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DIALECTICAL TRADE-OFFS IN THE DESIGN OF PROTOCOLS FOR COMPUTER-MEDIATED DELIBERATION

Abstract: Ideal models of dialectical argumentation, such the pragma-dialectical critical discussion or Walton and Krabbe's persuasion dialogues, comprise of a set of rules that define reasonable argumentation under idealised conditions. Assuming such conditions, dialectical rules are meant to secure an orderly procedure for testing opinions. However, in actual circumstances violations of argumentative rules – identified as fallacies – can and do occur. Pragma-dialectics treats fallacies as “derailments of strategic manoeuvring”, that is, contraventions of dialectical rules for a critical discussion committed by actual arguers for rhetorical gains. Hence, the predicament of actual argumentation is a possible (but not necessary) trade-off between dialectical constraints and rhetorical opportunities. In this paper I preliminarily conceptualise a different predicament that actual arguers may face. The sets of dialectical rules proposed in ideal models of argumentation are consistent and thus unproblematic, as long as they presuppose idealised conditions. However, when put to work in actual procedures for argumentation, the rules may clash with one another. For instance, the freedom to unlimitedly criticise the opponent may hinder the progress towards rational resolution of a difference of opinion. As a result, arguers may face a predicament in which the only way to observe one of the rules of reasonable argumentation is to violate another one. I call such possible clashes *dialectical trade-offs*, because they are clashes between dialectical rules that arise in actual circumstances of argumentation. Dialectical trade-offs are practical concerns that do not undermine the general composition and usefulness of the ideal models. Yet, they point to a practical difficulty in designing consistent and applicable protocols for reasonable argumentation. I will illustrate this difficulty by contrasting two kinds of protocols for computer-mediated deliberation: Internet forums for informal deliberation and formal models of deliberative dialogues developed within the field of Artificial Intelligence.

Keywords: argumentation, Artificial Intelligence, dialectics, Internet discussion forums, online deliberation, pragma-dialectics

1. The overlapping fields of argumentation theory and computer science

Before discussing any topic pertaining to the relation between argumentation theory and computer science, a brief clarification of the senses in which both these fields can be understood is needed. Ever since Aristotle's work on analytics, topics and rhetoric, argumentation theory has traditionally been divided into three sub-fields: logic, dialectics, and rheto-

ric. Wenzel, in his widely recognised account (1979, 1990), proposes to treat logic, dialectics, and rhetoric as three distinct, though interrelated, “perspectives on argument”. Logic, in its various forms, focuses on argumentation understood as a *product*, that is, as a certain constellation of sets of claims (premises and conclusions) that lends itself to a precise, formal analysis and evaluation in terms of validity of inferences. Dialectics primarily approaches argumentation as a *procedure* which allows for a critical testing of the disputed opinions. Finally, the rhetorical perspective investigates argumentation as a situated *process* of persuasive communication, often taking place by means of embellished language.

So delineated, the field of argumentation theory seems to be overlapping with computer science first and foremost in its logical and dialectical facet. Computers, in their basic function as computing machines, seem to be predestined to be of great use in supporting methods of abstract, monological reasoning. Proof theories, abstract models of argumentation, and other sub-fields of formal logic and semantics can thus prominently benefit from the opportunities given by computer systems (see Rahwan & Simari, 2009, Ch. 2–12). Some even go as far as characterising the whole area of argumentation in Artificial Intelligence (AI) as “logic continued by other means” (van Benthem, 2009, p. vii). Still, as soon as one focuses on argumentation as a communicative act – rather than purely monological act of internal reasoning – dialectical investigations come to the fore. As Wenzel characterises it, “the dialectical perspective embraces all methodological, procedural approaches to organizing argumentative discussions. The focus of this perspective [...] is on rules, standards, attitudes and behaviors that promote critical decision-making” (1990, p. 16). The purpose of dialectical inquiry is thus to analyse, evaluate, and develop procedures for argumentative discussions: “[w]ithin the dialectical perspective, the chief resources of interest are designs or plans for conducting critical discussions” (Wenzel, 1990, p. 21). It is exactly the issue of designability of argumentative interactions that strongly connects dialectical studies of argumentation to computer science. As has been noticed, new Information and Communication Technologies (ICT) have offered “massively expanded opportunities for deliberate design” and thus precipitated the “explosion of interest in the structure, organization, and conditioning of discourse” (Aakhus & Jackson, 2005, p. 411). The notion of “design” thus links the two fields: the theory and practice of designing computer systems and applications can be utilised for the purpose of creating and testing procedures for argumentative discussions. In this sense, computer science provides the tools for genuinely exercising dialectics in action.

In the use of information technologies for communicative purposes, including argumentation, three kinds of research areas can be distinguished: computer-computer interaction (see Rahwan & Simari, 2009, Ch. 13–17), human-computer interaction (see Sears & Jacko, 2008), and computer-mediated communication between humans (see Herring, 2010). Researchers working in the first of these areas properly belong to the fast-growing field of AI, in that they model possible communication among automated software agents. Such models are based on highly formalised, programmable protocols that make use of many logical insights. However, much work in AI involves design of critical argumentative exchanges (McBurney, Hitchcock, & Parsons, 2007; Prakken, 2000, 2009) and, in this sense, it also functions as an extension of dialectics, especially formal dialectics (Barth & Krabbe, 1982; Walton & Krabbe, 1995, Ch. 4). When it comes to human-computer interaction: while there are hardly any interesting developments in such areas as argumentation between humans and, say, ATM or Xerox machines (nor should there be!), some borderline cases have been of great interest to argumentation scholars. Different kinds of computer supported collaborative work (CSCW), such as group decision support systems (GDSS), in which human agents interact through a computer system have been analysed in terms of their capabilities for supporting dialectically sound procedures of argumentation (Aakhus, 2002a; Karacapiliadis & Papadias, 2001; de Moor & Aakhus, 2006; Rehg, McBurney, & Parsons, 2005). Systems for CSCW, however, can also be classified as instances of human-to-human, but computer-mediated communication. The bulk of computer-mediated communication has become part of ordinary people's everyday experience: e-mails, text messages, instant messengers, blogs, on-line chats and discussion forums, and so on, are commonly used beyond the limited scope of professional activities. While interiorised in a daily experience of millions of users, ordinary formats of computer-mediated communication have noticeable features that can be understood and analysed as constraints on and opportunities for communication and argumentation in particular (Aakhus, 2002b; Jackson, 1998; Lewiński, 2010a, 2010b). Similarly to any other type, or genre, of human communication, various modes of computer-mediated communication have been an object of rhetorical studies (e.g. Benson, 1996; Gurak & Antonijevic, 2009). Still, as protocols for argumentative discussions with explicit design features, they lend themselves particularly well to a dialectical analysis.¹

¹ Rehg et al. (2005, pp. 209–210) distinguish between different “system roles” in computer-aided procedures for argumentation; crucially, they differentiate between sys-

The goal of this paper is to identify one possibly prominent element of such analysis, which I call a *dialectical trade-off*. Dialectical trade-offs are clashes between different dialectical rules stipulated in the ideal models of argumentation, that arise in actual circumstances. In particular, actual designs of argumentative discussions, whether highly formalised or largely informal, may impeccably embody some of the ideal dialectical rules, yet do so at the expense of other rules. Employing the theoretical apparatus of the pragma-dialectical theory of argumentation, I will argue that this is clear in many computerised protocols for argumentative discussions. Dialectical trade-offs leave the designers and users of such protocols in a predicament that differs from the predicament of actual arguers identified in the pragma-dialectical concept of strategic manoeuvring. Whereas a main source of concern for pragma-dialecticians is a possible clash between “good” dialectics and “bad” rhetoric, I discuss the disconcerting clash between good dialectics and good dialectics. I do so in three basic steps. In section 2, I present the basics of the pragma-dialectical ideal model of a critical discussion and the notion of derailments of strategic manoeuvring. In section 3, I describe the notion of dialectical trade-offs. Finally, in section 4, I identify possible dialectical trade-offs in the design of some computerised designs for argumentative discussions.

2. Derailments of strategic manoeuvring: the choice between the good and the bad

The normative, dialectical core of the pragma-dialectical theory of argumentation is embodied in the model of an ideal, dialectical procedure called a *critical discussion* (van Eemeren & Grootendorst, 1984, 2004). A critical discussion is aimed at resolving the difference of opinion between arguers regarding a standpoint by means of a critical testing of the standpoint on the merits. The model specifies the stages, speech acts, and the rules governing the performance of speech acts that are conducive to critically resolving differences of opinion. Pragma-dialecticians formulate the norms of a critical discussion either as 15 rules defined in speech act terms (van Eemeren & Grootendorst, 2004, Ch. 6), or in a simplified form as a “code of conduct” for reasonable discussions, consisting of “the ten command-

tems as supports for human argumentation and systems as non-human participants to argumentation in their own right. Karacapilidis and Papadias clearly state that in the former role “by supporting and not replacing human judgment, the system comes in second and the users first” (2001, p. 260).

ments” instrumental in detecting fallacies of argumentation (van Eemeren & Grootendorst, 1992; 2004, Ch. 8). The rules, in both variants, stipulate basic rights and obligations of the parties to a dialectical discussion: the protagonist and the antagonist. According to the rules, any kind of a standpoint can be advanced and challenged, and, once challenged, it has to be defended on the basis of the procedural and material starting points agreed between the arguers. Further, the rules stipulate what counts as a sound argument (validated by a formal logical inference rule or an informal argument scheme) and a relevant criticism, as well as, ultimately, when a successful defence and attack of a standpoint occurs. In this way, the rules of a critical discussion define reasonable argumentation under idealised conditions (so called “higher-order conditions”). These conditions include free and open participation, equality among arguers, unlimited time for discussion, open access to resources (such as factual knowledge), as well as the cooperative and critical attitude of arguers, who should be persuaded solely by the force of the better argument, rather than private interests and prejudices (van Eemeren, Grootendorst, Jackson, & Jacobs, 1993, pp. 30–34). Assuming these conditions, the dialectical rules of a critical discussion are meant to secure a reasonable and orderly procedure for testing opinions.

It is clear, though, that in actual circumstances violations of argumentative rules can and do occur. Dialectical approaches identify such violations as fallacies of argumentation. The pragma-dialectical theory proposes to treat them as “derailments of strategic manoeuvring”, that is, as contraventions of dialectical rules committed by actual arguers for rhetorical gains (van Eemeren & Houtlosser, 2003). The notion of *strategic manoeuvring* is meant to grasp an important predicament that ordinary language users face in their day-to-day argumentation. On the one hand, every serious argumentation by definition involves certain commitment to reasonableness.² It means that those who advance a certain standpoint and *argue* for it in order to convince critics – rather than to win them over by various tricks and stratagems, including manipulation, threat and ridicule – make claim to certain standards of reasonableness. These standards, in the pragma-dialectical theory, are embodied in the model of a critical discussion whose norms exactly prescribe what it means to convince a “reasonable critic” by the force of the

² Pragma-dialectics defines argumentation as a “verbal, social, and rational activity aimed at convincing a reasonable critic of the acceptability of a standpoint by putting forward a constellation of propositions justifying or refuting the proposition expressed in the standpoint” (van Eemeren & Grootendorst, 2004, p. 1). Functionally speaking, crucial in this definition is the formulation of the goal of argumentation as convincing someone who is necessarily “reasonable” and, at the same time, is a “critic” which, until convinced, remains in disagreement over the standpoint proffered.

better argument. On the other hand, also by definition, argumentation is meaningfully advanced only under conditions of a difference of opinion – and resolving this difference in one’s own favour is a goal of every genuine arguer. Taking this element into account means that ordinary arguers are most faithfully approached if seen as involved in an agonistic struggle in which victory or defeat are at stake, rather than as purely rational minds aimed at a disinterested quest for truth. What matters in ordinary argumentative discussions is thus a skilful reconciliation of one’s desire to win a discussion by getting one’s standpoint accepted by the opponent, with the public expectation to do so in a reasonable way. These two distinct considerations may be neatly reconcilable (after all, there is nothing intrinsically wrong in being successful and persuasive), but they may also diverge – in which case a certain tension in pursuing both goals simultaneously may arise. This tension may be resolved by skilful strategic manoeuvring, in which the dialectical norms and rhetorical opportunities are “delicately balanced” (van Eemeren & Houtlosser, 2002). Yet, it may also lead to “derailments of strategic manoeuvring”, in which the opportunistic and at times unreasonable rhetorical aspect takes the upper hand over dialectical requirements (van Eemeren & Houtlosser, 2003).

To conclude, pragma-dialectics envisages a predicament of actual argumentation as a possible (but not necessary) trade-off between dialectical constraints of good, reasonable argumentation and rhetorical opportunities that may lead arguers astray to bad, fallacious practices: we all want to persuade others, and sometimes we do so by becoming “too rhetorical”, while losing sight of rational limits.

3. Dialectical trade-offs: the choice between the good and the good

In this section, I preliminarily conceptualise a different predicament that actual arguers may face. The sets of dialectical rules proposed in ideal models of argumentation, such as the pragma-dialectical critical discussion, are consistent and thus unproblematic, as long as they presuppose the idealised conditions mentioned above. However, when put to work in actual, less than ideal procedures for argumentation, the rules may clash with one another. Consequently, a dialectical trade-off may arise.

A dialectical trade-off is a predicament of arguers in actual communicative activities that amounts to a situation in which they are expected to simultaneously observe two (or more) dialectical norms that can hardly be observed together in concrete circumstances. Thus a dialectical trade-off

occurs between the rules of reasonable argumentation, but because of actual circumstances. In this sense, dialectical trade-offs are different from the predicament grasped in the notion of strategic manoeuvring, according to which ordinary arguers face a conflict of demands between dialectical rules and rhetorical devices (including fallacious ones) that facilitate successful persuasion. From a normative dialectical perspective, reasonable and responsible arguers should always solve the dilemma of strategic manoeuvring by opting for the dialectically correct solution, even at the cost of rhetorical success. By contrast, dialectical trade-offs present arguers with a more challenging dilemma, in which only one course of action can be taken, and the choice has to be made between following one principle of reasonableness against another. Moreover, the study of strategic manoeuvring has focused on the achievements and limitations of actors trying to solve the conflict of demands for themselves in a rhetorical situation. The way I define dialectical trade-offs does not exclusively point to problems to be solved through individual choices of arguers, but also to dilemmas inherent to the procedural designs of various argumentative activity types (see below, section 4).

These somewhat abstract considerations can be illustrated with the help of a few examples. Jacobs (2003) analyses the tension that may arise in argumentative discussions between “freedom of participation” (that is, access to forums of public argumentation) and “freedom of inquiry” (that is, opportunity to be involved in argumentation of high epistemic value). Both these kinds of freedom are dialectically significant and thus can be analysed as “two values of openness in argumentation theory” (*op. cit.*). According to Jacobs, under ideal circumstances they “converge and complement one another”: broader participation leads to a more thorough and critical public scrutiny, while epistemic openness allows for a wide array of opinions to be heard and thus stimulates active participation of all parties concerned (Jacobs, 2003, p. 554). However, constraints of actual circumstances can result in a tension between the two values. For example, time limits in broadcast media can lead to uneasy trade-offs in allocating air-time to various speakers: editors of TV debates can either maximise participation of ordinary members of audience or maximise “expert contributions” (Jacobs, 2003, p. 555). Both of these are valuable from an argumentative perspective, but cannot be achieved at the same time.

Rather more abstract, theoretical instances of possible dialectical trade-offs have been analysed by Krabbe. One of them is the problem of retraction of commitments in dialectical discussions (Krabbe, 2001; Walton & Krabbe, 1995), another, the interrelated issue of conclusiveness of argumentative procedures (Krabbe, 2007). Krabbe’s dilemma is the following:

In constructing a precise, formalised model of a dialogue, such as a critical discussion (Walton and Krabbe use the term “persuasion dialogue”), one has to decide to what extent the previously incurred commitments of arguers are retractable. On the one hand, “retractions are needed to bring critical discussions to a successful conclusion” (Krabbe, 2001, p. 144), since a conclusion can only be reached after one of the arguers admits that her position was untenable, and thus retracts it. On the other hand, “if someone keeps denying propositions just asserted, or keeps hedging or evading commitment whenever it appears [...] you can never get anywhere with this arguer” (Walton & Krabbe, 1995, p. 10), since there is no base on which the challenged position can be objected to. To tackle this dilemma, Walton and Krabbe (1995, Ch. 4) develop two formal systems of dialogue rules: Permissive Persuasion Dialogue and Rigorous Persuasion Dialogue. The former is permissive in that it allows retractions, with special conditions attached; the latter is rigorous, as retractions are limited to an absolute minimum (one can, and indeed has to, retract the defeated position). Shortly, “permissive dialogues can be soft on retraction, whereas more rigorous ones need to stick to stricter rules” (Krabbe, 2001, p. 146).³ So constructed, permissive dialogue accentuates the maieutic function of critical dialectical exchanges. Its chief goal is to comprehensively explore argumentation for and against a disputed position, and by doing so reveal unexpressed premises and other deeply seated, yet implicit, commitments (or, as Walton and Krabbe call them, “dark-side commitments”). Factors of time efficiency and tangibility of outcomes are less of an issue in realising the maieutic task. By contrast, rigorous dialogue functions primarily as a quick and efficient method of deciding whose (sub-)position holds on the basis of the current state of explicit dialectical commitments. Again, both these are dialectically relevant outcomes that often cannot be reached at the same time.⁴

A similar dilemma in the construction of critical dialectical procedures has been analysed by Krabbe (2007) in terms of “predicaments of the concluding stage” of a pragma-dialectical critical discussion. He expounds this predicament as follows:

³ By virtue of Rule 12, the pragma-dialectical critical discussion seems to belong to the permissive type of dialectical dialogues: “The protagonist retains throughout the entire discussion the right to retract any complex speech act of argumentation that he has performed, and thereby to remove the obligation to defend it” (van Eemeren & Grootendorst, 2004, p. 153). All the same, arguers cannot deny or retract premises that belong to the set of accepted starting points.

⁴ Walton and Krabbe’s solution to this dilemma is to build a theoretical model in which a rigorous dialogue is “embedded into” a permissive one (1995, pp. 163–166). This, however, is a theoretical solution that cannot always solve problems of actual argumentative discussions.

An argument may seem conclusive, but then the antagonist may come up with new doubt and call into question an element that was previously thought to be uncontested. Similarly, a seemingly conclusive attack may be undercut when the protagonist suddenly sees a new possibility for argumentative defense. Thus there is not much conclusiveness about attacks and defenses being or not being conclusive as long as some party can still add some contribution. (Krabbe, 2007, p. 9)⁵

What Krabbe views as a potential impediment to concluding critical discussions, is at the same time defined in the ideal model as a critically reasonable “optimal use of the right to attack and defend” (see rules 10 and 11 of a critical discussion: van Eemeren & Grootendorst, 2004, pp. 151–152). Making use of these two rights, Krabbe suggests, may thus go against an orderly progress towards a reasonable resolution. Similarly to above, Krabbe’s point is a theoretical one. Yet, it becomes of practical importance as soon as one wants to implement an actual procedure for argumentative discussion. Should one aim at an efficient resolution of a difference of opinion and thus prevent such inconclusiveness by putting in place rigid procedural rules and time constraints? Or rather promote an optimal expansion of the disagreement space in which every possible argument and criticism can be voiced without much concern for a timely completion of a procedure?

4. Loose protocols vs. formal systems for computer-aided argumentation

Dialectical trade-offs, or dilemmas, discussed in the previous section come to light in the design of procedures for actual argumentative discussions taking place in less than ideal conditions. Features of design of argumentative activities, be them televised public debates, parliamentary discussions, or medical consultations, present arguers with unique opportunities for having reasonable, dialectical encounters. This pertains particularly to computer-mediated formats for argumentative discussions which are explicitly designed through technological choices and thus draw out special at-

⁵ However, as Krabbe admits (2007, p. 7), theoretically speaking, in a resolution procedure proposed by van Eemeren and Grootendorst (2004, pp. 143–151), the conclusiveness of argumentation hinges on the successful performance of the *intersubjective procedures*: if the protagonist manages to build his case for the standpoint from arguments checked and accepted in these procedures (i.e., the “fixed inputs”, as Krabbe calls them), then he may conclude discussion in his favour.

tention to the ways interaction is mediated. Every argumentation design has a certain – stronger or weaker – preference structure built into it. Such structure makes some options for solving the choice-dilemma related to a given dialectical trade-off more likely to be followed by arguers involved in an activity designed in a particular way.

Researchers interested in investigating the impact of the design of computerised protocols on the shape and quality of argumentation have noted that various systems are successful in fulfilling different argumentatively relevant functions of communication: exploring positions and reasons regarding a disputed issue, coming to a collective decision, or creating a community of experts (Aakhus, 2002a; de Moor & Aakhus, 2006). Every different argumentation design thus accentuates some aspects of argumentative interactions, while downplaying others. For instance, the tools of the systems for “issue-networking” “emphasize opening up lines of argumentation as opposed to closing or limiting lines of argumentation” (Aakhus, 2002a, p. 126). In this way, their design involves a potential dialectical trade-off between extensive and conclusive argumentation.

This trade-off is even more pronounced in various types of informal online discussion forums. Such forums, whether in the guise of Usenet newsgroups or ubiquitous Web-forums, are characterised by a minimal design, which allows for asynchronous and typically threaded discussions taking place by means of messages (posts) similar to e-mails. No formal procedures or strictly formulated and enforced rules govern interactions in such fora. This has a significant impact on the shape of argumentative interactions (Lewiński, 2010a). Here, I focus on but one argumentative aspect of online discussions – their open-endedness.

The rules of most online discussion fora do not support, let alone guarantee, any kind of conclusion to discussions. This means that there is no technologically or institutionally prescribed way of settling disputes in this very type of argumentative activity. Rather, discussions simply fade away without any explicit conclusive results, as soon as users lose their interest in them. Moreover, since online discussions are open-ended, participants to these discussions are by no means obliged, or even expected, to come to any sort of explicitly pronounced decision or agreement on the matters discussed. This is in sharp contrast to the computer-mediated Group Decision Support Systems (Aakhus, 2002a; Karacapilidis & Papadias, 2001; de Moor & Aakhus, 2006; Rehg, McBurney, & Parsons, 2005). As described by Aakhus, the goal of one type of design of such systems is to “funnel” the multi-party argumentative discussion “into a flow from broad differences toward an acceptable conclusion” (de Moor & Aakhus, 2006, p. 97).

Special functionalities – such as evaluating arguments by voting or automated weighing (see Karacapilidis & Papadias, 2001) – are available to users of GDSSs in order to facilitate efficient, time-constrained collective decision-making. Neither such functionalities, nor even time constraints, are programmed into the discussions taking place in informal online fora. As a result, there is always room for a new argument or a new critical reaction to an argument, and any form of coming to a final conclusion may be infinitely postponed. (Of course, discussants may at a certain point explicitly terminate their line of argumentation one way or another, but this would be an empirical incidence rather than an institutional requirement.) The design of such informal fora thus instantiates the theoretical problem raised by Krabbe in his discussion of conditions for concluding critical discussions.

This lack of a tangible, procedurally defined outcome has been viewed as an unwelcome characteristic of online discussions. Critics have pointed out that political discussions which are not explicitly concluded, such as online discussions discussed here, do not bring about any concrete institutional results and are thus futile and pointless. Analysts such as Davis (1999) and Wilhelm (1998) bemoaned online discussions' incapacity to secure "intersubjective agreement" leading to "collective action" (Wilhelm, 1998, p. 316). However, these critics apply a decision-making paradigm or, as they call it, a "problem-solving understanding of conversation [...] geared towards articulation of common ends" (Wilhelm, 1998, p. 329), as a model for evaluation. Yet, this model does not exactly apply to informal political online discussions, since they are not expected to facilitate decision-making but informal opinion-formation (Lewiński, 2010a, Ch. 5). In other words, many political scientists criticise this type of discussions for what they are not meant to be.

From the perspective of the model for a critical discussion one may ask, however, if paradoxically the lack of external pressure on having the discussion ended in a prescribed way and limited time may not enable an extensive critical testing that would approximate the procedures stipulated in a critical discussion? Indeed, as I argued elsewhere (Lewiński, 2010b), informal online forums allow for a thorough public scrutiny of the standpoints advanced. Such scrutiny may be realised through various forms of collective criticism, in which opponents of a given standpoint join forces to critically examine this standpoint.

Taking such considerations into account, one can discern the mechanism of a dialectical trade-off in the design of such informal online discussions. Arguably, they facilitate extensive exploration of the disagreement

space, and thus careful critical testing of standpoints and arguments. In particular, when the inventiveness of a single critic of a given standpoint is (temporarily) limited, others may (spontaneously) step in and lend support to her/his criticisms. This, however, may come at a cost of inconclusiveness. Open-ended, pseudonymous, and collective argumentative exchanges are prone to the perils of distributed, or even diluted, responsibility. If anyone can leave a discussion at any time, strict regulation and moderation is lacking, and there is no prescribed way of closing discussions, then no single person may be willing and able to act as an agent able to carry the burden of proof successfully from the confrontation to the point of coming to a reasonable conclusion, and thus to the point at which a difference of opinion is resolved (Lewiński, 2010b). Clearly, then, in terms of dialectical values, the design of informal online discussions tilts towards the unrestricted critical openness of examination among “common people”, rather than disciplined, efficient, and conclusive decision-making supported by expert contributions.

Problems of quite the opposite nature are faced by the designers of well-regulated, formalised protocols for computer-aided argumentation and decision-making. McBurney et al. (2007), who develop a formal protocol for an argumentative deliberation dialogue between computerised agents, speak even of an inconsistency (rather than merely a trade-off) between the dialectical requirements that a good, reasonable protocol should meet:⁶

Essentially, this inconsistency arises because of the need to meet two desirable, but conflicting, objectives in the design of a protocol: freedom for the participants and orderliness of the resulting dialogues. By the very act of defining a protocol for dialogues, we are constraining the freedom of the participants in some way and are imposing some structure on the interactions between them. Because we seek to define a framework within which deliberation dialogues between computational entities can occur, our task, as designers, is to strike an appropriate balance between these conflicting objectives. (McBurney et al., 2007, p. 118)

McBurney and colleagues’ method of tackling such “conflicting objectives” is to design a protocol that unequivocally defines the types of allowable and required locutions, as well as sequential rules, yet also opens room for participant’s freedom of choice. The latter is difficult to achieve in well-defined,

⁶ McBurney, Hitchcock and Parsons (2007, pp. 115–118) detect this inconsistency using the 18 principles of Rational Mutual Inquiry proposed by Hitchcock. While somewhat differently formulated, Hitchcock’s principles can easily be rendered in pragma-dialectical terms, and the other way round.

disciplined procedures. One of the elements of freedom that McBurney et al. propose is the possibility to freely retract one's commitments: "we permit participants to make utterances that contradict their own prior utterances, or the utterances of others, and to retract prior utterances" (2007, p. 106). Part of such flexibility, however, can be explained through the nature of the deliberation dialogue, in which participants' (possibly shifting) preferences of one course of action over another may be as crucial as factual knowledge. For related reasons, participants are also free to bring in various issues that they deem relevant in addressing the "governing question" that opens deliberations (*should we take action q?*). Furthermore, following Walton and Krabbe's idea, McBurney et al. extend the freedom of participants by allowing them to embed in their deliberations various other types of dialogue, such as persuasion dialogue, in which proposals, preferences and facts can be tested in a dialectical exchange of pros and cons.

Designers of computerised systems for argumentative discussions thus point to the contradictory problems of over-determination and under-determination. On the one hand, the formal procedures should not be too tightened, for this may stifle free exploration of pros and cons. This is certainly detrimental to any dialectical activity, and may prove disastrous in actual argumentative processes by eliminating some reasonable, yet not so easily supportable options (see Rehg et al., 2005, p. 221). On the other hand, the lack of sufficient regulation can undercut the possibility of reaching tangible results on the basis of orderly exchanges. A solution to this dilemma should be a well-balanced system for argumentative exchanges that stimulates extended critical dialectical exchanges among participants and, at the same time, has clearly defined decision-making capabilities (Karacapilidis & Papadias, 2001, p. 261).⁷

5. Conclusion

Dialectical trade-offs described in this paper are practical concerns that do not undermine the general composition and usefulness of the models of idealised dialectical procedures. Rather, the analysis of some dialectical trade-offs points to practical difficulties in designing consistent and

⁷ Ultimately, however, the question rests on human factors: "How well participants of diverse backgrounds and capacities make actual use of this formalism in concrete contexts of use remains an open research question to which AI researchers are sensitive" (Rehg et al., 2005, p. 219).

applicable protocols for reasonable argumentation. The notion of dialectical trade-offs seems useful, since it gathers under one conceptual label a set of clearly interrelated challenges that have thus far been treated separately on a case-by-case basis. It may also allow for making a step towards considering certain “priority relations” in incorporating various dialectical rules into actual procedures for argumentation. For instance, in some circumstances, it is more vital to realise the maieutic function of a dialectical encounter by exploring the scope and depth of arguments behind each conflicting position, than to reach a conclusive resolution that would unequivocally promote one position as the most defensible from a dialectical perspective. Conversely, in other circumstances the practical goal of making a reasoned yet timely decision, calls for prioritising the rules that enable an orderly progress of a discussion towards an imminent conclusion. Such distinctions seem to be clear in many commonly experienced argumentative activities. Philosophical and ideological debates do involve thorough exchanges of arguments and criticisms, yet often they cannot be reasonably expected to cease. Legal procedures may take years to conclude, but typically return results that are, arguably, established “beyond reasonable doubt”. Practical deliberation leading to a decision regarding the best course of emergency action in case of a fault of a nuclear reactor cannot last longer than minutes, or hours at the most, but still the decision is expected to be taken on reasonable grounds. All such argumentative activities can be, and sometimes explicitly are, supported by means of computerised protocols for discussion. Throughout this continuum of argumentative practices, positions and arguments are advanced and criticised, and thus critical dialectical exchanges are exercised in each case. Yet, different elements of the dialectical system of norms are accentuated or even traded off. Analysts and designers of actual procedures should be sensitive to such differences.

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