A structuralist approach to argumentation in education

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Abstract
The authors present a review and critique of Argumentation and Education, a compilation of conceptual and research chapters about the theoretical foundations and practices of using argumentation in education. The book is described as providing a structuralist approach to constructing and evaluating arguments. Contrasting the structuralist paradigm with a dialogic perspective, the authors argue that authentic argumentation is a pedagogical tool, which involves dynamic, ever-changing, and unpredictable interactions. Ultimately, the authors highlight the absence of an essential focus in a book about argumentation and education: an authentic description of natural, spontaneous, student-created, and student-valued argumentation.

Keywords
Argumentation, Bakhtin, dialogic approach, education, structural approach


We have decided to approach our review of this book—a collection of conceptual and research chapters edited by Nathalie Muller Mirza and Anne-Nelly Perret-Clermont—argumentatively and ethnographically. Despite our own work on argumentation in education, grounded in a dialogic Bakhtinian framework (Matusov, 2009), we consider ourselves as paradigmatic outsiders to the field. In our view, the book presents a rather solid outline of the mainstream paradigm, which we call a ‘structuralist’ paradigm to argumentation and education.

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Below, we provide our critical observations about this structuralist paradigm as it is presented in the book.

A structuralist paradigm involves a family of diverse theories, empirical research methodologies, and pedagogical practices. In its gist, a structuralist paradigm insists that a phenomenon is rooted in a structure that can be influenced by some external factors. Thus, a structuralist approach to argumentation focuses on the cognitive structure of the text that defines the quality of argumentation. Such argumentative structure can involve claims, warrants, topics, evidence, fallacies, premises, and so on. The structure can be affected by such external factors as: a domain of argumentation; practice (e.g., science versus law); motivation; goals; emotions (e.g., conflict avoidance, anger); stakes; cultural norms; familiarity; certainty; conditions; gender; power, and so on. A structuralist approach preoccupies itself with abstracting models and rules of argumentation that mediate and carry the argumentative structure and remains mostly interested in idealized normative argumentation (i.e., what is good argumentation) rather than naturalistic ethnographic argumentation (i.e., how argumentation occurs in real life). The first chapter, by Rigotti and Greco Morasso, provides a wonderfully informative outline and history of the structuralist approach to argumentation (without naming it as such) that has been rooted in work by Aristotle but was given a new life by Toulmin in the 1950s. The authors make a very interesting point that argumentation is based not so much on rationality, defined by the authors as the necessity, but on reasonableness, defined as a better decision in the face of incomplete information (cf. Walton, 1996).

**Alternative to structuralist approach**

What can be an alternative to the structural approach to argumentation? Based on the work by Russian literature theoretician and philosopher Michael Bakhtin, we propose to define argumentation as a dramatic event rather than a discursive structure. According to this dialogic approach, quality argumentation is defined by the response of the audience (real or imaginary), i.e., it is a communal property. A cognitive structure can and usually does contribute to the argumentative event, but it cannot be its proxy and defines neither the outcome nor the quality of argumentation. A repeated argumentation might have the same cognitive structure as its text, but it often loses its power on the audience (like a repeated joke). In the second article, Mirza et al. refer to Bakhtin’s notion of ‘responsive understanding’ and relate this concept to cooperation between the participants (p. 79). However, in our view, this cooperation is not explicated in a way that aligns with responsive understanding. Instead, it seems that responsive understanding is likened to an investigatory process, where the arguer seeks out and uses the interlocutor’s utterances to develop refutations to support their own original position. In contrast to the structural approach to argumentation, which emphasizes and prioritizes cognitive aspects (despite all reverences to emotion, motivation, and social relations by some authors, a reader of the book finds a strong and undivided
focus on cognition in their conceptualizing of and research into argumentation), the dialogic approach focuses on ontology of argumentation. In a dialogic approach, the quality of argumentation is in the eyes of the beholders ‘here-and-now’ (even if the beholders’ ‘here-and-now’ is separated from the ‘here-and-now’ of the author(s) of argumentation by time and space). The ontological approach focuses on the ontological experiences of the participants in argumentation; some of these might be non-discursive in nature (see, for example, Kuhn, 1996; Latour, 1987).

Our other observation on the book is that the authors prioritize agreement and avoidance of mistakes (including fallacy errors) as markers of the productivity and efficiency of argumentation, while disagreements are viewed as temporary: ‘to argue means to create consent, agreement and common commitment’ (pp. 28 and 55). It is interesting to see that the majority (if not all) of the pedagogical design described in the book aids students in developing consensus (p. 22 and throughout). In our view, this prioritization of agreement as the acme and the desired product of argumentation comes from the structural cognitive paradigm, reducing the participants of the argumentation to interchangeable animators of intellectual and unchangeable positions. This paradigm seems to be based on the Enlightenment Modernist belief that if skilfully reasonable and well-intentioned people have access to the same information they will unavoidably come to a consensus, which is viewed as a proxy of the truth. An ‘endoxon’ is evoked as a ‘modern translation’ or example of this paradigm (p. 45), but we wonder about the danger of these types of consensus opinions since they are accepted by the vocal majority and potentially marginalize other voices. Additionally, consensus (between two people) as a final goal seems to us to be a premature or even wrong endpoint altogether—perhaps the mutually agreed-upon end is in fact not aligned with the ‘social reality’ of others (p. 22). Alternative conceptualizations of non-agreeable argumentation have been developed by Kuhn (in his notion of ‘paradigm’), Latour (in his notions of ‘interobjectivity,’ ‘two-faced Janus,’ and ‘modality’), Star (in her notion of ‘boundary object’), and Matusov (in his notion of ‘intersubjectivity without agreement’).

Furthermore, we found nothing in the text that allows for (or celebrates the fact that) the arguer or interlocutor freely to change their mind. Instead, the purpose of argument seems to be portrayed as a dogmatic activity where the goal is continually to support one’s own side, opinion, position, and so on. For example, Baker claims that unless a person defends ‘their own view’ against ‘criticism,’ a genuine dialogue cannot take place (p. 134). Is it not possible that one might decide to ask questions, to seek more information, to be a ‘sympathetic listener’ (Phillips, 2002), and/or to rethink their own standpoint through dialogue (among many other possibilities)? Many authors in this text write about the communal properties of argumentation, co-construction (pp. 106, 127), co-development (p. 76), and so on, but this co-construction seems to be solely based on one interlocutor using the other’s statements as fodder for their own original position: ‘the interlocutor’s opposition leads the individual to look for proof to develop a new form of understanding of
the subject under discussion’ (p. 86). It is important to note that this ‘new form of understanding’ does not seem to result in a change of mind; rather, the goal is to find evidence to reinforce the original position. We find it puzzling that none of the authors discusses the benefits of argumentation as an educative experience involving the flexibility and necessary malleability of the arguer’s position. If one purpose of argumentation is learning, then the arguers must be willing to augment their perspectives. This is different from consensus-building, where both sides may concede a portion of their position, or winning, where one person is able to convince the interlocutor to completely abandon their position (or give up).

In our view, the authors of the book put forward an interactionist version of a structuralist cognitive paradigm of argumentation. For some unclear reason, in his chapter on argumentation and learning, Schwarz refers to ‘a socio-cultural approach’ (p. 92 and further), but this is a mistake in our view; particularly because Schwarz goes on to explain that the outcome of engagement in argumentation is ‘immediate or delayed learning’ (p. 104) and this ‘learning,’ though not clearly defined, does not seem to be aligned with desirable learning related to transformation of participation or qualitative changes in the roles and responsibilities a learner assumes during the activity of the argument over time. We think the latter development relates more closely to Rogoff’s work (which is cited by Schwarz, p. 99). In their chapter on psychosocial processes in argumentation, Muller Mirza, Perret-Clermont, Tartas, and Iannaccone nicely summarize this interactionist approach (without naming it as such) in their psychosocial square as a unit of the analysis of argumentation:

Argumentation is a very suitable subject for examination from a psychosocial perspective. It involves an individual (the proposer), an interlocutor (or opponent) and an object (subject of the discussion) about which there is a divergence of points of view. To the three sides of this ‘psychosocial triangle’ we will add a fourth: the mediation tools. For indeed in any communication situation it is important to consider the tools (technical and symbolic) by means of which the actors conduct the interactions. (p. 68)

This square, not necessary ‘psychosocial’ but rather cognitive, becomes the unit of analysis for the presented educational research. It is interesting that the concept of audience, discussed in the first chapter by Rigotti and Greco Morasso and in the second chapter by Muller Mirza, Perret-Clermont, Tartas, and Iannaccone (p. 76), is not a part of the interactionist version of the structural paradigm and is not present in the rest of the book. In the second chapter, the audience is deemed important to the arguer to help him/her convince the interlocutor; not for learning from the interlocutor or otherwise shaping the co-construction of an argument. Interactionism is often associated with Piaget, Vygotsky, and constructivist educational philosophy, and these associations are discussed at length in the book.

In a famous scene of the masterpiece movie Godfather II, two brothers, Michael and Fredo Corleone, are engaged in argumentation about family, power, loyalty,
and betrayal; however, the two great actors, Al Pacino and John Cazale, who played the Corleone brothers, were engaged in performance and not in argumentation. We argue that no interactional (structuralist) analysis of a discourse can define the presence or absence of argumentation. The numerous vignettes of students’ classroom discourse presented in the book do not convince us that the researchers produce or study classroom argumentation; rather, they study predetermined structural components of argumentation sanctioned by the teacher (and often by the researchers) and the way these components are employed or not employed (knowingly or unknowingly, purposefully or not). The students might simply play these structural elements out in the lessons for the teacher’s approval and good grades. The teachers and researchers of classroom argumentation are not usually attentive to the participants’ social pragmatics.

In an institutional school context, where the teacher assigns the students arbitrary topics of no or little significance and consequence for either the students or the teacher to discuss, the students’ classroom discourses, ‘assisted’ by discursive clutches imposed by the teacher (i.e., ‘scaffolding’), might be called at best possibilities for argumentation, or at least students’ performance of argumentation to please the teacher. Sometimes students are asked to engage in debate by assuming roles or sides of a debate that they have not selected and may not believe in (see Morasso’s chapter). Though assigning roles may be a ‘best practice’ for researching and developing empathetic understandings of other people’s conflicting perspectives, we wonder whether students are learning how to construct their own arguments (which also seems to be an important instructional goal purported in the text). We think, as does Andriessen, that a prescribed structure can be a ‘straight jacket preventing creativity and elaboration to emerge’ (pp. 205–206). The benefits of children’s argumentation (without teacher mediations) are alluded to (p. 77) but are not explored in any of the presented empirical studies.

A dialogic approach to argumentation might be even more categorical without students’ ontological engagement in argumentation, without students’ ownership of it, without an evaluative audience, without consequences that are meaningful for the participants,—and we could not find these components overtly explicated in any research presented in the book. For example, there is passing reference to ‘why’ someone is arguing (pp. 86–87) but then the narrative turns to the emotional implications of the argument, not the arguers’ true purpose or goal. The teacher might skilfully lead the fabrication of students’ argumentation in the classroom, based on the teacher’s and researchers’ counts of how many references to evidence, warrants, ‘high-level thinking,’ and so on—the elements of cognitive structure—occur in the discourse, but real-life argumentation with an authentic purpose might not set foot in classrooms where teachers use this type of instruction.

Schwarz introduces, but does not expand on, the important conflict between the findings of Eisenberg and Garvey (1981) and D. Kuhn’s work (1991, 1996). The earlier work showed that 3-year old children are ‘skilful’ arguers, while D. Kuhn posits that the quality of arguments improves with maturity and education. This conflict illustrates the point that the restrictions on the argument topic and
expected structure directly impact whether or not the arguments are seen as a quality product. Schwarz points out that ‘the study of learning outcomes of argumentation by analyzing products of activities following argumentation is then overall problematic’ (p. 103). We agree wholeheartedly! The issues of validity—the internal (How does the instruction impact the quality of argument?), construct (How does the understanding of an authentic argument impact the assessment of the structure?), and ecological (How do the authenticity, spontaneity, real-life context, and arguers’ genuine purposes impact the quality of the argument?)—have to be addressed by authors working in a structural cognitive paradigm of argumentation.

We see the problem as lying beyond the technological issues with the pedagogical designs presented by the authors of the book but in the heart of the conventional school institution: is authentic argumentation (and there is no other) compatible with the conventional school institution (Matusov, 2009, Ch. 9)? Is argumentation compatible with ‘learning outcomes’—pre-designed curricular endpoints that school testers can easily measure (see Schwarz’s chapter (pp. 94–95) but also the others)? If the educational goal of schooling is defined as: ‘By the end of [the lesson, the term, the school year, or school learning], the students will know such and such [e.g., \(2 + 2 = 4\)],’ not only is argumentation an ineffective way to reach this preset curricular endpoint, but argumentation, when taken seriously, distracts from and destroys any curricular endpoints (indeed, \(2 + 2 = 4\) is not always 4).

Can argumentation be domesticated through the teacher’s school assignments and the teacher-controlled classroom discourse? Can argumentation be non-pragmatic, de-ontologized, and disinterested for its participants (including the teacher)? Should teachers always take on the sole responsibility for creation and maintenance of argumentation (seemingly suggested by Andriessen & Schwarz, p. 149)? In our view, informed by the Bakhtian dialogic framework, the answer to these questions is no. Argumentation, with its unpredictable outcomes, its respect for ‘the consciousnesses with equal rights’ (Bakhtin, 1999), and its improvisational nature, is essentially incompatible with conventional argumentation instruction. Schwarz seems to hint at the importance of student-created argumentation by referencing Stein and Miller’s work, which introduces ‘personally meaningful goals’ (emphasis added), but this is not expanded on, and the essential inclusion of student voice and responsibility for topic selection or curriculum creation during argumentation is missing from the text (p. 94).

However, from a dialogic point of view promoted by Bakhtin, tacit or explicit argumentation is the basis of any understanding and meaning-making, because the processes involved include: asking information-seeking questions (not information-known questions, as often happens in conventional schools); ontological engagement by the participants; evaluative audiences, and so on (Bakhtin, 1991, 1999; Matusov, 2009; Morson & Emerson, 1990). Genuine questions like ‘What does it mean,’ ‘Who cares,’ ‘Why is it important,’ ‘Why should we engage in discussion about that at all and not do something else,’ ‘What are the limitations
of this,’ and so on define human understanding. In this type of education, focused on deep, bottomless, understanding and meaning-making, there is no alternative to argumentation as the instruction (and the curriculum!). A student’s quote from Adriessen’s chapter partially illustrates our notion: ‘Discussions were introduced with questions by the lecturer, and sometimes the discussion was merely about answering the question. But with more open questions a serious debate took place’ (p. 209). We wonder who asked the open questions, what types of open questions were employed, and how these activities might serve to help address the ‘main obstacle’ highlighted by Adriessen: ‘Students need an assignment in which for them, broadening and deepening is an authentic activity’ (p. 211).

Regarding research methodology, we also argue that no student’s statements or performances by themselves can fully describe their learning/understanding, and no teacher or experimenter should make attributions about internal (unarticulated) student understanding based on students’ public performances. For example, Baker writes that it is possible that students do not possess personal opinions (p. 135). Furthermore, Baker points to argumentation as a way of illuminating ‘students’ initial unthinking certainties,’ which will prompt them to seek ‘additional information (perhaps from the teacher)’ (p. 137). Baker bases the assumption that a student has no opinion and is ‘unthinking’ on two things: an unobserved articulation of a student’s opinion and the student stating that they have no opinion. We would like to present alternative hypotheses: perhaps the student has an opinion but does not know how to articulate it, or does not see the necessity for argumentation at a given moment, or is fearful and doesn’t want to share their opinion for many reasons (high-pressure context of experimental environment, power dynamics in classroom, or the student does not see the genuine value of expressing an opinion in a contrived activity, and so on). The methodological issue we want to raise here is how much the participants’ subjectivities can be made available solely through an observation or a transcript without addressing these participants about their subjectivity (cf. Bakhtin, 1986).

At this point, we see the educationalist authors of the book have been subscribed to another side of the structuralist paradigm—to a structuralist approach to learning (and education in general). When the authors try to examine the question of how argumentation can help school learning, their empirical methodologies search for the students’ ‘learning gains’ and ‘conceptual understanding’ in analysis of the students’ statements and utterances. As in the case of argumentation, the structural analysis focuses on the structure of cognitive discourse; in the case of learning, the structural analysis focuses researchers on the structures of the students’ contributions as self-contained properties. According to this structuralist approach, a student who writes that $2 + 2 = 4$ is more advanced in learning math than one who writes that $2 + 2 = 3$, even if the latter might give an example to back up her claim (or just suspect that such examples exist—which is true), while the former student is not aware of the possible limitations of his statement. Not so in a dialogic approach.
We would like to learn more about how argumentation can be used to help students become agents of social change who are responsible for reshaping current society through their own arguments, as opposed to becoming socialized into the existing social framework as consumers of arguments (p. 75).

Additionally, we are interested in students’ spontaneous arguments. Citing the work of Stein and Albro, Adriessen & Schwarz summarize the empirical research by stating that there is a ‘lack of spontaneous argumentation in education settings’ (p. 147). However, data for Stein and Albro’s studies come from retrospective accounts of arguments and were not collected in real-world contexts. As teachers who use non-traditional instructional strategies, which include experiential learning, we challenge this claim. It is our contention that descriptive studies conducted in naturalistic settings (where teachers use non-traditional instructional strategies) will help argumentation researchers collect data on spontaneous arguments and add a necessary dimension to the field of argumentation.

Overall, the book will be interesting and useful for educational researchers interested in learning more about the mainstream structuralist approaches in argumentation and education. We wish that the voices of researchers and educators from non-structuralist approaches were included in this volume.

References


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