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Coding empathy

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Abstract: In rhetoric, empathy – the ability to put oneself inside the interlocutor’s position in an argument – has been considered as the bridge between the orator and the interlocutors. Despite its crucial importance, no studies have addressed the challenge of operationalizing this concept, translating it into proxies that can be used for determining how empathic a dialogue is. This paper intends to propose a coding scheme for capturing two dimensions of empathy in dialogue – otherness and relevance.

Keywords: empathy, argumentation, dialogue, relevance, otherness, transactivity, discourse analysis, pragmatics

1. Introduction

The possibility of dialogue is rooted in the fundamental and basic capacity of understanding the interlocutor’s utterances. However, as the literature in linguistics clearly underscores (Clark, 1996; Grice, 1957; Leech, 1983; Levinson, 1983; Sperber & Wilson, 1995), this understanding does not correspond to the decoding of the sentence conveyed, retrieving a proposition through the use of the rules of grammar and a dictionary. Using an example from Gibbs (Gibbs, 1987, p. 591), the interpretation of the following exchange would be impossible if we consider only the so-called “literal meaning,” or if we conceived meaning only as a property of expressions in abstraction from particular situations, speakers, or hearers (Leech, 1983, p. 6):

Bob: Would you like a piece of cake?

Peter: I’m on a diet.

This dialogue presupposes not only the analysis of the context in which it occurs, but also the mutual availability of specific knowledge that allows Bob to understand from Peter’s sharing of personal information concerning the issue of diet that he refuses his offer. The interpretation of Peter’s utterance is grounded on a set of assumptions concerning what a diet is and more importantly what people do (and do not do) when they are on diet. Without this information, this dialogue would appear pure nonsense.

This dimension of meaning and understanding defines the way we communicate. In a sense, the possibility of communication rests on what we do not communicate,

namely what is taken for granted in our discourse. This awareness led to a concept that is becoming crucial in a world characterized by the meeting of different cultures, namely “cultural literacy.” In commenting on the capacity of understanding a literary text, Hirsch observed that the ability of decoding the writing and the knowledge of the definitions of the words used is not self-sufficient. To be able to understand a text (or a piece of discourse), a reader (or a speaker) needs to have access to the information that it presupposes (Hirsch, 1983, p. 165):

Every writer is aware that the subtlety and complexity of what can be conveyed in writing depends on the amount of relevant tacit knowledge that can be assumed in readers. As psycholinguists have shown, the explicitly stated words on the page often represent the smaller part of the literary transaction. [...] [W]ithout appropriate, tacitly shared background knowledge, people cannot understand newspapers. A certain extent of shared, canonical knowledge is inherently necessary to a literate democracy. For this canonical information I have proposed the term “cultural literacy.” It is the translinguistic knowledge on which linguistic literacy depends.

This “tacitly shared,” “translinguistic” background knowledge is nothing but the transposition of the philosophical and linguistic concept of common (or mutual) knowledge to the field of literacy studies. In philosophy of language and pragmatics, one of the fundamental assumptions underlying the mechanism of speaker-hearer comprehension is the so-called mutual knowledge hypothesis (Gibbs, 1987), according to which the interpretation of utterances in conversation is grounded on a set of knowledge and beliefs that listeners share with speakers (Bach & Harnish, 1979, p. 5; Leech, 1983, p. 13; Levinson, 1983, p. 16; Schiffer, 1972, p. 39). Mutual or common knowledge, also referred to as “context” or “common ground” in several pragmatic theories, make communication possible, allowing the speakers to take for granted the information needed for retrieving their communicative intention, which would be otherwise impossible to provide for every utterance (Clark, 1996, Chapter 4; Stalnaker, 1978, 2002).

The problem of mutual knowledge has been addressed from many perspectives, all related to the problems of comprehension, interpretation, and the challenges of analyzing the linguistic triggers of presuppositions – namely how common knowledge is used in reconstructing meaning and how it is signaled. A dimension of mutual understanding that has been practically neglected (Macagno, 2018b; Verdonik, 2010) is the lack or the conflict of common grounds, namely what happens when the knowledge that the speakers assume to be shared in fact is not known or is controversial. More importantly, this gap appears even more evident when we move from the linguistic analysis of the products of the interactions – the utterances – to the broader picture of the interactions themselves – how they detect, negotiate, and discuss the knowledge that is not common to them. This aspect is fundamental to several disciplines, as it relates the problem of comprehension with crucial issues such as intercultural communication, value comprehension, and cultural inclusion.

The goal of this paper is to address the relationship between comprehension and common ground focusing on the process that allows the development of “cultural literacy.” On the perspective of pragmatics and communication, culturally literacy does not depend on the amount of knowledge that a speaker holds, but rather on his or her disposition to acquire it when it is needed. To this purpose, we will propose a coding

scheme that allows to capture the moves in a conversation that manifest this disposition, showing how they are related to a deeper understanding.

2. Empathy as a crucial dimension of intercultural dialogue

The starting point for analyzing the common ground between the interlocutors and the possibility of deep understanding also when the background cultures are different is the concept of dialogue. Martin Buber defined dialogue through the crucial notion of inclusion, which presupposes the conflict between the speaker's and hearer's viewpoints and backgrounds. According to Buber, a dialogical relation is a relation between persons "that is characterized in more or less degree by the element of inclusion," which presupposes the fact that the interlocutors live "through the common event from the standpoint of the other" (Buber, 2002[1947], pp. 114–115). According to Buber, the possibility of looking at the same state of affairs through the viewpoint of the interlocutor is the essence of dialogue, which he distinguishes from other forms of disguised monologue, in which the interlocutors simply tolerate each other, avoiding open conflicts (Shady & Larson, 2010, p. 87).

This concept of dialogue is crucial for understanding the balance between common ground and diversity: dialogue is characterized by the difference of perspectives and is possible because a common ground exists between the interlocutors. The difference is bridged by the mutual effort of understanding the other side (Buber, 1999[1957], p. 102), without necessarily giving up one's perspective (Shady & Larson, 2010, p. 83). Dialogue is thus awareness and understanding of the mutual "worldviews," with all the presuppositions on which they stand and the undertakings that they imply (Buber, 1999[1957], p. 103).

This dimension of dialogue, characterized by a balance between the identification with the interlocutor (which Buber defines as "empathy") and the mere acceptance, or better "tolerance," of a viewpoint perceived as distinct from and incompatible with the speaker's, was captured by Buber through the concept of "inclusion" (Buber, 1999[1957], p. 102). Buber's terminology hides, however, a fundamental relationship between his presuppositions of a real dialogue and the contemporary approaches to literacy, dialogue and argumentation. In particular, he draws a categorical dichotomy between empathy and inclusion, where the latter concept finds no equivalents in our modern theories developed in the fields of psychology, dialogue studies, or intercultural dialogue, and the former can be hardly accepted in our contemporary understanding of the term. Instead, if we analyze how Buber's concept of inclusion can be addressed and referred to nowadays, we can find this insight as a crucial starting point for better understanding the crucial dispositions of the interlocutors in a dialogue, which become even more important in an intercultural dialogue.

To understand Buber's notion of inclusion, we need to start from its theoretical alternative, empathy. Buber uses it with a meaning that suggests a loss of one's individuality: "to transpose" oneself over there and in there." According to him, being empathic means being absorbed by the reality in which one participates, excluding one's concreteness and abstracting from one's actual situation (Buber, 2002[1947], pp. 114). This view is very close to the aesthetical root of this word, referring to the imaginary bodily perspective taking, the "feeling into" an aesthetic object (Ganczarek, Hünefeldt, & Belardinelli, 2018). However, when used outside the aesthetic experience to refer to an interaction with another person (empathizing), the meaning of this term is

different, involving dimensions and processes that are extremely complex and controversial in both philosophy and psychology (Goldie, 2000, p. 194).

Empathy has been defined in the modern and psychological theories in different ways. The crucial difference is traced by the developments of Lipp's original idea that empathy can be conceived as the inner imitation of another's feelings (Lipps, 1903): the direct activation of an emotion through the perception of another's emotion. This proposal led to two crucial different paths (Preston & de Waal, 2002a, p. 2): 1) the reduction of the emphatic emotion to a perceptual reaction, leading to equating empathy to the experiencing of the feelings of another – especially the negative ones (Elliott, Bohart, Watson, & Greenberg, 2011, p. 43) or even to emotional contagion, and 2) the distinction between the detection of another's condition or emotion and the one's own emotional response. This latter approach focuses on the imitation dimension, in which the individual who is the source of the emphatic emotion (and his or her emotions) is distinguished from the empathizing subject (and his or her empathic emotion), and this gap is bridged by either the experiencing or understanding of the other's emotion (Scheler, 2017[1954], pp. 9–11; Zahavi, 2008), or the cognitive understanding of the causes of another's emotion (Goldie, 2000, p. 195). The first approach has been rejected by almost all contemporary theories (Preston & de Waal, 2002, p. 4; Scheler, 2017[1954], pp. 14–16; Zahavi, 2008) as failing to trace the distinction between the cause and the possible effect, and most importantly between the self and the other, which is considered as the essential dimension of empathy as an “other-centered” emotional state (Rogers, 1980, p. 140; Zahavi, 2014, p. 102). In this sense, in Buber's definition of empathy nowadays corresponds to a distinct concept, which could be referred to as “emotional contagion” or “emotional infection.”

The modern idea of empathy, however, can be compared to Buber's notion of “inclusion.” The common denominator that underlies the different theories (including the ones that regard empathy as based on the experience or perception of another's emotion, see Ben-Ze'ev, 2000, p. 110), is a form of understanding of the other (**Scheler, 2017[1954], p. 12**). Empathy is regarded as perspective-taking (Elliott et al., 2011, p. 43), the perception or cognitive understanding of another's frame of reference, without losing the distinction between the self and the other (Rogers, 1980, p. 140). As Zahavi put it, “To empathically understand that your friend loves his wife is quite different from loving his wife yourself. It doesn't require you to share his love for his wife” (2014, p. 150). According to Goldie, this “otherness” that defines empathy is characterized by three components (Goldie, 2000, p. 195):

First, it is necessary for empathy that I be aware of the other as a centre of consciousness distinct from myself (cf. Scheler 1954, Deigh 1996, and Peacocke 1985). Secondly, it is necessary for empathy that the other should be someone of whom I have a substantial characterization. Thirdly, it is necessary that I have a grasp of the narrative which I can imaginatively enact, with the other as narrator.

The recognition of the other is thus combined with the “narration” of the other experience, namely the adoption of the other's viewpoint (Battaly, 2011, p. 279; Zahavi, 2014, p. 150) (also called “empathic understanding,” see Ickes, 1993, p. 591), which then leads to an experience of the “embodied mind of the other” (according to a phenomenological approach) or to a simulation of the other's feelings based on one's own experiences (according to Goldman, 2006).

Buber's notion of inclusion as understanding of a state of affairs from the viewpoint of the other, corresponds to the modern concept of empathy, at least in its

dimension of perceiving, experiencing, or appraising the other's perspective, reference, and "narrative" (Bennett, 2001, p. 41; Orange, 2011, p. 49). The emphatic aspect of dialogue has been stressed in the literature especially in relation to the exchanges between speakers belonging to different religions. As Smart pointed out in his concept of "structured empathy," to understand another's religious position and more importantly have a true dialogue with him, it is necessary to "understand his understanding of the world, and that constitutes quite a complex structure" (Smart, 1986, p. 212). Empathy thus implies the suspension of one's own assumptions to adopt the social, philosophical, cultural structures underlying the other's view (Smart, 2000, p. 18).

3. Empathy as a precondition of argumentative dialogue

According to the theories of empathy outlined above, the essential requirement of a genuine dialogue consists in a deeper understanding of the other's viewpoint, namely accessing the presuppositions on which it is grounded. This perspective on dialogue has been adapted from the literature on specific intercultural exchanges. However, if we go back to the ancient roots of dialogue – developed in the realm of rhetoric – we can find a similar acknowledgment of empathic understanding.

The core of ancient rhetoric is the enthymeme, or rhetorical syllogism. Aristotle described the enthymeme as a syllogism (an argument) with fewer premises than the ordinary ones (Gough & Tindale, 1985; Sorensen, 1988). A clear example that Aristotle provides is the following (Aristotle, *Rhetoric*. 1357a19-22): Dorieus has won a crown, as he has won the Olympic games. The conclusion is drawn from an assumption (the prize for the Olympic games is a crown) that everybody knows. However, as Aristotle points out, most of enthymemes are based on premises that hold only generally, as they are only commonly accepted (Walker, 1994, p. 47; Walton, 2001, p. 106). While most of the dialectical (logical or definition-based) inferences are considered as essential (as grounded on irrefutable logic semantic relations such as genus-species), rhetorical inferences are only likely, namely generally accepted. Enthymemes rest on a premise that consists in the specification or application of a "commonplace" or warrant (guaranteeing the passage from the premise to the conclusion Hitchcock, 1998) to the subject matter under discussion. For example, in the aforementioned syllogism the commonplace "where is the cause, there is also the effect" is used by drawing on the assumption that the crown is an effect of winning the Olympic games (Rigotti, 2008). This premise is shared only by whom knows how Olympic games work, and to the extent that the rules thereof do not change. This epistemic aspect of enthymematic premises is considered as the reason of their implicit nature (Braet, 1999, p. 107): if something is presumed shared by the audience, there is no need to mention it. Thus, the orator has to weight between the risk of taking for granted a premise that is not shared (resulting in a general disagreement) and the danger of making explicit what is not necessary (implicitly admitting that he does not know his audience).

Aristotle developed the relationship between the audience and the enthymeme when he analyzed the maxims, namely the generalizations that can be used as implicit guarantees for rhetorical conclusions. Aristotle pointed out that general statements (such as "Nothing is more annoying than having neighbors") can be used in certain contexts and with certain interlocutors, but not others. For this reason, "the orator has [...] to guess the subjects on which his hearers really hold views already, and what those views are, and then must express, as general truths, these same views on these same subjects" (Aristotle, *Rhetoric*. 1395b5-12). The implicit premise of the enthymeme (which can

correspond to maxims) represents the its context-oriented dimension. The speaker can take a premise for granted because he or she can assume that it is so accepted by his or her audience that there is no need to make it explicit and submit it to the audience's evaluation (Macagno, 2018a; Tindale, 1999, p. 112).

The nature of the rhetorical argument is thus essentially related to its appropriateness to the circumstances, which was referred to as the "*kairos*" (Kinneavy, 2002; Kinneavy & Eskin, 2000, p. 437). According to Aristotle, the rhetorical art is grounded on the capacity of the orator to understand what the audience considers likely and acceptable in a given time (Untersteiner, 1954). Ethical and emotional arguments in particular need to be developed considering the situation of the interlocutors, namely the event and the values that can trigger a value judgment. The speaker needs to take into account and ground his or her arguments on what is likely to be true or acceptable for a specific audience (Viano, 1955, p. 281).

The ancient notion of *kairos* highlights a relationship between speaker and audience that has been developed in the contemporary argumentation theories under different concepts essentially related to empathy. One of the cornerstones of argumentation (the development of ancient dialectics) is the notion of commitment, namely the propositions that the interlocutors are expected or (according to the theory) held to defend and be consistent with (Hamblin, 1970, Chapter 8). Speakers, however, are not only committed to what they say, but to a set of propositions that constitute the background, or the presuppositions, of their discourse. The explicit (or light-side) commitments are thus distinguished from the dark-side ones, namely the unarticulated propositions that are the tacit grounds of explicit arguments or value judgments (Walton, 1987, p. 144). Dark-side commitments are crucial for understanding the deeper premises on which the interlocutor bases his or her viewpoint. Unless such premises are addressed, the argumentative dialogue cannot undermine the other's view, leading to a change of perspective. For this reason, Walton underscored the essential role of empathy: according to him, empathy is the ability to put oneself inside the interlocutor's position in an argument (Walton, 1992, p. 255), discovering the values and the assumptions that are fundamental for understanding why a certain viewpoint was endorsed.

This central role of empathy in dialogue and argumentation has also been stressed by Gilbert (Gilbert, 1995, 1997, Chapter 8), who pointed out how a speaker's position (a speaker's viewpoint on an issue) does not consist merely in the expression of a proposition (i.e. a claim). Rather, it is "like the tip of an iceberg:" to understand a position it is necessary to uncover all the assumptions that are presuppositions of or related with the claim (Gilbert, 1995, p. 839). On this view, to reach an agreement it is necessary to address the interlocutor's position, namely all the relevant beliefs, attitudes, emotions, insights, and values connected to a claim (Gilbert, 1995, p. 840). For this reason, the goal of reaching an agreement presupposes understanding a position, which in turn requires knowing why the interlocutor holds this position, and what he or she thinks and feel about it. Deep understanding is thus the crucial dimension of argumentation (Gilbert, 1995, p. 843):

One cannot be said to properly understand a position unless one can comprehend all that the position entails, and can, at least theoretically, put oneself in the place of a holder of that position. But putting oneself in the place of a dispute partner necessarily goes well beyond adopting the propositional component identified as the claim. It includes taking on the world view, adopting the attitudes and values, the very psychic mantle of one's dispute partner.

As mentioned above, this view of dialogue is rooted in the Aristotelian and classical concept of *kairos*, which in turn places empathy at the center of the strategies of addressing the audience. In order to be persuasive or overcome a disagreement, it is crucial to place oneself in the other's position. Understanding the words uttered is not enough; it is necessary understanding what lies beneath them, the set of "dark-side commitments" or beliefs, values, attitudes on which they are grounded. In this sense, dialogues, and in particular argumentative dialogues, depend on understanding, which in turn is matter of empathy.

4. Coding empathy – otherness

In the previous sections, we showed how a dialogue that can be considered truly intersubjective depends on the emphatic relation between the interlocutors. Emotional contagion and tolerance represent the two extremes of a dialogical relationship where empathy represents the necessary balance. But what is empathy, and more importantly what is empathy in dialogue? The psychological and philosophical theories of empathy seem to agree on one crucial point, namely that it presupposes the understanding of a state of affair from the viewpoint of the other. The rhetorical perspective adds another crucial aspect to this complex picture: the adoption of the other's viewpoint is possible only if one intends and manages to uncover the set of "dark-side commitments" related to what is expressed in a dialogue (see also the almost identical notion in conflict management, De Wied, Branje, & Meeus, 2007). More importantly, if we conceive empathy as perspective taking (Gehlbach, 2004), it implies that we are adopting the view of another, which may be different from ours (Johnson, 1975, p. 241). In this sense, recognizing the other, with all his or her differences, is the essential condition of empathy and thus authentic dialogue. This premise, however, leads to a crucial problem: how is it possible to capture this emphatic otherness of discourse?

The literature on argumentation can be of little help in this endeavor, as rhetorical and argument studies tend to focus more on the contents (the logic and expression) of what is said rather than the how dialogues are co-constructed, and the positions discussed interactively. The area of study where the attitudes manifested in discourse have been taken into serious account is the analysis of educational dialogue¹. In this field, scholars have paid attention more to how children develop fundamental dialogical skills and how such abilities evolve, in order to design the best strategies for promoting them. Here we find a first and crucial attempt to coding the dimension of discourse otherness, detected through the notion of "transactivity."

In their work on moral development through moral conflict discussions, Berkowitz and Gibbs brought to light the role of transactive discussions (1983, 1985), namely expressions of reasoning that, instead of merely providing consecutive assertions, "confronts the other's antithetical reasoning in an ongoing dialogic dynamic" (Berkowitz & Gibbs, 1983, p. 402). These types of units of dialogue promote justifications for moral positions, which highlight the flaws in each other's moral assumptions underlying their own positions. In this approach, "transacts" or

¹ While the "conversational" analysis of educational discourse has focused on different aspects of empathy, this dimension has been only recently analyzed in other types of verbal activities, such as medical interactions, in which empathy is commonly investigated as the inclusion of or reference to the other's view in one's own speech (Ruusuvuori, 2005).

transactional units of dialogue, are divided in two groups: representational and operational. While the former units represent or elicit the other's position (including feedback requests, paraphrases, justification requests, and juxtapositions of the different or conflicting positions), the latter consist in units that are aimed at developing, clarifying, attacking and supporting a position. The latter transacts are divided in the following ten categories (Berkowitz & Gibbs, 1983, pp. 404–405, 1985, pp. 75–76):

Clarification	(a) No, what I am trying to say is the following. (b) Here is a clarification of my position to aid in your understanding.
Competitive Clarification	My position is not necessarily what you take it to be.
Refinement	(a) I must refine my position or point as a concession to your position (subordinative mode) (b) I can elaborate or qualify my position to defend against your critique or point. (superordinative mode).
Extension	(a) Here is a further thought or an elaboration offered in the spirit of your position. (b) Are you implying the following by your reasoning?
Contradiction	There is a logical inconsistency in your reasoning.
Reasoning Critique	(a) Your reasoning misses an important distinction. or involves a superfluous distinction. (b) Your position implicitly involves an assumption that is questionable (“premise attack”). (c) Your reasoning does not necessarily lead to your conclusion/opinion, or your opinion has not been sufficiently justified. (d) Your reasoning applies equally well to the opposite opinion.
Competitive Extension	(a) Would you go to this implausible extreme with your reasoning? (b) Your reasoning can be extended to the following extreme, with which neither of us would agree
Counter Consideration	Here is a thought or element that cannot be incorporated into your position.
Common Ground integration	(a) We can combine our positions into a common view. (b) Here is a general premise common to both of our positions.
Comparative Critique	(a) Your reasoning is less adequate than mine because it is incompatible with the important consideration here. (b) Your position makes a distinction which is seen as superfluous in light of my position, or misses an important distinction which my position makes. (c) I can analyze your example to show that it does not pose a challenge to my position.

Table 1: Transactional units

The notion of transactivity became a crucial concept in psychology and education. Kruger and Tomasello (1986) used this construct to detect the otherness dimension of peer-peer vs peer-adult dialogues, and the differences between the distinct strategies for “including” the other in one’s discourse (by requesting clarifications or by developing arguments based on the interlocutor’s). The classification between self-oriented and other-oriented transacts was developed further by Teasley (1997), who distinguished the strategies used for making one’s viewpoint clearer from the ones aimed at operating properly on the other’s reasoning. This distinction shed light on the equal importance of intrapersonal dialogical processes (aimed at operating on one’s own reasoning) and interpersonal ones, showing how they are distinct phases of the same process of dialogically deeper understanding one’s viewpoints. Transactive units have been also used as a criterion of “coherence” in Felton and Kuhn’s (2001) coding system, in which they distinguish the statements that connect to the partner’s utterance (in form of a question, challenge, or comment) from the ones that ignore the interlocutor’s move (Felton & Kuhn, 2001, p. 140). This distinction was used to capture the quality of argumentative behavior (in this case, the strategic behavior, i.e. the conduct aimed at achieving the goals of argumentative discourse), distinguishing non-strategic behavior (non-transactive moves) from the strategic ones.

The concept of transactivity has been thus developed in the literature as a form of operationalizing empathy at two different levels, namely the dialogical involvement of the other (addressing what he said), and the textual connectedness with the preceding discourse and the goal of the interaction. The “interactional” and “textual” dimensions of dialogue represent two manifestations of empathy, or more specifically “otherness” – empathy as *involving the other*, and empathy as *talking to the other*. The first category (which we will refer to as “*dialogicity*”) was further elaborated on by distinguishing the two distinct dimensions of understanding, namely challenging (the dialogical aspect of transactivity) and understanding (clarifying one’s thought and asking for clarifications). The latter dimension, which in linguistics is commonly referred to as “*relevance*” (Macagno, 2019), was, however, confined only to a very vague criterion, capturing only one specific aspect of the relationship between the participants’ moves.

This operationalization framework can be developed by considering the manifestation of both dimensions.

5. Operationalizing otherness in coding peer-to-peer educational dialogues

The concept of empathy can be operationalized considering its dimension of dialogical otherness, namely including the other in one’s dialogue, which partly corresponds to the idea of transactivity developed in the literature. However, otherness/transactivity has two aspects, a structural and a pragmatic one. The structural aspect concerns the potentiality of a dialogical move: some moves have been acknowledged in the literature as more transactive than others due to their purpose (giving reasons, expanding, etc.). We will capture this potential, structural aspect as the “*dialogicity*” of a move, in the sense that a move can be more or less dialogical, namely can potentially lead to a more or less deep dialogue that takes into account the other’s view.

However, to be actually transactive, these moves need to be related to the other’s viewpoint, move, or at least the topic under discussion. They need to be part of the dialogue agreed upon by the interlocutors and developed by them. The “actual” transactivity is thus defined by a distinct criterion, relevance. A move needs to be relevant to another (or at least to the dialogue) to be transactive; otherwise, it is simply non-transactive as irrelevant. At the same time, relevance does not modify the level of

dialogicity of a move – a relevant low-dialogical move will result in a low-transactive one.

In the following coding schemes (Table 2), “otherness/transactivity” is captured by the two proxies of dialogicity and relevance.

Otherness		
Types of dialogical moves		Relevance
<i>Low dialogicity</i>	<i>High dialogicity</i>	
• Stating (ST)	• Inviting (IN)	<ul style="list-style-type: none"> • <i>Irrelevant/No transactivity (-)</i>: when the move is off-task/off-topic or it does not refer to a previously stated contribution by another speaker • <i>Relevant/Actual transactivity (+)</i>: when the move directly refers to a previously stated contribution by another speaker, or to the current state of dialogue in the case of “meta-dialogical” or “managerial” moves.
• Accepting/Dis carding (AC/DC)	• Expanding (EX)	
• Managerial (MA)	• Reasoning (RE)	
	• Meta-dialogical (MD)	

Table 2: Empathy coding categories

The specific description of the moves is provided below.

5.2. Structural level: low dialogicity

The moves with a low level of dialogicity are characterized by their lack of inclusion of the other’s perspective. These moves do not directly address or elicit the other’s viewpoint, but are rather the condition of more dialogical moves.

Stating (S): This coding category refers to “representations,” namely the conveyance of information, viewpoints, and value judgments on a state of affair or another viewpoint (Labov & Fanshel, 1977, p. 62). This code includes any act of stating or asserting that something is true or false *without defending such assertion*. It refers to any simple statement of an idea or fact or opinion without any dialogical intent of either justifying it to someone (which would probably make it an “expressing an argument” category) or asking for someone’s opinion about such statement (which would probably make it an “inviting” category).

Accepting/Discarding (AC/DC): Any act of accepting, acknowledging (AC), challenging or rejecting (DC) an opinion or a state of affair put forward by another speaker, without providing further reasons (otherwise it would be a Reasoning move) and without considering background values used as presuppositions or linguistic terminology (otherwise it would be Metadiological). It can range from a simple expression of a positive or negative reaction (e.g., yeah, aha, you are right, correct/ no, not true, I disagree, etc.) to a more elaborated sign of agreement with another person’s

perspective or opinion, either through restating it or reformulating it, but without justifying such agreement. Any addition of information remains at a textual level without the intent of making the others understand or improve their understanding regarding a previously expressed piece of discourse and without the formulation of a new idea.

Managerial (MA): This category, characterizing especially classroom discussions but adaptable to other institutional contexts, refers to any explicit reference to one or more steps of a task execution, for example, work distribution, sub-tasks to do, time management, etc. When the task is a reasoning task, for example exploring a concept, other categories apply. The procedural code is only used to refer to physical or management actions, such as: keeping notes, group leader role assignment, organizing materials, etc.

5.3. Moves with a high level of dialogicity

As defined above, otherness/transactivity is the quality of a move to include the other's perspective. It is possible to distinguish between four categories of moves. The first distinction concerns the level of the discussion, whether it is focused on the topic or on the conditions of the dialogue itself (Metadiological). The second distinction concerns the viewpoint, whether it already exists, or it is elicited. The last distinction concerns how a viewpoint is addressed, whether by clarifying it or defending/attacking it.

Inviting (IN): This coding category refers to any explicit invitation to another person for him/her to express his/her opinion, ideas, understandings, etc., either as an indication of authentic interest towards the others' perspective or as a re-voicing of a previously emerged contribution/request for contribution.

Expanding (EX): This category refers to any effort of extending or emphasizing one's own or another's individual or shared perception about the issue at hand. It can take several forms, such as: (request for) giving an example, adding details, extending a thought, expressing doubt about someone's ideas, clarifying something that was ambiguous, etc.

Reasoning (Expressing an argument or counterargument) (R): This category refers to a class of conversational actions characterized by the disputable nature of the subject matter (Labov & Fanshel, 1977, p. 62), and includes arguments or counterarguments (where the doubt or potential dissent is taken for granted in the need of providing a justification). This code refers to any expression of a more or less justified idea about an issue at hand, which moves dialogue forward.

Metadiological (MD): Metadiological actions "describe the behavior of the speaker when he is doing something else besides 'taking his turn'," not moving the conversation further, but rather making a further contribution possible, relevant, and coherent (Labov & Fanshel, 1977, p. 60). This move refers to any verbal effort to explicitly make a connection between the current state of the dialogue (and/or its understanding) and its supposed/expected goal related to the activity in course.

5.4. Transactivity

Relevance (+/-): This code refers to the type or relation of a move with the previous ones. Any contribution which is either off-task (non-transcribed interaction) or off-topic (transcribed interaction which is both incoherent and irrelevant to the dialogue contents) or off-goal (transcribed interaction which is interactionally coherent but irrelevant to the dialogue goal as implied by the analyst) is considered as irrelevant (-). If a move is coded as irrelevant, then every move addressing it must also be coded as irrelevant.

The degree of relevance (- or +), to be mentioned next to every low-dialogicity type of move (Stating, Managerial, Accepting/Discarding), refers to how related such move is to the topic under discussion or to the task/activity at hand. In both cases, the 'reasoning by exclusion' rule applies, namely: if it not irrelevant, then it is relevant.

The highly dialogical moves of Inviting, Expanding, Reasoning and Metadiological are marked as of high relevance when their dialogical transactivity is manifested. The passage from a textual to a dialogical level is decided following this rationale: if I expand without having in mind that I want to make myself understood, then it is Expanding with a low transactivity. If I express my opinions without having in mind that I want to prove my reasoning as valid, then it is Reasoning with a low transactivity. And if I refer to the dialogue process or activity itself without the intention of a genuine reflection on the dialogue goals, then it is Metadiological with a low transactivity

5.5. Code predominance

The more dialogical code prevails over the less dialogical. For example, a sequence of the kind:

Yeah, you are right, but I think that the problem of migration needs to be considered as an international problem.

The assumption is that a clause (whether dependent or independent) uttered for no-dialogical or less dialogical purposes and followed by a dialogically used clause can be considered as a preamble to it, or as an introduction or connective strategy. The prevalence of the dialogical over the non-dialogical is based on the assumption that sequences express one interactional (social) goal, namely one specific function that they play within the discourse (Macagno & Bigi, 2017; Merin, 1994, p. 238; Stubbs, 1983, Chapter 8.2; Walton, 2007; Widdowson, 1979, p. 144). The core of the "social" or interactive act is the actual way that it modifies the interaction (Widdowson, 1979, p. 144):

I am sure that it is a mistake to suppose that one participant's responses are simply reactions to what the other has said: they are, rather, readjustments to his own communicative intents. As I have already suggested, verbal interactions resemble games of chess: each participant works out his moves in advance and modifies them tactically as the encounter develops. In a serious game, analogous to academic argument, each player will be trying to project his own pattern on the game and to force his opponent into error, or at least into a move which can be turned to advantage.

While conversations cannot be compared to this kind of strategic behaviour, more dialogical moves affect more deeply the conversational structure of the discourse than

mere interactional ones (whose dialogical nature is less explicit or less present). Thus, in the case mentioned above, we notice two distinct codes capturing two distinct communicative intentions: an interactive one (an acknowledgment) and a dialogical one (an argument against a possible different viewpoint). In this case, the two intentions are not on the same level. The overall effect of the turn is to advance a grounded viewpoint, resulting in a deeper “readjustment” of the interlocutor’s communicative options (Ducrot, 1972). The first intention is ancillary to the latter, acting as a cohesion mechanism.

Generalizing this principle, the more dialogical code prevails over the less dialogical based on the principle of detecting the resulting effect of the turn. When the turn in fact elicits two distinct communicative effects, it needs to be segmented accordingly, resulting in two distinct codes.

5.6. Decision tree

The aforementioned distinction can be summarized and represented in a decision-tree. The proxies described above are mutually exclusive, as they are intended to capture the possible functions of the utterances in a dialogue considering a specific dimension of dialogical behaviour, i.e. empathy (Bellack, Kliebard, Hyman, & Smith, 1966). This “category system” provides a set of dichotomic choices that are presented at Figure 1 below.

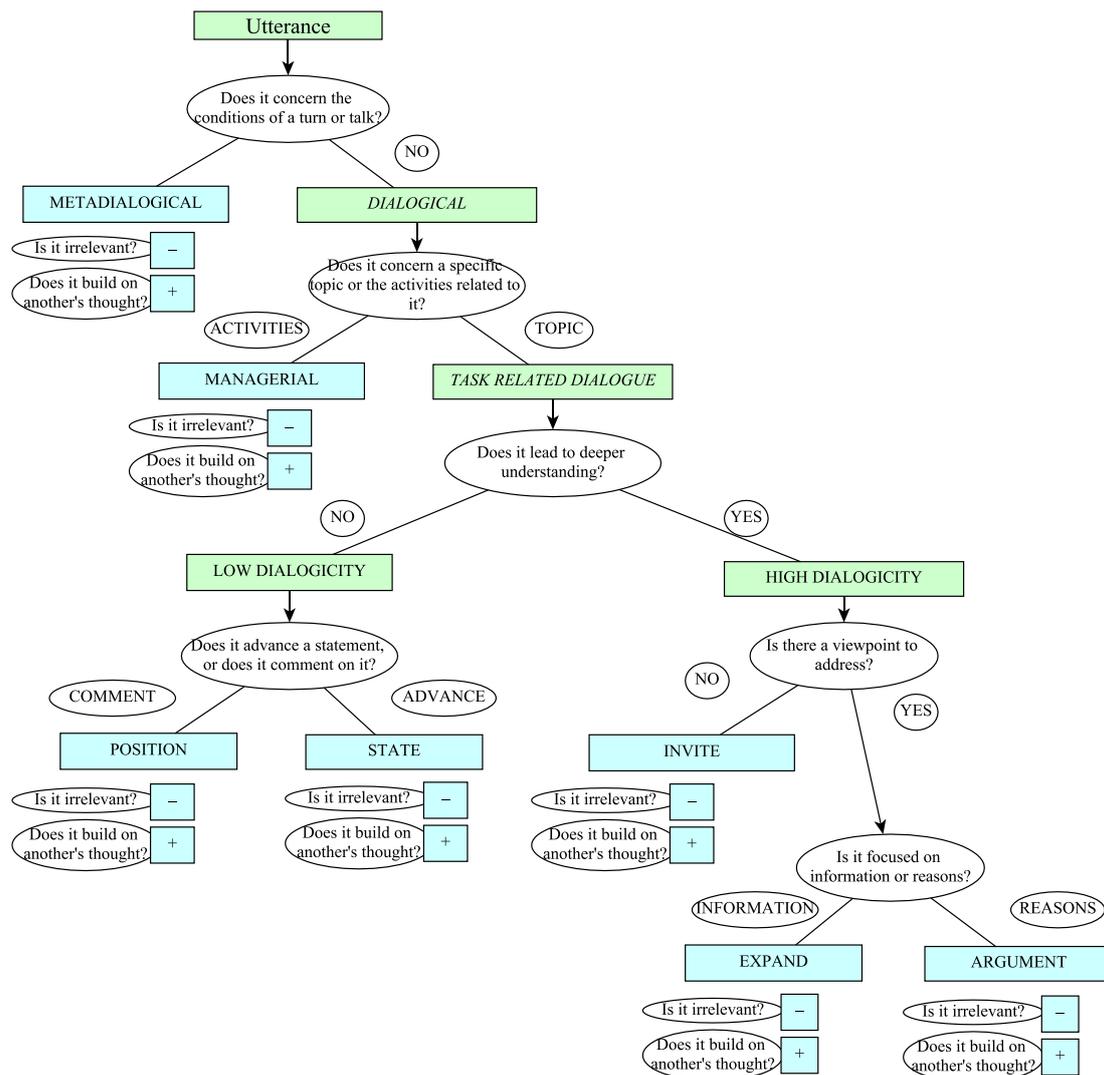


Figure 1: Decision tree

This decision tree allows determining the empathy codes for each move at levels of its structure and relevance, guiding the coding of texts.

6. Conclusion

Empathy is crucial concept for communication and argumentation. It is the key to understanding how the interlocutors interact and do not simply engage in unconnected remarks (or interactions similar to pseudo-dialogues Mustajoki, Sherstinova, & Tuomarla, 2018). Empathy has been defined in accordance with the philosophical and psychological literature as the understanding of a state of affairs from the viewpoint of the other, namely the consideration of the other world view and system of values underlying a position. This definition is line with the ancient concept of *kairos* in the rhetorical tradition and Gilbert's contemporary notion of deep understanding.

This framework has been used to develop a system for detecting signals of empathy in discourse, starting from the notion of transactivity that is a key notion in educational studies. The reference to and the inclusion of another's move or turn in one's speech is considered as a manifestation of empathy in discourse; however, the problem was to functionalize this intuitive concept. In this paper, we have presented two

interconnected criteria – a typology of moves and their relevance. The first criterion captures the potentiality of a move to address or include the other’s perspective. More dialogical – in the sense of potentially transactive – moves are thus distinguished from the less dialogical ones. These moves can become actual indicators of empathy when they are relevant, namely actually connected with the rest of the discourse, promoting the continuation thereof.

These coding criteria clearly identify only what is manifested in dialogues, and the complex phenomenon of empathy is reduced to only one of its aspects and expressions – the consideration of the other’s viewpoint in its depth, which comprises the reasons underlying it. The actual use of this coding system depends on its future developments, which need to include its validation and reliability.

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