Pragmatics, education and argumentation: Introduction to the special issue☆

ABSTRACT

The analysis of how context affects meaning, and how utterances affect a conversational situation is a fundamental and little acknowledged dimension of educational and argumentative dialogues. Pragmatics is presupposed by any discipline addressing how dialogic teaching affects learning or how argumentative dialogues can improve critical thinking skills. Pragmatics is underlying the study of arguments conceived not only as logical constructs but as means for resolving conflicts, differences, or doubts in different contexts and of different types. Pragmatic is the type of analysis that is often conducted in the areas of education and argumentation when dialogues are coded according to the function of utterances that constitute them, assessed based on their relevance or the cohesion between their parts, or studied in their implicit components and messages. Overall, pragmatics is the hidden dimension of many educational studies in argumentation and education, and one of the tenets of argumentation theory. However, no explicit consideration of the pragmatic dimensions of educational dialogue, especially the argumentative one(s), is currently present in the literature. The hidden and crucial relation between pragmatics, education, and argumentation is the subject matter of this special issue, and the tentative to make it explicit.

1. Why pragmatics in education

Dialogue and argumentation have become two pillars of education studies in the recent years (Schwarz & Baker, 2016). The value of argumentation as a vehicle of conducting good pedagogical discourse emerges as increasingly important in our present environment characterized by the so called "information overload," namely the incapacity or difficulty to control, manage, and assess a growing volume of information retrievable from different sources (Hetmański, 2013). The risks of this epistemological problem are represented by the devastating effects of fake news, "alternative facts," and in general inaccurate statements and claims presented as authoritative, which jeopardize the basis of a democratic society. The analysis and assessment of grounds, evidence and arguments (Goldman & Scardamalia, 2013) and the skills of critical dialogue (Kuhn & Crowell, 2011) are valuable instruments that can provide students and citizens with criteria for both defending their own ideas and selecting and acquiring acceptable and reasonable information. This educational goal is pursued through analytical tools. Arguments and dialogues need to be assessed and their components evaluated, based on analytics methods and instruments which, most of the times, do not belong to the field of educational research. The theoretical field of pragmatics is essential in this regard.

Pragmatics is commonly defined as the study of meaning by virtue of, or dependent on, the use of language (Huang, 2014; Jaszczolt, 2018). This generic definition is in fact very specific, as it addresses in particular two crucial dimensions of meaning, which are: *the linguistic acts* (how words can be used to do things, using Austin's terminology, Austin, 1962), and *the ways in which the linguistic context determines the proposition expressed by a given sentence in that context* (Stalnaker, 1970), namely how we interpret and comprehend utterances. As Kecskes puts it (Kecskes, 2013, p. 21):

Pragmatics is about meaning; it is about language use and the users. It is about how the language system is employed in social encounters by human beings. In this process, which is one of the most creative human enterprises, communicators (who are

speaker-producers and hearer-interpreters at the same time) manipulate language to shape and infer meaning in a socio-cultural context. The main research questions for pragmatists are as follows: why do we choose to say what we say? (production), and why do we understand things the way we do? (comprehension).

Pragmatic theories have addressed several distinct dimensions of comprehension, including the structure and principles of the interpretative processes underlying the reconstruction of what is said and what is implied or presupposed (Bach & Harnish, 1979; Grice, 1975; Leech, 1983; Levinson, 2000), the cognitive mechanisms involved in interpretation (Sperber & Wilson, 1995), the types of acts that we perform when we speak (Searle, 1969), the understanding of metaphors and figurative language (Gibbs, 2006; Giora, 2003), or the relationship between common ground, culture, and understanding (Kecskes, 2003, 2013).

The twofold interrelation between context and meaning, central to any theory of pragmatics, is crucial for the field of education. Thus far, the use of pragmatics in educational research has been primarily limited to the field of intercultural linguistics, with a special focus on second language acquisition and its facilitation by the so-called "pragmatic awareness," namely the knowledge of the rules and conventions underlying the appropriate use of language in specific contexts and situations (Alcón Soler & Safont Jordà, 2008, p. 1948). In this sense, what is currently lacking in educational research is a broader acknowledgement of analytical tools related to the study of interrelations between context and meaning, not limited to the second language acquisition. This Special issue is intended to show how crucial the role of pragmatics is for the area of education, and in particular for the field of argumentation and education.

The analysis and assessment of the type of discourse and dialogue known as "argumentative" has obtained a visible place in educational research due to the indisputable value of argumentation as a way of thinking and deciding both critically and effectively (Kuhn & Moore, 2015). Although the interest of educational researchers and practitioners moves increasingly towards a better definition of what is meant by "performing (teaching, learning, talking) in an argumentative way," there is still a lack of shared ground regarding how argumentative reasoning is manifested in language, and more precisely, within the educational dialogue. A crucial emerging need concerns the development of instruments for analyzing how contexts can be modified through dialogical interaction and assessing how the dialogical-educational practices can be more effective for learning purposes. These instruments can be provided by pragmatics.

A pragmatic view of educational argumentation focused on the reconstruction of the various dimension of dialogical meaning would allow for a greater consistency among the different frameworks used for analyzing argumentative dialogue and discourse. It would allow placing under a unique paradigm different levels of analysis, including the study and assessment of argument structures (Erduran, Simon, & Osborne, 2004), the different dialogical functions of specific "moves" or turns such as counterarguments, rebuttals, clarifications (Felton & Kuhn, 2001; Kuhn, 1992), or the dialogical negotiations of knowledge occurring in dialogical settings (Baker, 1999, 2009). Pragmatics can provide the philosophical and linguistic foundations of models of analysis ranging from linguistic analysis (analysis of the implicit and explicit components of an utterance), to discourse analysis (DA) (focusing on the identification of communicative functions, rules, and conversational acts) and conversational analysis (CA) (focused on the "systematic properties of the sequential organization of talk, and the ways in which utterances are designed to manage such sequences" Levinson, 1983, p. 287). This goal-oriented paradigm summarized under the term of "pragmatic analysis" would complete the puzzle of what it takes to teach and learn argumentatively in any interactional context.

2. Why pragmatics in argumentation

The pragmatic nature of the argumentative dialogue does not bridge the crucial difference constituted by extremely different methods and goals. The relation between the practical and the descriptive approaches of the distinct disciplines of education and pragmatics can be mediated by argumentation theory. Argumentation is an interdisciplinary area that represents the development of ancient dialectics, namely reasoning in dialogue. Argumentation has thus both a descriptive and an empirical dimension, as the analytical instruments are theoretically conceived not only for describing dialogical practices, but more importantly for assessing them, pointing out the problematic strategies and selecting the most effective ones depending on the purpose pursued. Argumentation is a crucial tool for education, as it offers a space for: a) a pragmatic analysis of teacher-students, and peer-to-peer interactions (Lefstein, 2006); and b) an explicit relationship between critical thinking – as expressed both in oral and written discourse, as well as a disposition – and dialogue, as an authentic practice (Kuhn, 2019; Rapanta, 2019).

The two dimensions of pragmatics, namely the study of language as action (pragmatics$_1$) and as meaning in context (pragmatics$_2$), define the essence of argumentation theory, as they distinguish argumentation theory from other fields in which the notion of argument is addressed, such as formal logic or psychology. Argumentation is pragmatic$_1$ as it addresses how language is used to support a doubtful or potentially doubtful conclusion (Ciceronis *Topica*, chap. 2 § 8), namely contending with a *difference* between two or more parties (Walton, 1990). This *difference* includes the incompatibility of points of view concerning an expressed opinion; however, it is not limited to it. An argument can be advanced to address different types of doubts: "an unsolved problem, an unproven hypothesis, or even a situation where both parties are blocked from further actions they are trying to carry out" (Walton, 1990).

Argumentation is pragmatic$_2$ as arguments can be reconstructed in a valid form only by considering the context – which includes both the information shared by or common to the interlocutors –, the co-text, and the goal of the interaction. In other words, the context of dialogue of an argument influences its evaluation (Walton, 2019), therefore dialogue goals are understood as manifested in participants' discourse moves, but they are also subset to shifting from one type to another as result of certain individual moves (Walton & Krabbe, 1995). At the same time, understanding the context of the dialogue is essential for understanding the meaning, i.e. the logical structure of the individual arguments, with their premises either made explicit in different individual discourse moves, or,

as it is often the case, remaining implicit in discourse.

The reconstruction of the implicit premises is guided by specific tools called "argumentation schemes" (Walton, Reed, & Macagno, 2008). Schemes are abstract patterns of natural arguments and provide a general and abstract description of the premises needed for a conclusion to follow based on the most common types of inferential relations described in the ancient dialectics, such as cause-effect, authority, definition, or means-end (Walton et al., 2008). The identification of the type of scheme, however, presupposes the identification of the purpose of the argument, namely its pragmatic$_1$ dimension (Macagno & Walton, 2015). Therefore, in argumentative dialogic discourse, pragmatic$_1$ and pragmatic$_2$ dimensions are necessarily inter-related. This inter-relation is the focus of this Special Issue (SI) on "Pragmatics, Education, and Argumentation."

3. The contributions of this SI

This SI brings together the fields of pragmatics, education, and argumentation, allowing to see how the pragmatic dimension of dialogues and arguments is used for educational purposes, through the proposal of analytical theories and schemes that respect both the pragmatic$_1$ and pragmatic$_2$ dimensions of argumentative dialogic discourse.

The article Capturing deliberative argument: An analytic coding scheme for studying argumentative dialogue and its benefits for learning, written by Mark Felton, Amanda Crowell, Merce Garcia-Mila, and Constanza Villarroel, addresses the global goals of educational dialogues, focusing on deliberative discussions. The authors code the different communicative functions of the interlocutors' utterances, and building on the pragmatics, argumentation, and education literature, they outline the dimensions defining an effective deliberative dialogue, namely the exploration of the discussants' arguments on both sides of an issue, the critique and refinement of the arguments, and the integration of the opposing arguments.

In Walton's types of argumentation dialogues as classroom discourse sequences, Chrysi Rapanta and Andri Christodoulou operationalize the abstract framework of Walton's dialogue types at the pragmatic level of the utterance, focusing on the dialogical goal of each "move." They develop the concept of "dialogic potential" of a discussion, namely the fulfilled or unfulfilled communicative proposals of the interlocutors, underscoring the strategic role of the teacher in proposing or selecting the moves more productive and useful for the purpose of the class.

The article Coding relevance by Fabrizio Macagno relates the problem of recognizing the dialogical intentions pursued in a dialogue through the individual moves to the issue of determining the relevance, or dialogical coherence, of the latter. Relevance is thus assessed by defining five operational criteria, drawn from the literature on pragmatics, discourse analysis, and argumentation theory, that can capture both its pragmatic and topical dimension.

Finally, the article titled Analysis of the relationships between students' argumentation and their views on nature of science, written by Marina Martins and Rosária Justi, addresses the gap, commonly found in Science education, between the epistemology of science and its place within students' argumentative discourse (Sandoval & Millwood, 2007). The inter-relations between the acquisition of nature of science concepts, on one hand, and their valid use as evidence within arguments emerging in students' discourse, on the other, are the focus of this methodological paper.

4. Conclusion

The first contribution by Mark Felton and his colleagues places the focus on a very common type of dialogue, i.e. deliberation, which has, however, received little attention thus far in educational research. Capturing the differences in the use of this dialogue mechanisms and strategies, what the authors call "argumentative intersubjectivity," among different individuals, age- and expertise-wise, is a main outcome of their study. The second article by Chrysi Rapanta and Andri Christodoulou is a methodological contribution towards bringing together the fields of argumentation theory and educational research. Through a systematic, theory-driven, bottom-up pragmatic analytical approach, four types of teacher-student dialogues (information-seeking, inquiry, discovery, and persuasion) were refined in terms of goals and identification criteria. In the third paper of this SI, Fabrizio Macagno operationalizes the vague philosophical term of "relevance" in ways that make sense for educational researchers interested in argumentative dialogue. Finally, the fourth paper by Marina Martins and Rosária Justi is a pragmatic analytical contribution from the Science Education field, bridging science learning with dialogue and argumentative discourse.

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