readily provide a sufficient major premise notwithstanding the vagueness of the denotation.

The vagueness of the predicate *interactive* and, more specifically, the difficulty to establish *minimal conditions* for something to be truthfully called *interactive* – which we discussed in the previous section – suggested a further foray of corpus exploration aimed at examining the use of *interactivity* in argumentative strategies based on dissociation.

9. Concerning real interactivity: keywords and dissociation

Dissociation, as a rhetorical technique was first discussed by Perelman and Olbrechts-Tyteca (1958). Van Rees (2009: xi) summarizes their treatment as follows:

> [...] through dissociation, a notion that originally was conceived as a conceptual unity is split into two new notions, each of which contains only part of the original one, one notion containing the aspects of the original notion that belong to the realm of the merely apparent, the other containing the aspects of the notion that belong to the realm of the real.

As observed by van Rees (2009: 15), a dissociation amounts to more than a simple conceptual distinction, as it always involves the introduction of a *new definition* of the "real" notion, and the establishment of an *evaluative*

hierarchy between the two notions. These features make dissociation very close to the rhetorical technique that Stevenson (1938: 331) calls *persuasive definition*:

> A "persuasive" definition is one that gives a new conceptual meaning to a familiar word without substantially changing its emotive meaning, and which is used with the conscious or unconscious purpose of changing, by this means, the direction of people's interests.

For Stevenson (1938: 333), persuasive definitions become both easier and more powerful when applied to a particular class of words:

> There are hundreds of words which, like "culture", have both a vague conceptual meaning and a rich emotive meaning. The conceptual meaning of them all is subject to constant redefinition. The words are prizes which each man seeks to bestow on the qualities of his own choice.

Having observed that *interactivity*, and, in particular, the adjective *interactive* are highly polysemous and vague words that are nonetheless associated with persistent positive connotations, it is natural to consider them as privileged targets of rhetorical maneuvers based on persuasive definition and on dissociation aimed to appropriate their connotations, to claim exclusive ownership of them, or to deny access to them to the antagonist. We decided to investigate this matter, again, by using a simple argumentative indicator to construct a suitable query to extract corpus examples. This time it was: *That's not real interactivity* and a few other syntactic variants of this expression.

This allowed us to collect a striking variety of examples where, as expected, *interactivity* is the target of dissociations. However, instead of briefly presenting a larger sample of these uses, we prefer here to focus on a single striking example, considered in the context of the online discussion where it appears:

(44) The person 'conversing' with Milo believes it because they want to believe it. All it takes is for someone to step even slightly outside the bounds of the simulation for suspension of disbelief to be shattered. **That's not real interactivity**, it's the illusion of interactivity – the lack of meaning

and substance clearly shows that they're well into uncanny valley territory. (Extracted through WebCorp, original URL: www.ausgamers.com/forums/consoles/thread.php/2751146)

Example (44) appears in a post in an Australian forum dedicated to (computer) gaming in response to a video showing a virtual boy (Milo) "interacting" with a real girl. The video sequence is part of a technology demonstration of Peter Molyneux's *Project Natal* – a Microsoft technology development project aimed at creating "interactive" games involving fictional characters that possess "emotional AI" and are thus able to react properly to the users' facial expressions, tone of voice and gestures. In introducing the demonstration sequence, game designer Peter Molyneux says:

(45) I want to say one thing to you: that's the word **interactive**. Surely, we've been making **interactive** games for twenty years, haven't we? Or, thirty years. Well, no. I don't think we have. Because that thing in our hands, that thing that has evolved in our hands, that got more and more complex, got more and more buttons, actually has been the biggest barrier to what we want to create. Because what we want to create is a connection to our worlds.[23]

In (45) Peter Molyneaux makes a dissociation putting the minimal conditions of *real interactivity* at a very high level, never reached before, and identified vaguely with the possibility of having a "connection" with a virtual world. He focuses on the nature of the interface between the user and the system: the artificial nature of the interface is a barrier to "real" interactivity. So, only a natural interface that adapts to the user's facial expressions, tones of voice and gestures can ensure true interactivity. The dissociation involves a persuasive definition, because Molyneux focuses the attention of the audience on facial expression, tone of voice recognition, gaze coordination, and not, for instance, on whether the virtual boy Milo is able to answer meaningfully to unscripted questions by the user – which apparently he is not (Grant 2009). Interestingly, the poster of (44) does not directly question Molyneux's dissociation or his persuasive definition of interactivity. Instead

[23] The video containing both Molyneux's speech and the demonstration sequence is available on YouTube, at http://www.youtube.com/watch?v=HluWsMlfj68&feature=player_embedded (January 29, 2010). The transcription is ours.

he goes one step further and makes another dissociation between *real interactivity* and the *illusion* of it. He associates illusory interactivity with the so-called *uncanny valley* (Mori 1970) – the strongly unpleasant emotional effects provoked by very realistic simulations of human life that nevertheless fail to be fully believable and remain recognizable as "counterfeit".

Observing the facility with which the participants in the discussion move the bar of the minimal conditions of *interactivity* in these explicit negotiations of the denotative meaning of the word helps to cast a brighter light on a number other examples encountered in the previous section – such as (37) and (43) where no explicit dissociation and redefinition are present but implicit shifts of denotative meaning are performed by the arguer for strategic reasons: to extend to *podcasting* the positive connotations of interactive media in (37), or – rather outrageously – to boldly deny these same connotations to face-to-face conversation in (43).

10. Conclusions and perspectives

In this paper we have tried to show, through the analysis of the words *interactive* and *interactivity*, the productivity of a notion of cultural keywords as *termini medi* in enthymematic arguments pointing to implicit premises that are *endoxa* in the cultural common ground. Although the analysis could be still sharpened by the recourse to additional corpus evidence collected through the recourse of a wider variety of argumentative indicators, we believe that what we have offered is sufficient to support the claim that this notion of cultural keywords has a double relevance:

From the viewpoint of anthropological semantics, it offers a principled and concretely applicable procedure to test a candidate cultural keyword, gaining in the process not only important insights on its "raw" persuasive force, but also a clearer picture of the set of values and beliefs it evokes.

From the viewpoint of an argumentation scholar aiming to establish an accurate reconstruction of an argument relying crucially on unexpressed premises, it offers a method for empirically checking on a culturally relevant corpus that the implicit premises he attributes to the arguer are indeed recoverable or at least partially justified in the cultural common ground.

In fact, we believe that this article also makes a methodological point,

which has perhaps a broader import: argumentation scholars interested in analyzing and critically evaluating real texts should pay more than a cursory attention to lexical semantics, and should also rely on rich corpus data collected and queried using methods inspired by corpus linguistics.

As regards *interactivity*, these methods have led us to conclude that the keyword is polysemous and vague, and yet displays the same connotation across its uses, evoking simple evaluative *endoxa*, which provide access to suitable major premises that are recovered, so to say, at a very shallow level. This analysis is confirmed by the ease with which dicussants make interactivity the target of dissociation strategies.

It would be certainly too strong and simplistic to hurry and say that a massive fallacy of equivocation, operating at an intertextual level, ensnares all talk of interactivity in the contemporary information society. Yet, we believe that this exploratory analysis opens up interesting possibilities with respect to the critical scrutiny of cultural *endoxa*.

As authoritative accepted opinions, as defined by Aristotle, *endoxa* function as social values that are bound to guide actions and decisions in human affairs. It is precisely because of this social significance that studying *endoxa* is crucial to argumentation theory. Amossy (2002a) has recently observed that modern attitude towards *endoxa* is, to say the least, ambivalent. There certainly are those who continue the Aristotelian line, like Perelman and Olbrechts-Tyteca (1958) and Amossy (2000b) herself, and present them as the ideas and beliefs that constitute the indispensable common ground of a given society, fundamental not only to construct basic interpersonal interactions, but also, at a larger scale, the whole life of a cultural community. Yet, the negative strand seems to be the prevalent one. Terms like *commonplace*, *idée reçue*, *cliché*, *stereotype* all refer to the *endoxon* with a broadly negative connotation. And, from Flaubert's *idées reçues* to Barthes' *myth* (2000 [1957]) and Foucault's *discours* (1971), *endoxa* are equated with ready-made thoughts and cultural constructions tacitly accepted and broadly repeated, close to a kind of dominant ideology that hinders ordinary people from developing their own ideas. In this case, all that is endoxos is considered banality and may lead to alienation.

Looking back at what we have done in this paper we can see that, rather than advocating a wholesale rejection of the *endoxa*, we have moved from the Aristotelian recognition that *endoxa* represent an indispensable start-

ing point for argumentation within any cultural community, and ended up developing some theoretical and methodological tools that have showed to be relevant for critically evaluating their quality. Much remains to be done, but the direction seems promising.

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Non-cogency misjudged: Reconstructing a three-stage mistaken argumentation-process

La no-cogencia subestimada: Reconstruyendo el error de tres etapas del proceso argumentativo

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Abstract: Good intentions are not enough for cogent argumentation. Cogency is inherently epistemic and it is sustained in some prior conditions. First, it is necessary to establish the universe, or subject-matter, the discourse is about. Second, statements that convey information of that subject-matter must be coherent, they should *say* something. Third, chains of reasoning leading from one statement to another must be correct. These three conditions feature cogency as it is realized in argumentative practice. This article tracks non-cogency misjudged when combining concepts into a pseudo-thought and "linking" it in reasoning. Mistakes involved are uncovered by means of a two-vector analysis. The first arrow exhibits the *unfortunate* genealogy of a three-step sequence of errors. It begins with a category mistake due to crossing the extension of the concept of the universe of discourse established. It continues with a fallacy due to a gap in reasoning, and ends in a paradoxical argumentation. Paradox is a clear indication that something needs to be revised in our web of beliefs. The converse arrow regains cogency by de-constructing the previous vitiated process. It exhibits a way out of the paradox so obtained by re-classifying it as a fallacy due to the prior commission of a category mistake. Thus, cogency is restored and its whereabouts sharply recorded.

Key words: Argumentation, cogency, category mistake, fallacy, paradox.

Resumen: Las buenas intenciones no bastan para la argumentación cogente. La cogencia es inherentemente epistémica y requiere además ciertas condiciones previas. Primero, es necesario establecer el universo, o asunto, acerca del cual se diserta. Segundo, los enunciados que proporcionan información sobre dicho tema deben ser coherentes, deben de *decir* algo. Finalmente, el engarzado de las cadenas de razonamiento que llevan de un enunciado a otro debe ser correcto. Estas tres condiciones caracterizan a

la cogencia tal como se sustenta en la práctica argumentativa. Este artículo persigue los extravíos de la cogencia en la anterior triada y su posterior recuperación por medio de un análisis de dos vectores. Se presenta una descripción de ida y vuelta que incluye el primer trayecto de la genealogía de una cadena de errores. Se comienza por un error categórico debido a una transgresión en la extensión del concepto de universo de discurso que se trate, a través de una falacia debida a un gap en el razonamiento, hasta una argumentación paradójica. Una paradoja señala que nuestra red de creencias necesita ser revisada. El trayecto inverso de la de-construcción de este proceso viciado nos conduce de la paradoja hasta su reclasificación como falacia debido a un previo error categórico. De este modo, la cogencia se recobra y sus paraderos quedan adecuadamente registrados.

Palabras clave: Argumentación, cogencia, error categórico, falacia, paradoja.

1. Terminological preliminaries

In this paper a statement is a sentence in a given interpreted language, whether natural or artificial. People use statements to say something (the proposition expressed) and to convey information about something (the universe or subject-matter referred to). Successful communication among human beings requires the good practice of cogent argumentation. People use argumentations to obtain knowledge whenever some previous knowledge –whether deductive or inductive– is available. An argumentation is a three part process composed of a set of premises, an intermediate chain of reasoning, and a conclusion aimed at. Argumentation is cogent or fallacious. This notion of argumentation is clearly participant-relative. A cogent argumentation is an argumentation in which its intermediate chain of reasoning shows that the conclusion aimed at follows from the initial premise-set when it does. A fallacy is an argumentation whose intermediate chain of reasoning is flawed. Explaining some of the whereabouts of cogency in this paper requires the technical concept of premise-conclusion argument. A premise-conclusion argument is a two part system composed of a set of propositions (the premise-set) and a single proposition (the conclusion). Arguments are valid or invalid. Notice that a premise-conclusion argument does not involve any thinker. Philosophically speaking, "argument" is a purely ontic concept without any reference whatsoever to thinkers or reasoning. Thus, we can discuss validity or invalidity of a given argument *per se*, but argumentations are cogent or fallacious with respect to intelligent beings. Humans produce

argumentations by generating intermediate chains of reasoning between premises and conclusion of a given premise-conclusion argument the validity or invalidity of which is under investigation. Notice also, that a fallacious or non-cogent chain of reasoning in a given argumentation does not inform the issue as to the validity or invalidity of the corresponding "binding" premise-conclusion argument. Thus, in the present paper, no fallacy is an invalid argument and *vice versa*. Finally, the term 'cogency' shall be used in two different but related contexts. Given the right conditions, cogency is present whenever a compelling combination of concepts leads to the expression of a thought or proposition. For present purposes, it is immaterial whether cogency is understood as *grasping a thought*, when there is a thought to be grasped in the first place, or whether cogency is understood as *expressing a thought* when there is a thought intended to be expressed. Likewise, cogency may also be coherently predicated of chains of reasoning. Aristotle was the first thinker to indicate that in a given cogent chain of reasoning each of its steps is obtained by means of already *immediately validated* arguments; i.e., perfect syllogisms whose validity was already known by the thinker. Quine (1970/1986) calls these "visibly sound". This way of considering cogency as applied to concrete chains of reasoning is conceptually prior to rules of inference. Rules of inference are derivative and can be simply taken to be equivalent classes of concrete arguments, already known to be valid, which share the same form. As Corcoran (1989: 36-38) indicates, the real issue here seems to be how cogency of immediately validated arguments is possible. Both sides of the deep issue of how cogency of simple thoughts and of immediately validated arguments is possible shall require a further paper. In this article cogency is used as a criterion applied to discriminate propositions from pseudo-propositions and deductions from fallacies. Moreover, cogency is relative to a cognitive agent, whether an individual or a community of thinkers.

Tradition indicates that cogent argumentation requires careful attention of the moves of the mind towards concepts, statements, and reasoning. These three building blocks are necessary stages in accomplishing a cogent argumentation and their first-grade quality is not negotiable. *Misjudging* a defective argumentation *as cogent* clearly indicates that reason lost track in judging at least one of these three elements. Thus, the present analysis points at errors in judging cogency. It begins by considering a category-mistake

followed by a fallacy or a gap supervenient on that fallacy, to end with the emergence of a subsequent paradox which indicates that some mistaken move in the previous triad went unnoticed or misjudged. This unfortunate sequence has the potential to generate false beliefs. Belief revision is obtained by a de-constructive process leading to cogency and good judgment.

2. Pseudo-thoughts misjudged as cogent

A discourse –whether a monologue or a normal conversation– presupposes people engaged in it with the purpose of effective communication. In order to enhance effective communication among the speakers, it is necessary to establish the topic, subject matter, or universe of discourse, that is, the class of objects that are presupposed by the context of the conversation. In this connection it is often said that a given speaker who did not establish her topic or universe of discourse "does not know what she is talking about". We do not need to know many things about the subject-matter of a given discussion, but we must know what the subject-matter is. The importance of the universe of discourse tends not to be noticed until some sentences are taken out of context or there are new persons joining the discourse who are unaware of the universe that has been established. For example, the statement 'Every square is a double square' is true in the universe of plane geometrical figures, but it is false in the universe of natural numbers. The main assumption of this paper is that category mistakes are relative to the universe of discourse established. More precisely, a category mistake or incoherence arises when the proper extension of the category-class corresponding to the concept of the universe of a given discourse is trespassed by incoherent predication. This means that each predicate has a range of applicability within which it holds true or false and outside of which it may become senseless. This viewpoint clashes with Frege's for whom the proper range of applicability for predicates is universal. However, it is natural to restrict the topic of a coherent discourse and this is the predominant conception in contemporary semantics. It is important to notice that the concept of the universe of discourse plays the role of logical subject in the statements of that discourse. Misunderstanding a concept, due perhaps to insufficient experiential mastery of it, or perhaps misidentifying it, very often leads to non-sense. Sometimes apparently cor-

rect or well-formed combination of that concept with another may cover up incoherence. For purposes of illustration, consider a toy-example: The property of being red is *coherently* predicated of a certain rose in the universe or category-class of flowers. The proposition to the effect that that rose in the given category-class possesses that property is either true or false. The property of being red is *incoherently* predicated of a number in the universe or category-class of natural numbers. There is no proposition to the effect that a certain number in the given category-class possesses that property. Similarly, there is no proposition to the effect that a certain number in the given category-class does not possess that property. On this assumption, a category mistake provokes a fallacy for lack of cogency whether in the initial, middle or final step in the intermediate chain of reasoning. Category mistakes due to incoherent predication in the previous sense are often qualified as "sortal mistakes". A sortal mistake in this sense is "out of the game" sort to speak. This characterization is conservative in the sense of preserving bivalence of the underlying logic and in granting that philosophical tradition witnesses incoherence in striving for intellectual expansion. For more involved and common mistakes of this sort, take the use-mention mistake, a mistake which consists in taking an expression for the thing named by it and conversely. Some ways out of the "Liar sentence" are good illustrations of the present idea that a category mistake is non-sense rather than plain falsity. Likewise, consider the composition-division mistake which consists in predicating a certain property of a genus only applicable to each of its members, and conversely. Some ways out of the Russell's sentence exemplify this case but not all of their proposed solutions follow the present idea that a category mistake is non-sense rather than plain falsity. It may be suitable to qualify these two previous cases as "type-mistakes," since some sort of conceptual hierarchy is obliterated. Thus, prima facie, there are category mistakes in "extension" (sortal) and there are category mistakes in "depth" (type). For a recent re-consideration of the composition/division mistake see Eemeren, F. H. van and Garssen, B. (this journal 2009). The important thing for present purposes is not to loose *from sight the* fact that it is people who make mistakes. Therefore, it is people who make category-mistakes. These seem to depend on a sort of deficient comprehension of the concept of the universe of a given discourse, whether sortal or stratified. This deficiency may also be due to lack of knowledge or even inattention.

3. Fallacies misjudged as cogent reasoning

Needless to say, no alleged classification for fallacies is definite, much less formally and materially adequate. It may also be handy to distinguish sophisms, which involve intentionality on the side of the arguer, from fallacies, which in the present sense are just mistakes. For present purposes, a fallacy is a flawed chain of reasoning.

Category mistakes often provide grounds for committing a certain fallacy or mistake in reasoning. To characterize it, let us remind ourselves that any step of cogent reasoning operates from premises or previous steps towards a conclusion aimed at. Each of these must be a statement expressing a thought or a proposition. In other words, it is propositions, or derivatively statements, that stand in the logical relation of implication. Category mistakes neither imply nor are they implied by any proposition. How do incoherencies cause a mistake in reasoning? In this predicament, the arguer wrongly believes that she understands or grasps a proposition when, in fact, the object of her intellectual regard is non-sense. In fact, no cogent chain of reasoning ends nor does it begin with a category mistake. In other words, a category mistake does not "hook up" nor is it "hooked up" in any cogent chain of reasoning. Notice that by premise-addition one cannot remedy a fallacy which is due to the presence of a category mistake. The only way out is to retract; i.e., to take something back. But, of course, prior to this, the agent must acknowledge that cogency has been lost, even though *then* she was not aware of it. In a sense, this is a sub-case of a *non sequitur*. Tradition often pictures a *non sequitur* as involving two cases: when the argument used in the chaining of reasoning is valid *per se*, but not known to be valid by the thinker, and when the argument used in the chaining of reasoning is invalid *per se*, but not known to be invalid by the thinker. Whenever a category mistake arises, cogency fails. But it should be clear that no linking argument is available in the first place, since a category mistake is incoherence. Incoherence is no proposition, and arguments are composed exclusively of propositions. Often, this unfortunate concatenation of errors ends in a paradox. Let us see how this works.

4. Paradoxical argumentations and outcomes

The Quinean *web of beliefs* comes as a useful metaphor to understand the dynamics of the epistemological enterprise and the essential role cogent argumentation plays in its expansion. The typical move here is to settle a given hypothesis. In its present sense a hypothesis is a proposition not known to be true and not known to be false. When an agent deductively tries to accept or reject a given hypothesis, the method is either to show that it is true by proving it deductively as logical consequence of premises already known to be true, or to show that it is false by deducing a conclusion know to be false from the hypothesis alone or from the hypothesis together with other premises all known to be true. The first way of settling the truth of the given hypothesis results in a successful argumentation realizing the deductive-method, and the second way of settling the falsity of the given hypothesis results in a successful argumentation realizing the hypothetic-deductive method. However, even granting hard work, expanding the web does not come out that smooth all the time. Frequently, the attempt to reduce a given hypothesis to propositions already accepted involves more or less shocking surprises, as in the case of paradoxes.

For present purposes, a paradox for some agent **x** at time **t** is an argumentation with respect to which **x** believes that its premises are all true, **x** believes the conclusion to be false, and **x** believes the intermediate chain of reasoning to be cogent. Since no set of true propositions implies a false proposition, it is clear that paradoxes are symptoms that some wrong belief has been held. Thus, the meaning of term 'paradox' is unsuccessful or defective. Paradoxes presuppose at least one belief bound to be changed. Paradoxes are *transient* argumentations, because sooner or later they are bound to be reclassified by **x**, as a result of revising one previously held belief. The thinker then engages in the process of checking or expanding the available evidence, so as to be capable of either reassuring or changing at least one of the previous three beliefs. If the change of belief is with respect to the truth of the premise-set, then the paradox vanishes and the argumentation is reclassified as a [indirect] "deduction-candidate". If the change of belief is with respect to the conclusion, then the paradox vanishes and the argumentation is reclassified as a "proof-candidate". If the change of belief is with respect

to the cogency of its chain of reasoning, then the paradox vanishes and the argumentation is reclassified as a "fallacy-candidate". For present concerns, only the last outcome matters.

It is interesting to note that most of the characterizations and classifications of paradoxes in the current literature are given not by looking at the nature of paradoxes, but by looking at the ways which led out of paradoxes. Thus, according to Quine (1966/97), paradoxes can be "upsetting", "surprising", (even "comic") etc. All these expressions make evident elliptical reference to the intended audience. He also indicates that his initial account "stands up pretty well. But it leaves much unsaid". Surprisingly, Quine does not provide any further hint on the issue of the nature of paradoxes in his relational sense, but rather gives a taxonomy classifying three ways out of the paradoxes, or three ways of re-classifying a given paradox. He never says how they are generated, nor does he discuss what makes the result upsetting or surprising. Quine appears to be oblivious to the step or leap in the development of a given discipline in which there are many things going on, both in the scientific community and in each of the minds of its members. At least this much unsaid remains so, and the reader is confronted not with a study of paradoxes, but rather with an analysis of their possible outcomes. Roughly, under his solution-criterion, Quine classifies paradoxes as veridical, falsidical and antinomies. A veridical paradox is an argument (an argumentation in the terminology of this paper) in which the conclusion is actually true, although it was previously believe to be false. A falsidical paradox is an argumentation in which at least one of the premises is false, but previously believed to be true. Here, Quine merely indicates that in some cases falsidical paradoxes are just fallacies, but he reminds us that fallacies often lead either to true or to false conclusions. Finally, an antinomy in Quine's characterization is a paradox in which some previously important and held belief must be dropped, despite its paradigmatic entrenchment and the sociological impact caused by such a revision. For a detailed study along similar lines of solution-types for paradoxes, see Cuonzo (this journal 2009).

5. Lost and found

For purposes of a reconstructive analysis, uncovering non-cogency misjudged

as cogency, and in order to show how the process of detecting it takes place, we focus on the specific case in which the initial doubts of the thinker lead to suspicion with respect to the cogency of the chain of reasoning in the give paradoxical argumentation which was erroneously taken to show that the conclusion followed from the premise-set. Suspicion that something went wrong in the chain of reasoning gradually emerges until the mind judges that perhaps one of the alleged initial premises, one of the intermediate steps, or even the conclusion, did not expressed a thought, but incoherence. Thus, there is a gap in the chaining process and, thus, the chain of reasoning is now believed to be non-cogent. There were after all, no compelling reasons for combining concepts into a thought in the first place, and from this initial non-cogency no linking chain of reasoning can be cogently constructed**.** Every day discourse often exhibits this kind of slip due sometimes to use-mention mistakes. For example, "Our research project is about meanings of love. Hence we should pursue a semantic approach and recovered it from prevalent psychological accounts". Here the premise is incoherent. In the next case one intermediate step is incoherent: "Aristotle *embraces* middle points. Richard does not understand how something as imperfect as youth gets transformed into the perfection of maturity, and maturity gets itself degraded into elderliness. Aristotle, Richard thinks, is anxious in his attempt to highlight maturity over the other ages and thus he amplifies that term. Thus maturity is an amplified and perfected term". These two examples are sortal-mistakes in our terminology. Finally, "Since humans are numerous and Socrates is a human, Socrates is numerous" exemplifies a type-mistake.

Moreover, *reasoning* in history goes first as phenomenon or "data" to be studied by argumentation as discipline and this paper tries to be faithful to some of its detected subtleties. For more technical and historically relevant illustrations it is useful to point out that Tarski thought the Liar string was ill-formed and hence not an interpreted sentence or statement due to the object/meta-language crossing, which is "responsible" for the family of liar-type paradoxes. According to Tarski's diagnosis, the problem lies in taking something that looks like an [interpreted] sentence to be a sentence, without actually being a sentence, because it does not express a proposition, but incoherence. Tarski's solution amounts to a paradox-avoiding restriction based on a suitable hierarchy of languages. In this hierarchy, predicating truth or falsity of a given sentence of a certain *n*-level language must be ex-

pressed by a sentence belonging to an n+1 level language, the first language being a sublanguage of the second. Thus, Tarski's way out of the paradox amounts to considering the Liar argumentation a fallacy. The thinker doing the reasoning from premises to conclusion mistakenly took a premise, the Liar-sentence, to be a sentence expressing a proposition. Hence, no cogent reasoning was actually developed, since no proposition was available in the first place to allow a cogent step-by-step deduction. There was no first link in the chain of reasoning, due to a category mistake. Hence, there was no [cogent] reasoning, but an inferential gap. Of course, according to the previously stated definition, once the subject realizes his wrong acceptance of the reasoning performed, the paradox vanishes or is re-classified as a fallacy, because as it was already said, it involved a flaw in the chain of reasoning. Notice in this connection that the words 'rejecting' or 'dismissing' should not be taken to mean "changing the previous belief with respect to the premises to the opposite belief" but rather as meaning "there was no *real* belief to begin with. A category-mistake was misjudged as a proposition (a [cogent] thought), and based on it a fallacy was misjudged as cogent reasoning. In this connection, it is interesting to notice the following conundrum: on the one hand, if linguistic stratification were really necessary, then the paradoxical Liar argumentation would in fact be a fallacy, but –hence–, no contradictory conclusion was cogently produced. On the other hand, if the reasoning leading from premises to conclusion of the paradoxical Liar argumentation were cogent, then linguistic stratification would not, after all, be necessary. An analogous well-known example comes from Russell's own solution to his set-theoretic paradox. Since the Russell paradox begins from a string of characters intended to express a proposition to the effect that there is a set of all non-self-member sets, if type-theoretic stratification were really necessary, then the paradoxical Russell argumentation would in fact be a fallacy, but –hence–, no contradictory conclusion would be cogently produced. On the other hand, if the reasoning leading from that premise and known tautologies to a contradictory conclusion were cogent, then type-theoretic stratification would not, after all, be necessary. These puzzles simply vanish when paradoxes and their causes and solutions are suitably relativized to both, time and people.

6. Final remarks

Category-mistakes, fallacies, and paradoxes have a bi-dimensional nature in the sense of being participant-relative and context-dependent. Under the previous analysis, there is no category-mistake, no fallacy, and no paradox *per se*. Some ramifications of cogency-deviation have been identified and in each case, some of the underlying reasons for misjudging non-cogency were uncovered. Later the thinker restores the equilibrium in the web by detecting an inconsistent set of beliefs. In the present case, one of the wrong beliefs of the thinker derives from mistakenly judging cogency of a chain of reasoning, and cogency among the concepts in something that looked like a proposition, but was not. It is generally believed that we learn more from our mistakes than from plain success. In a way, it is precisely their cognitive value as learned-lessons which sustains and improves our own epistemic capacities for cogency recovery.

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Since Plato's days, most logicians had a phobia of rhetoric. The opposition rhetoric/logic or argumentation/demonstration (respectively their instruments) gives expression to a fundamental cultural opposition which separates a family of ideas such as truth, science, certainty, demonstration (with which demonstrative logic is identified) from falsehood, opinion, mere probability, plausibility, appearance, fallibility (with which rhetorical argumentation is associated).

Until half a century ago, rhetoric and logic seemed at first sight to belong to two different universes. Speaking of rhetoric generally aroused either a defensive reaction, as if directed against an enemy, or an attitude of superiority, as if directed towards a miserable thing. In contrast, speaking of logic excites feelings of safety and respectability. Owing to this radical revision of the concept of rhetoric –which currently designates a mode of insincere and bombastic speech, that is, a type of artificial, declamatory or highly wrought language–, roughly onwards from the middle of the 20th century until today, the term also indicates a "rationale of informative and suasory discourse" (Bryant 1953, 401) or "a permanent subjunctive mental mode" (Struever 1970, 155) or even "all of language, in its realisation as discourse" (Valesio 1980, 7).

However, it seems not entirely true to say that, once a logical proof can be obtained, rhetoric is no longer required. For example, rhetoric can produce

true understanding not only by deceptive emotions, but by "taking us through layers of implications to show us that, though uncertain, a statement may be provisionally accepted because of its premise" (Meredith 1966, 25). On this basis, Meredith provides an interesting revaluation of rhetoric: He affirms that the opposition between science and rhetoric in terms of certainty vs. probability is owed to a fundamental misconception of the very nature of science. Also scientists must admit that science, whether or not it requires rhetoric, always has to do with the probable and improbable, while certainty is the domain of theology.

What misleads is the confusion between the persuasive aspect and the explicative feature of rhetoric: Rhetoric is less an art of persuading the listener in order that he/she may accept as true some statements which are logically inconsistent, than an art of lucid exposition, an art and an act which are part of logic and of scientific demonstration. For Meredith, to demonstrate means to explain a phenomenon, but also to explain this explanation to someone else (The latter task is called "exposition"). "[T]hose who have profound and vital things to say will often abandon prose altogether and exploit the freedom of poetry. Scientists communicating with one another do essentially the same, but their poetry is mathematics" (*ibid.,* 24).

If we want to free ourselves from the suspicion that this is a "modernist" thesis, we could quote a passage from the first chapter of the first book of Aristotle's *Rhetoric*. There, it is said that some men are persuaded not by the arguments of science, but by the common notions (*Rhetoric* I, 1, 1355 a). The exemplar Aristotelian definition of rhetoric as "an ability, in each case, to see the available means of persuasion" (*Rhetoric*, I, 1, 1355 b 27: G. A. Kennedy 1991 transl.) is an example of a definition which determines the nature of the *definiendum*. And it is worth to point out that Aristotle tries to model and to found his rhetorical theory on logic, as long as he can. One possible conclusion is that "the same intelligent man uses different logics in different situations, maintaining a rational consistent behaviour" (Dalla Chiara Scabia 1974, 114).

Until the first half of past century, the general attitude of contemporary Italian culture towards rhetoric was, with very few exceptions, characterized by its literary conception, its insufficient theoretical reflection on it, and a lack of original contributions. Today, there is a need and a demand for logic and for argumentation. In 2009, an informal society of Italian scholars from

different fields of research who take an interest in logic and in argumentation and who promote the theory and the practice of argumentation has been constituted, called *Ergo* (http://www2.unipr.it/~itates68). One of its members, Andrea Gilardoni, the Italian translator of books by Frans van Eemeren and Rob Grootendorst such as *Leren argumenteren met Vader en Zoon, En Spoedcursus in twintig lessen* (1996) and *A systematic theory of argumentation* (2004), recently published a new, namely the third edition of *Logica e argomentazione. Un prontuario* (*Logic and argumentation. A handbook*). It is a complete reference of almost 500 pages which successfully combines logic and rhetoric, demonstrative and argumentative proof. The book comprises a more traditional part on classical deductive, on formal logic, on inductive logic, on syllogism and its rules, and a more original part on the use and abuse of statistics, on identifying unexpressed premises and on different kinds of inference, on good definition and especially on fallacies, including application-exercises on speech acts as well as a glossary.

This handbook is an excellent didactic survey and a collection of rules and formulae for free reasoning, with clear examples and useful exercises, a course book that an Italian student of logical argumentation and "argumentative logic" needs to have, also in order to skim it when necessary. We can find in it a sort of healthful and restorative recovery of the Medieval *Logica Maior*, that is the logic whose task is not merely to grant the rigour of its own formal 'logos', but to verify, to substantiate and possibly also to ensure the truth of its propositional contents, which *Logica Minor* of necessity does not take into account.

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1. Introduction

Dissociation in Argumentative Discussions. A Pragma-Dialectical Perspective, by Agnes van Rees from the University of Amsterdam was published in Springer's "Argumentation Library" series, whose editors are Frans H. van Eemeren (University of Amsterdam), Scott Jacobs (University of Arizona), Erik C. W. Krabbe (University of Groningen), and John Woods (University of Lethbridge). As the author states in the preface, the monograph is "the conclusion of ten years of research into dissociation", part of which was published in "journals, conference proceedings, anthologies" (p. v). The book consists of three parts organized in 11 chapters, preceded by an introduction, and followed by references and an index of authors.

The book interestingly follows van Rees' provisional project of studying dissociation which she had been sketching in one of her first talks on the concept at the Fourth OSSA Conference in 2001. To quote from this programmatic talk:

> First, there is the conceptual problem that the difference between, in general, making a distinction and, particularly, dissociation is not always sharp (...). A first task would be conceptual clarification of the notion of dissociation, which would also deal with the relationship between dissociation and precization and between dissociation and definition.

> Next there is the question in which ways dissociation becomes evident in argumentative discourse. This necessitates research into the various indicators that may signal the use of dissociation. Third, the question arises in which ways the technique can be used dialogically in the negotiations between protagonist and antagonist to bring about the solution of a conflict of opinion. This implies empirical study of the contexts in which dissociation is used in argumentative discourse. Fourth, one may ask what the dialectical and rhetorical consequences of the use of this technique are. This means that a functional analysis of the use of the technique must be undertaken. And, finally, one might want to know under which circumstances the technique is dialectically sound. This would imply a study of dissociation from a normative dialectic point of view. (van Rees 2001)

The concept of dissociation was introduced to the field of argumentation theory by Perelman & Olbrechts-Tyteca (1958) in their *New Rhetoric* (from now on NR). Consequently, the monograph opens with an introduction (pp. xi-xv) which, starting from an example identified in ordinary discourse practice, reminds the reader of the definition of dissociation in the NR. Dissociation is an argumentative technique through which

> "a notion that originally was considered by the audience as a conceptual unity is split up into two new notions, each of which contains only part of the original one, one notion containing the aspects of the original notion that belong to the realm of the merely apparent, the other one containing the aspects of the original notion that belong to the realm of the real." (p. xi)

Details are also given on previous studies on dissociation by Grootendorst, Lynch, Schiappa, Stahl, Zarefsky, and an inventory is provided of various discursive settings in which dissociation has been identified by argumentation scholars: political debates, deliberations of ordinary people in everyday life, law ("a prime area for the use of dissociation", p. xii), science, philosophy.

The author also points to the facts that dissociation "has been studied mainly from a rhetorical perspective" (p. xiii) and that the approaches to this technique have been consequently "monologual". This remark allows her to introduce the specific perspective adopted towards dissociation in this study,

i.e. "dialogual aspects of the use of dissociation", "the use of dissociation in argumentative discussions", and to the methodological approach used, in the framework of the "theoretical perspective of Pragma-Dialectics ... that studies argumentation as part of a critical discussion, in which discussants jointly try to solve a difference of opinion" (p. xiii).

Thus, most of the examples of dissociation discussed and analyzed throughout the book are taken "from all realms of public and private life", coming "from such diverse sources as newspapers, television shows, websites, Parliamentary Reports, and ordinary circumstances" (p. xiv). This provision of examples, together with the analyses accompanying them, is one of the most important assets of the study, which can thus be seen as a sample of Discourse Analysis practice extending work on the same topic previously done by argumentation scholars interested in less 'ordinary' discursive contexts.

2. The book

The first part, 'Dissociation', deals with: 1. 'The Concept of Dissociation' (pp. 3-15); 2. 'The Uses of Dissociation' (pp. 17-30); 3. Indicators of Dissociation (pp. 31-44). The chapters are concerned with "what dissociation is, how it is used in various fields of discourse, and how the use of this argumentative technique in discourse can be identified." (p. 45)

Chapter 1, on the concept of dissociation, is an extended revised version of section 2 (The notion of dissociation) of van Rees (2003). We find: A) a presentation of the concept as one may find it in NR, where dissociation is the other technique which, together with association, is used in all argumentative discourse instances; B) a parallel between dissociation and other concepts it is related to: semantic shift, euphemism, distinction, dichotomy, precization, definition; C) the main characteristics of dissociation, which distinguish it from the previously mentioned concepts.

These characteristics complement the *definition of dissociation*, according to which a) there are two speech acts inherent to dissociation (distinction and definition); b) a value hierarchy is established through dissociation; c) dissociation resolves an incompatibility or a contradiction. Without getting into the details of the presentation provided by van Rees, I find it necessary to

quote the definition she suggests at this point which is further refined and illustrated throughout the book with an impressive amount of examples:

> [D]issociation is an argumentative technique in which, in order to resolve a contradiction or incompatibility, a unitary concept expressed by a single term is split up into two new concepts unequally valued, one subsumed under a new term, the other subsumed either under the original term, which is redefined to denote a concept, reduced in content, or under another new term with its own definition, the original term being given up altogether. (p. 9)

To illustrate the concept and its functioning, the author uses discourse fragments excerpted from everyday interactions or reported in the media, and also borrowed from other authors, then analyzing the latter in the perspective she adopts on dissociation. The wide variety of example sources characterizes the presentation and the analysis of the concept and its functioning throughout the whole study.

In chapter 2, on the uses of dissociation, the author mentions a number of discursive examples of dissociation mainly chosen from philosophical texts, law contexts, political argumentative situations, and the discourse of science. Van Rees achieves both a general overview of the most relevant pieces of literature on this topic, by recalling the various illustrations of the concept provided by other scholars, and a genuine look at the previously mentioned realms of social life, in order to confront the reader with other samples which add to the diverse practical occurrences of dissociation.

Not only does the author provide such illustrations borrowed from existing studies or identified by herself, she also discusses the practical, pragmatic gains of using this technique and its effects upon the audience or the addressee. As pointed out also in NR, "dissociation serves to reconstruct the conception of the world of the audience and to do so in particular directions, serving certain interests and promoting certain views." (p. 29)

Chapter 3, on indicators of dissociation, is an expanded revised version of van Rees (2003/2005). This chapter points to another important characteristic of dissociation: the technique allows that

> a statement containing a proposition in which the reduced version of the original concept occurs can ... be denied, while a statement containing a proposition in which the split-off concept occurs can ... be asserted (or the other way around), without running into a contradiction. (p. 31)

This feature of dissociation allows the analyst to identify the technique at work in discourse. Thus, the author discusses in turn the linguistic clues indicating: a) distinction and definition as speech acts constitutive of and functional in dissociation; b) the application of a value scale to the two terms of the dissociation; c) the contradiction or the paradox that dissociation aims to resolve. Of course, these linguistic clues can occur all at one time or in various combinations. One important aspect is underlined by the author, namely that both distinction and definition have to be connected in some way with the application of a value scale and must solve a contradiction. Otherwise they simply are a distinction or a definition without giving way to dissociation.

The second part of the monograph, "Dissociation as a Discussion Technique", endeavours to "elucidate how dissociation can be employed in argumentative discussions for enhancing or diminishing the acceptability of standpoints." (p. 45) This part is organized into five chapters: 4. The Model of Critical Discussion (pp. 47-54); 5. The Confrontation Stage (pp. 55-65); 6. The Opening Stage (pp. 67-75); 7. The Argumentation Stage (pp. 77-86); 8. The Concluding Stage (pp. 87-90).

In chapter 4, on the model of critical discussion, the reader is introduced to all the important elements required to understand the approach to argumentation proposed by pragma-dialecticians. The first section of this chapter is an excellent introduction to the tools of pragma-dialectics. In the second section of this chapter (pp. 47-51), dissociation is discussed in relationship with the suggested model and with the recently introduced new concept into this framework, that of strategic manoeuvring.

With reference to this concept, the author advances the idea that "dissociation can enhance both the dialectical reasonableness and the rhetorical effectiveness of the various moves in each stage." (p. 52) This is a valuable assertion since dissociation has been usually seen in the literature from the rhetorical side and its advantages have been put in relationship with its re-

semblance to persuasive definition. With this approach, dissociation is seen as a device which "may add to dialectical reasonableness" on the grounds of its constitutive acts of distinction and definition.

The overall effect is that it enables "the speaker to execute the various dialectical moves in the successive stages of a critical discussion with optimal clarity and precision, making the statements in which it occurs optimally well-defined and well-delineated." (p. 52) Van Rees also discusses the rhetorical effectiveness of this technique which she sees as a result of: a) the possibility dissociation offers to the speaker to "present a particular state of affairs in a certain light" (p. 52); b) the freedom it provides the speaker with to perform it "in such a way as to rule out any further argument." (p. 53)

Chapter 5, on the confrontation stage of a critical discussion, looks at dissociation in the three successive dialectical moves characteristic of this stage. Van Rees conceives of dissociation as being used in bringing forward a standpoint in order "to delineate a particular standpoint against the background of other possible standpoints." (p. 55) With respect to rhetorical gain, since dissociation delineates the standpoint more clearly, it also makes it easier to defend and harder to attack.

The technique can be used by the antagonist in bringing forward criticism against a standpoint in order to also become the protagonist of the opposing standpoint and – if this is the case – of a new particular standpoint, with the rhetorical effect that the initial standpoint is negated, set aside, and "replaced by a standpoint that is more to the liking of the anatagonist-turned-protagonist" (p. 58), with the new standpoint toning down the initial standpoint. This makes dissociation "particularly fit for use in situations in which the speaker wants to counter down the accusations against himself or his associates." (p. 59) In the third dialectical move of the confrontation stage, the protagonist may use dissociation in order to maintain or withdraw the initial standpoint. The protagonist may maintain the initial standpoint by using dissociation since it allows a presentation of the original standpoint in a particular interpretation. Consequently, the standpoint may be maintained in this interpretation, but withdrawn in another one.

Rhetorically, dissociation allows the protagonist to "grant a concession on an interpretation of his standpoint that is presented as marginal, while taking a firm position on an interpretation that suits him better and that is pretended as crucial." (p. 61) Dissociation contributes to the dialectical

move of withdrawing a standpoint by enabling the protagonist "to give a particular interpretation of his standpoint (which is presented as crucial) in which, this time, he withdraws it, while retaining it in another, irrelevant, interpretation." (p. 62)

According to van Rees, the difference of opinion disappears, with the rhetorical result that this allows the protagonist to back out from his commitment to the initial standpoint by making it "look like this is not the case and he is not acting inconsistently, at all." (p. 63) In other words, the protagonist may, by using dissociation, withdraw his standpoint by pretending that "in the crucial aspects of the matter, he agreed with the opponent from the beginning." (p. 63)

This potential of dissociation makes it, in the author's opinion, "highly suitable" for "resolving inconsistencies" (p. 63) and, more generally, with any dialectical move of the confrontation, "an excellent means for manipulating the 'disagreement space' (Jackson, 1992) in which the discussion will be conducted." (p. 65) I would add, in Goffmanian terms, that this allows the protagonist to withdraw the initial standpoint by maintaining positive face, by not having face affected by inconsistent behaviour, and by escaping a possible accusation of inconsistency.

Chapter 6 is on dissociation in the opening stage – in which "discussants jointly establish the material starting points for the discussion" (p. 67).Two dialectical moves in this stage are proposing, and attacking starting points. Dissociation can be used similarly in both these moves in two ways: by introducing a dissociated term in a proposition proposed as a starting point or in one proposed as a criticism of a starting point or by introducing the dissociation itself as the very starting point or the attack at the starting point by means of a dissociative definition and/or distinction. Van Rees shows that the contribution of dissociation to these two dialectical moves is that it allows –respectively– the protagonist to delineate a particular starting point "against the background of other possible starting points" (p. 68) and the antagonist to reject the starting point initially proposed.

Another dialectical result to be valued by the antagonist is also discussed: the rejection –through dissociation– of a starting point is implicitly equivalent to the advancement of another starting point that can be used in a multiple difference of opinion when the antagonist becomes protagonist of a standpoint opposite to the initial one. In all of these four cases, the

rhetorical gains are, for the protagonist, that a starting point can be chosen which serves best the argumentative intention while ruling out other possibly embarrassing starting points, and, for the antagonist, that the starting point of the protagonist is "replaced by one that suits the antagonist better, toning down the original one" (p. 73) while dismissing the protagonist's proposal for a starting point and at the same time establishing a starting point more convenient for defending the opposite standpoint.

To the two previously mentioned dialectical moves adds a third one, consisting in reacting to criticism brought forward against starting points. This reaction can be to the effect of maintaining the starting point or of withdrawing it and, in van Rees' opinion, the dialectical contribution and the rhetorical gain are similar to those which are the case in the corresponding confrontational move. In all these situations, the speaker uses dissociation to get rid of the starting points suggested or proposed by the opponent.

Although there is no explicit mention of this, I consider that in all the moves characteristic of the opening stage, as illustrated by van Rees, dissociation works as one of the most representative strategic manoeuvres, by providing, most often by way of explicit definition and/or distinction speech acts, a new semantic and pragmatic setting for the ongoing argumentative discussion. In the examples she provides in this chapter, some of which are taken from formal, or rather institutional, contexts, dissociation works, as it were, like a 'creator' of new possible worlds, which do not belong to the belief universe of the audience before being produced discursively as such.

One of the most interesting chapters in the book, since it provides a completely new approach to the technique, chapter 7 deals with dissociation in the argumentation stage of the critical discussion, in which "the protagonist connects the starting points that have been established in the opening stage to the standpoint, by means of the application of an argument scheme", while "the antagonist criticizes the application of this argument scheme by asking critical questions." (p. 77) Since dissociation is not an argument scheme, as pointed out by other scholars (Grootendorst 1999), it can be used in this stage by the antagonist to attack the argument scheme by means of three sets of critical questions corresponding to the three types of argument schemes distinguished by pragma-dialecticians: symptomatic, based on analogy, and based on cause-effect relationship.

The protagonist can use dissociation only to respond to criticism against

the arguments put forward. Three elements can be attacked by the antagonist in the argumentation stage: the argument scheme itself in point of the type of relationship established between two terms, the first term of the relationship or the second term of the relationship.

Dissociation is used by the antagonist to attack the relationship between the two terms of the argument scheme; their relationship being declared by the antagonist to be apparent, not real, the argument itself becomes irrelevant. On the rhetorical side this results in a strong effect, the dissociation suggesting that the real characteristic, cause or analogue, although existent, has not been identified and revealed by the protagonist. Van Rees thus points to the idea that the antagonist may gain stronger grounds to benefit from the dissociation in order to also advance a new starting point consisting in the real cause, analogue or characteristic, which would allow him to also advance his own standpoint.

When used to attack the second term of the relationship, dissociation is considered to contribute to the dialectical move by providing an alternative interpretation of the second term and to achieve rhetorical gain by suggesting that the standpoint "only holds for a trivial aspect, but that it does not apply to the heart of the matter". (p. 81) Moreover, van Rees suggests that the antagonist also has some other advantage: since the attacked argument has been proved irrelevant, another argument for supporting the opposite standpoint is not needed. And again, I should add, the antagonist's positive face is maintained with no risk of accusation of inconsistency.

Third, van Rees discusses dissociation when used by the antagonist to attack the first term of the relationship by "pointing out that it is not what the argument states that supports the standpoint" (p. 83), but something else. The dialectical result is that an alternative interpretation of the first term is provided, opening "the way for the antagonist to point to an exception to the rule that is inherent in the relationship that the protagonist postulates", while the rhetorical objective fulfilled is that "the antagonist can escape a conclusion that he would be committed to on the basis of his acceptance of the argument and of the argument scheme." (p. 83)

Van Rees' noteworthy conclusion is that, in all three cases, the antagonist is enabled to posit an alternative interpretation by means of which it is established that the argument is not relevant or sufficient, while eventfully positing this alternative as an indirect/implicit defence of another standpoint.

Chapter 8, on the use of dissociation in the concluding stage of the critical discussion, points to the discussants' efforts in an argumentative exchange directed towards giving "a more precise meaning to the conclusion reached in the discussion, in such a way that the result of the discussion is most in accordance with their own point of view, and has the least unfavourable consequences for themselves." (pp. 89-90)

I interrupt this descriptive review at this particular point to question and discuss van Rees' perspective adopted in this chapter, namely that dissociation can occur in the concluding stage. We have seen, for instance, that there is no way for the protagonist to use dissociation in the argumentation stage other than to react to the antagonist's critiques and not on a free 'personal' initiative.

In the same way, I find it difficult to cope with the idea of dissociation being *used* or *introduced* or *appealed to* (as an argumentative technique) – in the concluding stage for at least the following reasons: 1) There is no longer a difference of opinion in the concluding stage, so no longer an argumentative exchange proper. The dissociation cannot then be seen as a possible contribution to the dialectical moves characteristic of this stage since the positions of the discussants are already 'stabilized' and the discussion is concluded as such. There is no longer a protagonist and an antagonist, except retrospectively. 2) Dissociation always takes a discussion (back) to the opening stage, since this stage is meant for and thus allows a change in the starting points of the discussion (I think that if dissociation takes place at the confrontation stage or at the argumentation stage, the discussion is also taken to the opening stage).

This change is most often profound and has serious implications, since what has been considered correct or true until then – with respect to notional representation or content corresponding to some given linguistic expression – is said to be merely apparent, while reality is something else, to be revealed and released by the dissociation 'author'.

With respect to these two remarks, I am quoting a couple of statements in this very study that might themselves be considered as arguments in favour of my view: a) Dissociation "always entails a more or less fundamental restructuring of our conception of reality." (p. 4) If this is so, could this restructured conception of reality turn up when an argumentative discussion is concluded? No, since at this stage the discussants should share the same

commitments and belief universe: what holds for the former protagonist now holds for the former antagonist. Yes, since these speakers, while trying to give a more refined[1] interpretation of the standpoint might discover that a new difference of opinion is the case – affecting the starting points of the just now concluding discussion – which would bring them to a new confrontational position. b) Dissociation "is meant to resolve an incompatibility or contradiction". (pp. 15, 31) Since the concluding stage of a particular discussion has been reached, the former discussants should be normally placed on equal and similar positions. If either of them makes use of a dissociation at this point, then this is because there is still some incompatibility or contradiction which, once identified, automatically leads them either to the roles of antagonistic discussants again and to the adoption of distinct opposite positions, which means that a (new) difference of opinion is the case, or to a (heuristic) collaboration to argue as a single body in favour of the need of a dissociation by implicitly or explicitly defending a (virtual) standpoint that something is the case only in appearance, while in reality something else is the case.

In my opinion, A) one may accept that dissociation takes place at the concluding stage provided it is assumed that this dissociation leads to a new discussion mainly rooted in the identification of some incompatibility. If so, then we are led to admit that such a dissociation is itself the ground for a new metalinguistic (side) discussion which will be carried on around the necessity and the grounds for modifying the given representational system. This would be a case similar to the one pointed to in the chapter on the confrontation stage and discussed in the chapter on the opening stage, namely

[1] Van Rees uses the word 'precise' in this context, which I am replacing by 'refined'. Of course the word 'precise' can be used in relationship with the word 'precision'. This is how we use it in everyday or ordinary communication. Yet, the pragma-dialectical approach to argumentation – in some particular respects – draws also on Arne Naess' philosophy. In Naess' semantic theory, the term 'precise' is used in relation with the (semantic) notion of 'precization'. Precization corresponds to the relative synonymy of two declarative sentences in the sense that the declarative sentence *b* is a *precization* of the declarative sentence *a* iff all reasonable interpretations [i.e. sentence meanings] of *b* are reasonable interpretations of *a* and there is at least one reasonable interpretation of *a* which is not a reasonable interpretation of *b*. Since this is not the meaning needed in the discussion on the use of dissociation – also on account of the distinction van Rees herself points to between dissociation and precization (see p. 13) – I consider that a proper 'formulation' to be used, in general, when speaking about dissociation, should be something like "dissociation helps a speaker provide a more *refined* presentation of the standpoint".

of a "standpoint which, as a whole, *consists of* a proposal for dissociation" (note 2, p. 55), when a (new) starting point is proposed.

Moreover, should this be not exactly the case, B) then one may accept that a dissociation occurring in the discussion is at most recalled or reported in the concluding stage. In fact, one of van Rees' examples of this type of dissociation is a reporting situation in which a third party (a journalist) advances a question on the meaning of the reported words; yet this speaker is not one of the former participants in the concluded discussion nor is his comment part of the initial communicative situation (pp. 88-89). Dissociation would then be only *recalled* and not occurring in the concluding stage.

The third and last part of the study, "The Strengths and Weaknesses of Dissociation" consists of three chapters: 9. The Dialectical Soundness of Dissociation (pp. 93-109); 10. The Persuasiveness of Dissociation (pp. 111-121); 11. An Extended Example (pp. 123-139).

Researchers familiar with van Rees' work on dissociation for almost ten years will certainly find these chapters most novel and rewarding since they round up the presentation of the topic. As well balanced as the first two parts of the monograph, this part concentrates on the possibilities of evaluating actual dissociations according to reasonableness standards and the pragma-dialectical rules for conducting a critical discussion. Subsequently, it deals with the effectiveness of dissociation.

Chapter 9, on the dialectical soundness of dissociation, discusses the requirements for dissociation to be sound and the problematic situations in which the technique may become unsound. In the first section on other approaches to dissociation the author mentions Schiappa's (1985, 1993, 2003), in whose opinion dissociation is always unsound because it involves a real definition. After the presentation of several other approaches to the soundness of dissociation, van Rees discusses requirements for the dialectical soundness of dissociation from the pragma-dialectical perspective. She thus points to procedural and material requirements.

On the procedural side, dissociation stays sound if the change in starting points adduced by dissociation is put up for discussion by presenting this change as a standpoint and/or by bringing forward argumentation in favour of this change. Such conduct, in van Rees' opinion, should usually result in performing the explicit speech acts of making a distinction and introducing a definition, which are considered usage declaratives, i.e. declarative speech

acts by means of which a new linguistic reality is created. For the concept of 'usage declaratives' see van Eeemeren & Grootendorst (1984). On the material side then, the change in the starting points should be accepted by the other discussant.

Chapter 10, on the persuasiveness of dissociation, discusses the occasions for the use of this technique, the responses to it, and the way in which audience acceptance of dissociation is obtained. Thus, van Rees identifies the following occasions for dissociation to occur: a) "the sense of unease that is a result of a clash between how things are defined and how one perceives or would wish things to be" (p. 112); b) "when a negative judgment or an outright accusation is directed against one" (p. 113) or some thing; c) the attempt to evade an accusation of inconsistency.

The negative responses to dissociation on the side of the audience are: a) rejecting the distinction; b) rejecting the value hierarchy a dissociation seeks to impose; c) rejecting the solution of the incompatibility proposed by dissociation on account of the audience's feelings concerning failure of the technique to clarify problematic aspects.

It is odd that the author should have chosen to title the book sections according to the previously mentioned audience reactions as *Accepting the Distinction / the Value Hierarchy / the Solution,* while dealing in the respective sections with responses of rejection on the part of the audience. With respect to gaining audience acceptance for dissociation, dealt with in the following section, van Rees clearly identifies the main requirements making a dissociation acceptable and persuasive in front of an audience; thus a potentially (rhetorically) successful dissociation should: a) acknowledge the audience's views; b) anticipate the need to argue for one's standpoint and replace the problematic situation by an alternative interpretation; c) be introduced authoritatively; d) provide conceptual clarification – judged by van Rees as the most important requirement especially with a critical audience.

Chapter 11 is a presentation, an analysis and a discussion of longer discourse excerpts taken from various responses of President Clinton, given in court, on occasion of the Lewinsky case. I take this to be a prototypical situation for the use of dissociation, resulting in an excellent illustration of the – not very successful, as assessed by van Rees – use of the dissociative technique. The author presents the occasion at which a particular dissocia-

tion occurred in the President's replies, its possible dialectical and rhetorical effects, its lack of dialectical soundness, its relative persuasive effectiveness. She concludes that, in this particular case, the use of dissociation was characterized by various weaknesses although, with more attention paid, it could have been made into a stronger and more successful case. The analysis is illustrative of all the various perspectives taken on dissociation throughout the monograph and an exemplary model of discourse analysis directed towards the study of dissociation.

3. Evaluation

The book is a most pleasant and useful reading, well informed by the literature and innovative in terms of the view taken to the topic. In my opinion, it is the only systematic account of dissociation so far – as I have termed van Rees' approach to dissociation as it was being developed along the several articles she published before this monograph (Gata 2007). Moreover, it may be seen as an accurate application of the pragma-dialectical approach to the study of a particular concept of primary relevance to the field of argumentation. I fully agree with Schiappa (2009: 245) that the critical questions raised by van Rees are particularly valuable for any argumentation scholar. And I also agree with the idea that the monograph "succeeds in illustrating how the analytical potential of the tools developed within pragma-dialectics can be exploited for a systematic understanding of the workings of a particular argumentative technique." (Tseronis 2009) The abundance of examples sometimes discussed from different perspectives in various chapters of the book provides the researcher with a 'panoramic' view of this long neglected argumentative technique.

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Everyday life reasoning and argumentation involve quantifying expressions that go beyond what can be captured with modern predicate logic. Typical examples include *most*, *many*, and *all except a few*. The universal quantifier (∀) and the existential quantifier (∃) of modern predicate logic may be used for the representation of propositions which are expressed by phrases like "all" and "at least one", respectively. Their practical utility for the formalization of natural language arguments or everyday life reasoning, however, is quite restricted.

The universal quantifier is too strong, as it does not allow for *exceptions* (unless these are not made explicit in the antecedent). One counterexample is enough to falsify a universally quantified proposition. Moreover, in everyday argumentation, words like "all" are mentioned, but they are often pragmatically used in the sense of "most" or "almost-all".

Likewise, the practical utility of the existential quantifier is quite restricted. Reasoning about *at least one* thing is very useful in formal sciences like mathematics (e.g., important theorems establish the (non-)existence of some mathematical objects). However, such reasoning rarely occurs in everyday life reasoning and argumentation. Therefore, reasoning systems which express and thus serve to represent reasoning with expressions whose

[1] Austrian Science Fund project *Mental Probability Logic*.

meaning "lies in between" the universal and the existential quantifier are desirable.

To build a logic that is expressible enough to capture quantifying expressions that are used in everyday reasoning requires going beyond modern predicate logic. Lorne Szabolcsi successfully built on (and improved) Fred Sommers's and George Englebretsen's *logic of terms* (1996), and combined Philip Peterson's *intermediate quantifiers*[2] and Wallace Murphree's *numerically exceptive quantifiers* (1991) in a fruitful way (see also Pfeifer, 2006, for related work developed independently). Szabolcsi calls the resulting logic "*Numerical term logic*" (short NTL).

The book contains a foreword by Fred Sommers, who highlights the reasoning mechanisms of Szabolcsi's numerical term logic and his contributions to quantification theory. After a brief introduction (first chapter), the second chapter introduces Szabolcsi's "Numerical Term Logic", his logical notation, including formalizations of various natural language quantifying expressions. "More than 4 clowns are scary", for example, is formalized by +4C+S. The book continues with a chapter on "Inference in NTL", containing several detailed proofs.

The section "Further Developments in NTL" includes various topics like existential implication, and definite descriptions. Also, relations to other systems of non-standard quantifiers (e.g., Peterson 2000 and Murphree 1991) are discussed in the third chapter. Unfortunately, there is only a very brief note on generalized quantifiers. If the author had had the opportunity to incorporate more recent work (e.g., Peters and Westerståhl 2005) this section would have been much more substantial and informative. Unfortunately, in 2002, Szabolcsi died in a tragic car accident at the age of 28. George Englebretsen edited a corrected and lightly edited version of Szabolcsi's work posthumously. A number of typos very likely stem from scanning the original document (e.g., "modem" instead of "modern" on pages 7 and 102). More careful proofreading would have been beneficial. The final four chapters contain a brief conclusion, notes, a bibliography and an index.

NTL is constructed within—but is not restricted to—the classical syllogistic framework, taking neither the existential nor the universal quantifier

[2] Sczablocsi cites a series of papers by Peterson, but not the book of 2000. The interested reader is referred to this book as it provides an overview of Peterson's work.

as basic. Rather, NTL provides a rich and unified (algebraic) framework for numerous different kinds of quantifying expressions. Examples include (i) quantifiers that handle exceptions explicitly (e.g., *all except thirty*), (ii) comparative quantifiers (e.g., *(no) more …, than …*), and (iii) fractional quantifiers (e.g., *80% of … are …*).

The expressions of everyday reasoning do usually not contain explicit numbers or percentages which, however, are extremely useful for making explicit *to what degree* the relationships among given terms hold. It is well known that humans may interpret one and the same phrase differently. This also holds for the interpretation of phrases containing quantifying expressions. Szabolcsi's NTL provides useful tools for the logical analysis of different interpretations of phrases that involve quantifiers. For example, "ten out of thirty objects having property *P*" may be interpreted as "few objects have property *P*", "many …", "more than enough …", or "not enough …" (Szabolcsi, p. 26f). All interpretations differ from each other, and so do their formalizations. Thus, NTL is rich enough to express various subjective interpretations of a wide range of natural language quantifying expressions.

Over the last 100 years, many empirical studies have investigated how people reason about classical syllogisms (e.g., Störring 1908; Chapman and Chapman 1968; Prowse Turner and Thompson 2009). Almost all psychologists took it for granted that modern predicate logic provides the gold standard of reference for evaluating the quality of human inferences. Consequently, they focused on the classical quantifiers. The present book could be used as an inspiration for designing tasks which target quantifiers that are closer to everyday life reasoning and argumentation than those designed in the framework of modern predicate logic.

The book is therefore a valuable source for anyone interested in reasoning and argumentation about quantified propositions. It is not only interesting for logicians, but also for philosophers, linguists, and psychologists working on the interpretation and understanding of quantifiers.

The major strength of this book is its clear and unified logical treatment of a broad variety of interpretations for natural language quantifying expressions. Notably, the author shows how logical validity can be determined by relatively simple algebraic manipulations. Throughout the book, the systematic application of the theory to everyday arguments highlights its practicability and the importance of Lorne Szabolcsi's theoretical achieve-

ments. The book does not provide a comprehensive overview of modern quantification theory (see e.g. Peters and Westerståhl 2005). Recent work on generalized quantifiers and the relationships to numerical term logic are missing. Nevertheless, the theory exposed in this book is self-contained, fruitful, and deserves scientific attention.

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