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Is There a Role for Adversariality in Teaching Critical Thinking?

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Abstract: Although there has been considerable recent debate on the topic of adversariality in argumentation, this debate has rarely found its way into work on critical thinking theory and instruction. This paper focuses on the implications of the adversariality debate for teaching critical thinking. Is there a role for adversarial argumentation in critical thinking instruction? Is there a way to incorporate the benefits of adversarial argumentation while mitigating the problems?

1. Introduction

There has been considerable recent debate on the topic of adversariality in argumentation. On the one hand, it has been argued that argumentation is, by its nature, adversarial in that it involves a confrontation between arguers arguing opposing positions, and, further, that such a confrontation of opposing views is essential for arriving at the best judgments. On the other hand, some theorists have pointed out that such an adversarial framing can be problematic in terms of encouraging aggressive modes of discourse that can interfere with rational exchange. In addition, the imperative to win that is inherent in adversarial argumentation may well eclipse the goal of coming to a reasoned judgment, undermining co-operation, open-mindedness, and a willingness to concede to the strongest reasons.

Although there has been a growing interest in adversariality in argumentation theory, this debate has rarely found its way into work on critical thinking theory and instruction.[1] The issue

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[1] One work which does deal with the issue of adversariality in critical thinking instruction is Catherine Hundleby's (2010) discussion of problems with the adversary paradigm in the teaching of fallacies.

addressed in this paper is: how does this debate apply to critical thinking? Is there a role for adversariality and adversarial argumentation in education for critical thinking?

2. The educational project

In order to tackle the issue of the role of adversariality in critical thinking instruction, it is necessary, first, to establish what the goals are of critical thinking instruction. We have argued elsewhere (Bailin & Battersby 2016a) that the primary goal of critical thinking instruction should be to develop in people the ability and the habits of mind or virtues relevant to making reasoned judgments on significant issues, often of a complex nature, and to engage in reasoned interchange and dialogue.

There are a number of contexts in which this goal is central:
i) individual inquiry and decision-making: making judgments and decisions about issues and controversies which people encounter, for example political issues (Should our country accept more refugee claimants? For whom shall I vote?); social issues (Should there be physician-assisted dying? Should assault rifles be banned?); scientific issues (Should you have your children vaccinated? Is GMO food safe?). This would include making judgments about arguments one reads and written back and forth argumentation.
ii) group deliberation: engaging in deliberation and making judgments and decisions in group situations, for example in juries and in educational, professional and community contexts
iii) persuasion: in person argumentation between two or more individuals trying to persuade the others of the rightness of their position.

All these contexts require the capacity to critically evaluate reasons and arguments on various sides of issues as well as the habits of mind or virtues necessary for doing so in an open-minded and fair-minded way. In addition, cases ii) and iii) require the ability and propensity to engage in rational and productive dialogue, to make a reasonable case with the appropriate level of confidence, to listen to the arguments of others, and to modify or change one's position when warranted by the arguments. All these contexts involve a consideration of conflicting views. Thus questions regarding the role of adversariality are relevant to all of them.

3. The adversariality debate

3.1 Pro adversariality

3.1.1 Argumentation is by its nature adversarial

Theorists on one side of the debate argue that argumentation is by its nature adversarial in that it involves a confrontation between arguers arguing opposing positions (Govier 1999). As Govier states:

> It would appear that in any controversy there must be proponents and opponents of various views. Insofar as we are engaged in a controversy, we will be arguing with others who disagree with us and are, in that sense at least, our opponents or antagonists (p. 247).

Govier further claims that argumentation involves the belief that the opposing position is mistaken and that this, in turn, entails the belief that the person holding the opposing position is wrong, and that, with respect to the correctness of the position, they are one's opponent (Govier 1999, p. 244). Aikin (in a 2011 paper) supports this oppositional framing, maintaining that we argue with others because we believe that our views are correct and theirs are not and that those who disagree with our views are wrong and need correction (Aikin, 2011). Indeed, numerous theorists have pointed out the ubiquity of this adversarial paradigm in philosophy (Moulton 1983) and in argumentation more generally (Cohen 2015). Casting the participants in argumentation in the roles of proponent and opponent with the goal of prevailing in the argument is a common way of framing the practice.

3.1.2 Epistemic advantages of adversariality

The argument is not, however, simply that argumentation is, by nature, an adversarial practice. It is argued, further, that this adversarial practice has epistemic advantages – that such a confrontation of opposing views is essential for arriving at the best judgments. Zarefsky, for example, argues that the prospect of prevailing in an argument motivates people to produce stronger reasons than they would on their own (Zarefsky 2012). And Aikin makes the point thus:

it is in the enacting of the debates, the attempts by each side's proponents to make the best case, rebut the opponent's counter-arguments, and lay out the best criticisms of the alternatives that we gain an understanding of an issue (Aikin 2011, p. 260).

The argument is that the rigorous debate at the heart of adversarial argumentation results in the laying out for consideration of the best case for opposing views, the strongest objections and counter-arguments, and the most forceful rebuttals. This makes it more likely that the best supported view will prevail.

There is, in fact, considerable support for the view that the consideration of alternative views and opposing arguments is crucial for coming to reasoned judgments (Finocchiaro 1994; Perkins 1989; Perkins et al. 1983). Such a consideration of alternatives is important because fully evaluating a theory or view is a comparative enterprise, requiring the weighing of evidence and arguments for and against the various alternative views (Kuhn, 1991; Bailin & Battersby, 2009, 2016a). Evaluation, as Kuhn argues, is meaningful only in a framework of comparison (pp. 266-267). In this context, the generation of counter-examples and counter-arguments is indispensable as it plays a crucial role in the evaluating of one's own views in comparison with alternative views and allows for the revision of existing beliefs (Kuhn 1991). Kuhn again: "Paradoxically, to know that a theory is correct entails the ability to envision and address claims that it may not be" (p. 171).

There is also considerable evidence, however, that individuals, on their own, are generally not very good at generating opposing arguments and considering opposing views. Much current research in cognitive psychology has demonstrated the ubiquity of myside bias, involving a failure to consider alternatives and to fairly and adequately evaluate arguments with which one disagrees (Perkins, 1989; Perkins, Farady, & Bushey 1991; Perkins & Tishman 2001; Stanovich 2011). It appears that people are generally much better at evaluating and critiquing the arguments of others than they are at evaluating their own reasoning. They tend, for example, to have a limited ability to come up with arguments against positions that they hold and in generating counter-examples to their own views (Mercier 2016; Mercier & Sperber 2017):

When people reason on their own, they mostly find reasons that support their preexisting beliefs (myside bias), and they are not critical toward these reasons (laziness). As a result,

they are unlikely to revise their own beliefs, whether or not these beliefs are accurate (Mercier, Boudry, Paglieri & Trouche 2017, p. 6).

It is through the practice of argumentation, however, that these tendencies can be countered.

Thanks to reasoning, senders can provide arguments to support their messages, arguments that can be evaluated by receivers so they can decide whether to accept the message. By discussing and evaluating one another's arguments, people may end up accepting a point of view that they initially deemed implausible or unpalatable (Lombardi, Nussbaum, & Sinatra 2015). (Mercier, Boudry, Paglieri & Trouche 2017, p. 5).

The epistemic benefits of argumentation are borne out by the success of some forms of group deliberation. Groups, properly constituted, tend to be much better at making reasoned judgments than individuals, group members compensating for each other's limitations and correcting each other's cognitive biases (Mercier 2016; Mercier & Sperber 2017). Such benefits only accrue in groups in which there is a confrontation of conflicting views and in which participants feel free to express those views and critique the views of others. Group deliberation in which there is a lack of disagreement or a reluctance to express differing views can result in the amplification of errors, the reinforcement of existing beliefs, and an increase in commitment to poor decisions (Janis1982; Schultz-Hardt et al. 2000, 2006; Sunstein & Hastie 2015).

What the pro adversariality view rightly highlights is the epistemic value of disagreement and the importance of mutual critique.

3.2 Problems of Adversariality

3.2.1 Aggressive modes of discourse

The adversarial framing of argumentation also presents some risks, however. One of these relates to the modes of discourse it encourages. Numerous theorists have criticized the dominance of battle and sports metaphors in argumentation and the type of aggressive discourse which it can engender (Lakoff & Johnson 1980; Blair 1987; Moulton 1989; Ayim 1991; Cohen 1995; Govier 1999; Rooney 2010; Hundleby 2013). These modes of discourse may exclude women and

socially marginalized groups (Moulton 1989, Ayim 1991, Tannen 1998) and can interfere with reasonable and productive interactions and with rational exchange (Hundleby 2013, p. 240).

It has been argued, however that adversarial argumentation need not result in aggressive modes of interaction. Govier refers to such behaviours as *ancillary adversariality* and suggests that it is not a necessary part of argumentation. Adversariality can, she argues, be kept to a logical and polite minimum (Govier 1999), a type of adversariality which she calls *minimal adversariality*.

3.2.2 Oppositional framing

The proposal for minimal adversariality, although it does address the issue of aggressive language and modes of interacting, is nonetheless problematic in accepting the framing of the enterprise in terms of opponents and winning. Govier states, for example, "When we argue for a claim, we at the same time, and necessarily, argue against an envisioned opponent, one who does not accept the claim" (p. 243).

This slide from "arguing *for* claims" to "arguing *against* people who disagree with those claims" is problematic. Moreover, viewing the person holding the opposing position as one's opponent is unnecessary and unjustified, as Rooney points out: "[W]hy are you my "opponent" if you are providing me with further or alternative considerations in regard to X . . . whether I end up agreeing with X or not-X?" (Rooney 2010, p. 221).

Govier herself, in fact, recognizes the difficulty inherent in this oppositional terminology:

> If we accept that there is a positive value in controversy . . . then what reason is there to regard those who participate with us in controversy as opponents or antagonists with whom we are in conflict? Given all the positive aspects of controversy, there is an important sense in which such people are helping us by disagreeing with us. Thus we might wish to regard them as partners, not opponents (p. 254).

A related issue has to do with the effect of this contest metaphor on the goal of epistemic improvement. We have seen the argument made by some theorists (Aikin 2011, Zarefsky 2012) that adversariality, with its accompanying desire to win the argument, contributes to epistemic goals. Yet in practice the opposite result is often the case. The imperative to win the argument

may conflict with the desire to have the best view win out, thereby eclipsing the goal of coming to a reasoned judgment, undermining co-operation, open-minded consideration of opposing arguments, and a willingness to concede to the strongest reasons and to revise or change one's view if warranted by the evidence.

If the argument is that having each party make the strongest case they can for their own position will result in epistemic advance, then the question arises: to whom do the epistemic gains accrue? If each of the arguers is committed to winning rather than to making a reasoned judgment, then it would fall to a third party or parties (an audience) to evaluate the arguments and make the reasoned judgment (as is the case in a courtroom or traditional debate). Unless the arguers are open to a fair-minded consideration of the opposing views and are willing to revise or change their position if warranted, the epistemic gains will not accrue to them.

In this context, Rooney has pointed out that the framing of the argumentative enterprise in terms of winning and losing is, in fact, an inaccurate and misleading description. If our interlocutor offers a better argument for their position than we offer for ours and we accept that argument, we don't in fact lose. We actually gain. We are, epistemically speaking, better for it.

Another problem with the adversariality view is its binary framing of argumentation. Cohen maintains that such a framing can interfere with our rational goals since it tends to presuppose that:

> the subject at hand can be carved into distinct and opposing positions, and this tends to squeeze the discussion of even the most complex questions into a black-and-white view of the world (Cohen 1995, pp. 180-181).

Argumentation is not, however, a binary affair. Argumentation is dialectical, involving an interaction between arguers and arguments. Particular arguments are often modified or reframed in response to criticism and objections, and these modifications may in turn result in a revision of the objections, a modification of the criteria deemed relevant, and even a reframing of the original question (Bailin & Battersby 2009). The kind of richer, deeper understanding of an issue which can come out of a confrontation of views is less likely to arise when such a dialectical dimension is lacking.

The paradigm of argumentation which is the focus of the adversariality debate tends to be two persons face to face persuasive argumentation. In practice, however, argumentation takes place in a variety of other contexts and is structured in various ways, from formally structured contexts such as traditional debates and courtroom argumentation, to an individual deliberating about an issue, several people inquiring together in a collaborative group, and individuals with differing views trying to make a judgment.

It is important to keep in mind, however, that, regardless of how argumentation may be structured in particular contexts, the underlying goal is the making of reasoned judgments. There are variations in how this goal is cashed out by different theorists -- to yield knowledge or reasonable belief (Biro and Siegel 1997, 2006), to lead to rationally justified belief (Lumer 2005), the bettering of our belief systems (van Radziewsky 2013), epistemic betterment (Stevens & Cohen 2019). We prefer to characterize this goal in terms of coming to reasoned judgments, making it clear that this includes judgments about what to do as well as about what to believe (Bailin & Battersby 2009, 2016a). Arguers may come to an argument with various initial intentions including, but not limited to, wanting to persuade their interlocutor of a different view. But so long as they are engaging in a reasoned exchange of arguments, are open to seriously considering alternative arguments, and are willing to follow the reasoning where it leads and to alter their own position accordingly, they are involved in a joint endeavour and are not opponents (Bailin & Battersby 2009, 2016b).

3.2.3 Polarization

Another potential risk posed by adversarial argumentation is polarization. Although the confrontation of conflicting views can result in the serious consideration of opposing views and counter-arguments and can enhance the making of reasoned judgments, it does not always reap such epistemic benefits. The problem is not simply that individuals are often unmoved by cogent opposing arguments and counter-arguments (Lord, Ross & Lepper 1979. The process of defending one's position against counter-arguments and counter-evidence often creates a backfire effect, with individuals becoming even more entrenched in their original positions (Lord, Ross & Lepper 1979; Sloman & Fernbach 2017; Kahan 2013; Bai et al. 2018). One possible explanation for this phenomenon is in terms of defensive bias: people tend to identify with their beliefs and so are motivated to protect their beliefs as a way of protecting their feelings

of adequacy and self-worth (Cohen, Bastardi, Sherman, McGoey & Ross 2007; Sherman & Cohen 2002).

Another explanation is in terms of cultural cognition which involves individuals holding onto specific beliefs as a way of expressing their group identity and solidarity with others and so resisting information and evidence that go against the dominant beliefs within their group (van Bavel & Pereira 2018; Kahan 2013; Kahan, Jenkins-Smith & Braman 2011). The framing of those who hold opposing views as one's opponent, as, indeed, the "enemy" is an all too common manifestation of this problem. And it is a problem which occurs not only in face-to-face argumentation but also when people hear, read, or come across arguments (e.g., in the media) which disagree with the views they hold. Indeed, Haidt has argued that it is virtually impossible to persuade others under conditions of group competition (Haidt 2012) .

4. What can we learn from the debate?

There are a number of lessons that can be learned from the discussion of adversariality that are applicable to education for critical thinking. The debate reveals some aspects of adversarial argument that contribute to epistemic improvement and that should be included in critical thinking instruction as well as some aspects that can detract from the making of reasoned judgments and that should be avoided.

4.1 Positive aspects
One of the most important points to be taken from the debate is the centrality of the exposure to opposing views for making reasoned judgments. The confrontation of conflicting views can help counteract myside bias, helping people to see both sides of an issue, to acknowledge counter-arguments, and to make better arguments and improved judgments and decisions (Mercier & Sperber 2017, p. 298). The debate also highlights the importance of getting actual, strong, and not straw-person versions of these opposing views laid out for consideration.

Another lesson from the debate is the importance of critique. Given that we are generally not very good at evaluating our own views, the evaluation of our arguments by "other minds" is invaluable. The need to be accountable for our arguments can provide a motivation for exploring criticisms and counter-arguments and for improving our own reasoning (Tetlock 1992).

4.2 Negative aspects

There are a number of aspects of adversariality that need to be avoided, however. One of these is the aggressive modes of discourse and of interacting that can accompany adversarial argumentation (Govier's *ancillary adversariality*). These have been aptly criticized by numerous theorists as having no role in reasoned argumentation.

Also to be avoided is the focus on winning which is often a part of adversarial argumentation and which can detract from a fair-minded consideration of opposing views. This focus can engender or be accompanied by aggressive modes of discourse and interaction, but it need not be, as Govier points out. What is required, instead, is an orientation which focuses on the epistemic goals of argumentation, an approach which has as its goal reasoned judgments.

We also need to try to avoid or mitigate the kind of polarization and backfire effect which can occur when individuals confront views which conflict with their own. What is required is an approach which mitigates defensiveness in the face of challenges to one's views and lessens the effects of in-group identity on reasoning.

5. Adversariality and critical thinking instruction

The goal for critical thinking education is to incorporate the benefits of adversarial argumentation while mitigating the problems. What is required, then, is an approach which encourages the confrontation of opposing views but at the same time fosters an open-minded consideration of these views.

The distinctions made by Stevens and Cohen (2019b) among several forms of adversariality is helpful here. They distinguish between the adversarial **attitude**, the adversarial **stance**, and the adversarial **function**. The adversarial attitude involves a focus on winning and garnering any practical advantages that winning can provide, rather than on "getting it right" and generating epistemic gains. The adversarial stance involves occupying roles that set people against each other as adversaries or opponents, e.g., in law, politics, debates. The adversarial **function** involving engaging in the 'moves of critical probing' (or task, as we have called them) (Bailin & Battersby 2016b) that are dialectically oppositional (Aikin 2017) and that are necessary for argumentation, for example formulating objections, raising questions. What is

desirable is an approach to critical thinking education that avoids the adversarial attitude but incorporates the adversarial function. We will address the role of the adversarial stance later.

5.1 Dialectical Inquiry

Our response is an approach based on what we call dialectical inquiry. It is an approach which focuses on a confrontation of opposing views but within a collaborative framework. In dialectical inquiry, the goal is to come to a reasoned judgment on a controversial issue and this is viewed as an essentially dialectical and collaborative process. Students work in groups to comparatively evaluate arguments on all sides of an issue rather than simply offering and defending their own arguments. Thus the exploration of conflicting views is at the centre of the inquiry process, but the process of reaching a reasoned judgment is a collaborative rather than adversarial endeavour.

There are a number of features of dialectical inquiry which instantiate the desired elements described above. First, aspects of the structure of the inquiry process ensure an exposure to conflicting views. These include the requirement that students research the actual arguments that have been presented on various of issues and not just those that they can think of on their own nor straw-person versions that may have been offered by opponents of the view. A useful heuristic in this regard is a dialectical argument table which represents the debate on the issue, including the arguments pro and con as well as objections to the arguments and responses to the objections. Through learning epistemic norms as well as considering the context of the debate, students are in a position to come to a reasoned judgment through a comparative evaluation of the relative strengths of the various arguments in the overall case.

Critique and the evaluation of one's views and arguments by others are facilitated through group deliberation and feedback. Indeed, the use of groups is an important aspect of the approach. Students frequently engage in group interaction, discussing, questioning, challenging, and critiquing. They engage in collaborative inquiries, jointly researching, evaluating, debating, and coming to a joint judgment. They also engage in individual inquiries in which they conduct the inquiry in stages, working in groups to get critique from peers at each stage. The discussion and critique inherent in this process means that students will be exposed to objections to their positions and critiques of their arguments. They will also become accustomed to offering well-grounded and rigourous critiques of the views of others. Strategies for further promoting the inclusion of conflicting views within the groups include creating heterogeneous groups, devil's

advocacy (which can be effective although it tends to be less effective than real disagreement) (Schulz-Hardt, Jochims, and Frey 2002; Schulz-Hardt et al. 2006), and structured controversy (where students alternate in defending different sides of an issue and then collectively come to a reasoned judgment) (Johnson & Johnson 1988, 2009). The use of both devil's advocacy and structured controversy can be seen as ways of injecting a temporary adversarial stance into the argumentation to ensure that the adversarial function is fulfilled. This can be particularly helpful in the case of students who are reluctant to disagree with and critique the views of their peers. These strategies can be an effective method for helping to mitigate the pitfalls of adversariality in group argumentation (Johnson & Johnson 1988, 2009) while encouraging accountability for one's arguments and ensuring that alternative views are given a full hearing and appropriate scrutiny.

It is not always possible, however, to have actual interlocutors and peer critics when confronting controversial issues in life, as Baumtrog (2017) has pointed out. Thus one of the aims is to set conditions that will encourage students to internalize the inquiry orientation. The intention is that students will develop the habit of seeking out opposing arguments as well as objections and critiques, and of evaluating them in a rigourous but fair-minded manner even when reasoning alone, thus developing intellectual independence. In this regard, Mercier suggests that

> students should be taught how to create felicitous contexts for group discussion, thereby allowing them both to reap the benefits of their argumentative skills and to improve on their solitary reasoning skills (Mercier, Boundry et al. 2017, p. 1).

According to Mercier, these felicitous conditions involve people in the group having different opinions, being able to voice these opinions, and feeling free to criticize one another's opinions (Mercier et al., p. 8).

There is, in fact, considerable evidence that the epistemic benefits of group deliberation carry over to the individual context. Kuhn, for example, found that students who had engaged in argumentation with peers offered more complex arguments incorporating both sides of the issue when writing individual essays on a different topic than did students who had been reasoning on their own (Kuhn & Crowell 2011). They also demonstrated an increased capacity to anticipate

counter-arguments in contexts when an interlocutor was not present and with respect to topics beyond those discussed in the group (Mercier, 2017, p. 11).

The creation of a community of inquiry in the critical thinking class has an important role to play in countering the adversarial attitude and in reducing polarization. This is a community in which the epistemic goals of argumentation and the essentially collaborative nature of the enterprise are emphasized. It is a community which instantiates the norms of critical inquiry, promoting rigorous but respectful critique, including of one's own views, open-minded and fair-minded exchanges, and changing one's mind when justified by the evidence and arguments. It is also a community committed to respectful treatment, meaningful participation, and productive interaction (Bailin & Battersby 2017).

Such a community can mitigate defensive biases in that it is a community in which value is placed not on supporting particular views but rather on being reasonable and in which students feel free to revise their views. A community of inquiry can also help to address the challenges posed by cultural cognition by creating a community of affiliation as an alternative to or counter-balance to one's cultural community. In a community of inquiry, group identity is constituted not by a commitment to specific beliefs but rather by adherence to the norms of rational inquiry.

A central point to be emphasized here is that critical thinking education aims not only to develop the capacities for critical judgment, but also, and importantly, to foster the virtues of inquiry. These include an appreciation of reason (Bailin & Battersby 2007), a commitment to reasoned discussion, and a commitment to rational belief and action (Siegel 1988). The collaborative, community orientation of the approach can work towards these aims.

6. Critiques

6.1 Doesn't recognize virtuous adversariality

There are a number of critiques of our approach which would like to address in order to better clarify our arguments and position. Stevens and Cohen (2019a) criticize our approach for its alleged "wholesale rejection of adversariality." They characterize our view as maintaining that there is never any role for any form of adversariality in argumentation, that "each arguer in a cooperative argument shares in the responsibility for fulfilling every [argumentative] task" and that a virtuous arguer committed to the telos of epistemological betterment will "choose the

13

cooperative stance at each stage." The view which they argue for, in contrast, is that arguments take place in a variety of forms and contexts and that, depending on the situation, an arguer can choose an adversarial rather than a cooperative stance out of argumentative virtue.

The claims they attribute to us, however, do not reflect our position. We explicitly make the distinction between a perspective which focuses on argumentation as a social practice, and an epistemological perspective, which focuses on the overall epistemic goals of argumentation. We acknowledge that there are many contexts in which argumentation takes place and numerous ways in which argumentation is structured in practice including formally structured contexts (e.g., courtroom, traditional debates), individuals trying to persuade others of their position (both in face to face and in written contexts, e.g., social media), an individual deliberating about an issue, several people inquiring together in a collaborative group, and individuals with differing views trying to make a judgment. But we do not say anything about what choices particular arguers make, or should make, in these various contexts or at different stages. Our focus is not on the particular argumentative moves that arguers may make in specific situations but rather on their overall orientation to the argumentative enterprise (although an epistemic, inquiry orientation would preclude some moves, e.g., knowingly offering fallacious arguments or not conceding strong points in one's interlocutor's arguments[2]). We would not disagree with their claim that "even the virtuous arguer can be justified in adopting some degree of adversariality because of the context of an argument and her role in it" (Stevens and Cohen 2019, p. 2) – as long as adversariality is meant in the sense of the adversarial function. Our point is that in all of contexts, what needs to be borne in mind is that the underlying goal is an epistemic one –arriving at a reasoned judgment (a point with which they do not seem to disagree). So, for example, in the case of trying to persuade another of one's position, the interlocutors must be willing to acknowledge strong points in the other's arguments and modify their view when warranted by the reasons and arguments.

Nor do we claim that "each arguer in a cooperative argument shares in the responsibility for fulfilling every task." Rather, our argument is that the various argumentative tasks (e.g., proposing arguments, offering objections, proposing counter-arguments, evaluating arguments)

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[2] Cf. Stevens and Cohen: "The attitude arguers have in an argument will impact their argumentative behavior. E.g., an arguer with a cooperative attitude will aim to act so that the arguers as a group will identify and correctly weigh reasons applicable to the issue. By contrast, an arguer with an adversarial attitude will behave in those ways she hopes will ultimately help her achieve her goal of winning." (Stevens & Cohen 2019b).

may be performed by, shared among, and even switched between arguers depending on the context and the situation, but that the division of labour is incidental from **an epistemological perspective.**

Moreover, their claim that we completely reject adversariality is misleading. Indeed, a central aspect of our approach is that it is centred around the confrontation of conflicting views. We do not reject what Stevens and Cohen have called the adversarial function. Rather, we have made it a central aspect of the approach.

One of the underlying challenges with respect to clearly outlining our position is terminological. Although we have argued for the importance of what Stevens and Cohen call the adversarial function, we have reservations about using the term adversariality for the approach we are advocating. Theorists have tried to modify it with various adjectives (e.g., minimal as opposed to ancillary adversariality, dialectical adversariality) to divest it of its negative connotations. But the need for such modifications reveals the essentially problematic character of the term in this context. We think that a better description of what we are advocating might be "collaborative oppositionality" – where oppositionality is used in the sense of "the state of being opposed by way of comparison or contrast." This captures the confrontation of opposing views without the negative associations of the term adversariality and emphasizes the collaborative nature of the process. It is similar to what Aikin (2017) calls "minimal dialectical adversariality" but avoids the problems of adversariality and emphasizes the collaborative dimension.

6.2 Collaborative argumentation an unachievable ideal
The second critique by Stevens and Cohen that we want to address is that our goal of collaborative argumentation is an unachievable ideal (2019b). Although agreeing that a cooperative stance may be a normative ideal, they argue that the social context of argumentation, e.g., that arguers, ourselves included, are flawed and that contexts are full of complex contingencies, make this ideal unrealizable in practice. They claim that "humans are combative and ineradicably susceptible to adversarial attitudes" and that "when we argue, we argue with others who bring their own adversarial attitudes to arguments." Because of these constraints and contingencies, the goal of collaborative argumentation is unachievable, and our offering it as an argumentative ideal is potentially harmful.

We certainly agree that the goal which we are putting forth, which we would characterize

in terms of collaborative oppositionality, is a an ideal, but we do not see this as a criticism of the approach. On the contrary, our interest is in education for critical thinking and education is, or should be, animated by ideals. Ideals are what we aspire to, with full knowledge that they can never be perfectly achieved. They provide the basis for the more proximate goals and give substance to the virtues that we are aiming to develop. So, for example, we may see honesty as an ideal to be aspired to and aim to foster the virtue of honesty in students even though we know that they will not be perfectly honest in their lives, that their ability to practice honesty will not entirely depend on them but will be affected by circumstances, and that they will encounter people who do not act honestly and will try to take advantage of their honesty. Nonetheless, I do not think we would see this as grounds for ceasing to see honesty as an ideal nor would we want to say that trying to foster the virtue of honesty is harmful.

Moreover, we find their claim that "humans are combative and ineradicably susceptible to adversarial attitudes" a rather sweeping and questionable generalization. There is evidence that some individuals prefer cooperative over adversarial argumentation (Nussbaum 2002). Moreover, the success of collaborative group argumentation and deliberation would seem to indicate that collaborative interaction can be fostered through appropriate group structures (i.e., groups where there is a confrontation of conflicting views and in which people feel free to criticize other's views and to revise their own views) (Mercier et al. 2017). Such willingness to revise one's views is discouraged by an adversarial framing.

7. Conclusion

In trying to draw implications from the adversariality debate for critical thinking instruction, it is important to note the differing focuses of two endeavours. The focus for the debate over adversariality has largely been on two person face to face argumentation over a range of subjects – from significant issues (e.g., whether to implement a carbon tax) to practical concerns (e.g., who should walk the dog) -- and on how people conduct and should conduct such arguments. Our interest, in contrast, is on education for critical thinking. Thus our focus is on developing in students the argumentation skills necessary for making reasoned judgments rather than on the particular argumentative moves which arguers make in face to face argumentation. Our focus is broader in including solitary reasoning and group deliberation – both of which are largely

ignored or minimized in the debate. But it is also narrower in concentrating on contexts involving making reasoned judgments (including judgments about what to do) rather than also including contexts involving primarily negotiations (e.g., over who should walk the dog).

There are several lessons that we take from the debate that are relevant to our educational project. One relates to the importance of the confrontation of conflicting views and of critique. Another centres on the risks of aggressivity, of the focus on winning, and of polarization. What is required, then, is an approach which involves the confrontation of opposing views but at the same time fosters a critical but fair-minded consideration of these views. We propose dialectical inquiry, with its use of collaborative oppositionality, as such an approach.

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