The Dynamics of Class Mood and Student Agency in Classroom Interactions

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Abstract

This study explores the arising and unfolding of class mood with a focus on the students' agentic contributions to classroom interaction. The study is based on empirical video-data that were collected in four secondary school Italian classrooms. We identified three forms of qualitatively distinct class mood, whose unfolding in classroom interactions revealed interpersonal regulation, material negotiation and resistance, respectively. By analysing the interactive dynamics through which these class mood episodes developed, we could trace the influential process of student agency, which eventually transformed the context of interaction. In conclusion, the study points out how often overlooked emotions intertwine with the cognitive work of the classroom life and its learning opportunities.

Keywords: classroom interactions, class mood, emotions, agency

Introduction

In this article, we investigate the role of emotions in classroom interactions. Even if it is well-established that emotions are inseparable from cognition in learning (Holodynski, 2013; Veresov, 2014), research tends to separate the two, with great importance given to cognition and much less attention paid to the exploration of emotions permeating teachers' and students' classroom lives

To address this research gap, the observation and description of interactional dynamics of emotions in classroom interactions are at the core of the current study. To this end, we build on the concept of class mood, which Stone and Thompson (2014: 10) consider as a 'social emergent phenomenon that exists both beyond and between individual.' Our primary aim was to explore the arising and unfolding of class mood episodes, defined as momentary emotionally-rich interactive exchanges that permeate classroom life. We posit that participating in such interactions situated within the culturally organized context of school crucially shapes children's learning and development (Vygotsky, 1998). Moreover, we studied how students' engagement in such interactions created opportunities for achieving agency, that is, acting upon and transforming the interactional contexts and their meaning (Holland et al., 1998; Rajala, Martin, & Kumpulainen, 2016).

Emotions and class mood

Though often not traceable or evident, emotions are always present in classroom discourse and interaction. In social and cultural terms (Valsiner & Han, 2009), emotions arise in a material environment that is historically connoted and orients activity (Engeström, 2006). As distributed, situated, and context-specific aspects of educational actions, emotions are an inherent part of the social and interactional processes that unfold in classroom lessons (Kumpulainen & Mikkola, 2014; Lemke, 2015; Rajala & Sannino, 2015). From this perspective, there is not much empirical research on emotions and the topic deserves more attention from researchers.

To grasp emotions as situated collective experiences, researchers need to go beyond what Sawyer (2005) calls "methodological individualism", that is, the tendency to consider emotions as internal psychological states. In this direction, Stone and Thompson (2014) contributed to the discussion on how to study the collective dimension of emotions in the classroom by developing the construct of class mood. The authors defined mood as a phenomenon that is emergent and socially distributed across time and space. In their view, mood is co-constructed in the coordination among people, and it is also spatially located in the interactional contexts. To capture mood, researchers must develop methods that go beyond descriptions of individuals' emotional states and are able to describe the collective emotional experience in terms of 'a dialectical and mutually constitutive relation between individual and social context' (Stone & Thompson, 2014, p. 312).

Through a year-long video ethnography of literacy teaching in first grade, Stone and Thompson studied class mood episodes of help-seeking, help-giving and collaboration among students. For overcoming the methodological challenges posed by the study of such complex and somehow "untranscribable" social phenomenon, the authors proposed that class mood could be studied by focusing on the back-and-forth taking of stances by the participants in interaction. More precisely, Stone and Thompson built on the

distinction between two types of stances, namely epistemic and affective (Ochs, 1996), and argued that they both co-occur in the same utterance. As a consequence, only a consideration of the interactional production of stances in situated practices will reveal their meaning for the participants.

In our study, we further develop the conceptualisation of class mood in two ways. First, we aim at identifying the arising and unfolding of class mood episodes, with a special focus on the possible qualitative differences in these kinds of episodes. Second, we intend to gain understanding of the relation between class mood and student agency, as participation in class mood episodes offer students opportunities to achieve agency to shape the classroom interactional contexts.

Class mood and agency

We conceptualize student agency as their realized capacity to act upon and transform the interactional contexts they inhabit (Rajala, Martin, & Kumpulainen, 2016). Here, agency is seen as an ongoing process that is contextually and interactionally situated (Lipponen & Kumpulainen, 2011). Rather than regarding agency as residing in individuals, in this framework agency is viewed as an interactional achievement that results from the interplay of individual and joint efforts as well as available conceptual and contextual resources (Biesta & Tedder, 2007). This implies that the students' achievement of agency relies on their initiatives being recognized and developed by the teacher and other students.

The existing studies of agency in educational interactions have documented various forms of student agency. Firstly, student agency has been primarily associated with students' engagement and authorship in knowledge construction (Clarke et al., 2016; Damşa et al., 2010; Greeno, 2006; Gresalfi, Martin, Hand, & Greeno, 2009; Kumpulainen & Lipponen, 2010; Martin, 2016). Secondly, some studies have shown that students display agency by managing mutual relationships and providing reciprocal support while working on problems (Damsa et al., 2010; Kumpulainen & Lipponen, 2012; Rajala, Hilppö, Lipponen, & Kumpulainen, 2013). Thirdly, agency can be achieved by taking actions that transform classroom interactional events and practices (Rainio, 2008; Rajala et al., 2016; Siry et al., 2016). For example, Rajala et al. (2016) showed how students opposed the teacher's authority to contest instructional contents and procedures. Rainio (2008) found that engaging in a collective dramatized play provided open-ended activities that stimulated students' initiatives, permitting creative ways for treating even resistance and destructive engagement as forms of agency. In sum, the existing research has illuminated varied ways in which agency is manifested in educational interactions. However, while agency is always emotionally connoted, this previous research has not explicitly addressed the relationship between agency and interactive dynamics of emotions.

Given these premises, the focus of this study is on the process description of the arising and unfolding of class mood episodes, with a particular attention

to students' achievement of agency in the course of classroom interaction. The following research questions guide the empirical work of our study. How do class mood episodes emerge and develop in classroom interactions? Which qualitatively distinct forms of class mood can be identified, depending on the properties of the ongoing interactive process? How – if at all – does student agency manifest itself in the various forms of class mood?

Method

Study setting and participants

The video-data were collected in a high school situated in an agricultural country town in the North of Italy. Four classrooms participated in this study, for a total of 89 students aged from 16 to 19 and their four teachers of humanities. The data were collected from November to March of the school year.

A collection of video-data on minors must rigidly observe and adhere to the ethical National and International guidelines. The present study has respected the ethical principles developed by the Italian Association of Psychologists in all stages. In particular, we informed the teachers and both parents of all participants about the research objectives and procedure, and about the fact that the data were to be used for research and educational purposes. We then asked them to read and sign a consent form. We also made a written agreement with the students, in which they declared their availability to participate in this research project.

Procedure for data collection and analysis

The collection and analysis of the data were informed by an ethnographic logic of inquiry (Castanheira, Crawford, Dixon, & Green, 2001). The video-ethnographic research approach was essential to meet the aims of our research since we conceptualize classroom mood and agency as constituted in the situated interactions between the participants in the situation. Videoethnography allowed us to study classroom mood and agency in the making as they dynamically evolved in the moment-to-moment interactions of the classroom. On a first stage the researcher entered the classrooms, taking field notes and recording small flash videos of students and teacher's interactions that we considered meaningful for our purposes. Then she introduced two video cameras oriented towards the students sitting in rows, which allowed the inclusion of all the students in the videos.

The data analysis was carried out on a material comprising about 13 hours of video-recordings of normally scheduled humanities lessons. We also made use of the field notes and flash videos as a secondary data source when relevant to interpret the video data. For all the steps of the procedure concerning the transcription and analysis of audio-video material, we relied on the Transana 2.42 software, specifically developed for the management, the transcription and the organization of large video collections. Its major

benefit is the combination of both audio and video with transcripts, which are time-coded and synchronized.

The data analysis was iterative in nature; and the specific research questions as well as the analytic approach were progressively refined throughout the analysis process involving multiple steps and repeated viewings of the recordings. This analytic approach was informed by the method of progressive refinement of hypotheses (Engle, Conant, & Greeno, 2007). First, we transcribed the verbal exchanges while also writing notes that we considered relevant for describing what happened in the class. Second, we read the transcripts and watched the videos several times, in order to identify regularities and patterns in the emergence of emotional interactive episodes that we could code as class mood. As mood is spatially and temporally located in the interactional context, this step of the procedure was based on interaction analysis of the participants' talk-in-interaction and significant nonverbal actions (Derry et al., 2010; Jordan & Henderson, 1995).

We are aware that studying class mood as an emergent phenomenon that is socially and temporally distributed poses several methodological challenges. First, emotions are ubiquitous, as they permeate classroom life, but they are hidden or covert for most of the time. Secondly, it is guite difficult to sustain that a person or, in our case, a group is going through an emotionally connoted interaction. To overcome these difficulties, we used as a heuristic methodological principle to base the analysis on class mood episodes that are observable and transcribable with reference to the participants' epistemic and affective stance-taking process (Ochs, 1993). For the purposes of our study, we focused in particular on how the combination of such stances unrolled in the course of the exchange. In this alchemy, we recognize that the elements, epistemic and affective, occurring in the same utterance contribute to create a mood, as the product of this specific stance-taking provides a way of characterizing some of the elements that make a mood emerging. This happens in the interaction, though, this creation of mood via stance is not a simple matter of adding up the stances to get the mood. Rather, it is much more like a chemical combination in which the properties of the resulting molecule are significantly different from the properties of the elements on their own. It is in these complex combinatorics of stance that a mood emerges (Stone & Thompson, 2014).

To bring further contribution to understanding class mood, using the method of analytic induction and systematic comparison (Strauss & Corbin, 1998), we started analysing the back and forth taking of stances and next we searched for student's agency. In our analysis, students' agency was indicated in their initiatives that were taken up and developed in the interaction to create new interactional contexts for the classroom activity. When the procedure of data transcription, organization and analysis was over, we ended up with a corpus of data consisting of 48 interactive episodes of class mood, without the presumption that they represent all class mood events in the observed lessons.

Results

The analysis of the episodes that we coded as class mood revealed three qualitatively different forms of class mood, whose unfolding interactive dynamics concerned interpersonal regulation, material negotiation and resistance, respectively. We observed that all class mood episodes normally started with a thematic shift. We identified a shift when teacher and students. involved in a lesson task such as listening to teacher's explanation or dealing with a test, moved to an aside frame. In the three forms of mood, the thematic shift was introduced by an affective stance (for interpersonal regulation mood), a proposal on school material or activity (for material negotiation mood), or a teacher's request for attention and participation (for resistance mood). In all cases, mood unfolded in a back and forth movement of affective and epistemic stances. The mood episodes ended with another shift that brought the classroom back to the lesson task. In Table 1 below, we synthesize the principal indicators of each form of mood.

The majority of class mood episodes were centred on interpersonal regulation processes. All of them started with a thematic shift introduced by the teacher, for the most part involving a humoristic or sarcastic affective stance. By and large, the interactional dynamics observed in the class during

Table 1 Synthetic description of indicators for Interpersonal regulation, Material negotiation, and Resistance class mood episodes

		35 / 13	
	Interpersonal Regulation	Material Negotiation	Resistance
Total number of episodes	28	12	8
Number of episodes initated by:	Teacher N = 28 Student N = 0	Teacher N = 6 Student N = 6	Teacher N = 0 Student N = 8
Thematic shift introduced by:	Affective stance (humour/joke, sarcasm, empathy, scolding, blunder)	Request on school material or activities	Teacher's request for attention or participation
Focus	Humour/joke, sarcasm, empathy, scolding, blunder	Request on school material or activities	Teacher's request for attention or participation
Visible emotions mostly displayed	Cheerfulness Disappointment Tension Empathy	Anxiety Tension	Chaos Opposing silence Tension
Primary classroom interactive process	Disappointment	Searching for coordination between teacher and students	Class stalemate
Agency hints	Tuning in the ongoing regulation process	Changing the procedure (succeeding from negotiation)	Blocking or delaying the ongoing activity

interpersonal regulation mood involved that teachers and students were engaged either in searching for closeness or in marking distances. Secondly, we could describe mood episodes of *material negotiation*, which started with either the teacher or a student making a request concerning school practices, procedures or tasks. The topic concerned material or objects usage, and the interactive process revealed the effort to coordinate actions between the teacher and the most active participants, while the rest of the class paid attention. The emotions displayed in these episodes were mainly negative, with anxiety and tension the most frequently observed. However, when negotiation eventually succeeded, emotions of relief were observed. Finally, in mood episodes of *resistance* the students showed up their power to influence class activity. For this to happen, a condition was class compactness in opposition, which can take either the form of a particular kind of silence that can be defined as 'thick', or that of maintaining chaos irrespectively of repeated teacher requests for attention.

Here, we present and reflect upon some episodes that we considered as representative exemplars of the three forms of class mood that we were able to identify.

Class mood episodes of interpersonal regulation

In class mood episodes focused on interpersonal regulation, participants communicated something about the way they were relating to each other (Sfard & Kieran, 2001). The mood's starting signal corresponded to a stance taken by the teacher, which could be either verbal or nonverbal. Multiple emotional expressions – humoristic, sarcastic, positive, negative – pervaded these episodes.

In Excerpt 1, we present an episode of interpersonal regulation class mood. It is taken from a literacy lesson on Manzoni's novel I Promessi Sposi, in which the teacher was testing a student about the episode of a young lady, Gertrude, who was forced to become a cloistered nun. At the beginning of the lesson, the teacher asked Matteo to answer a question about Gertrude, the nun from Monza. The class mood episode started at turn 3 with the teacher using a joking way to correct the student. As Matteo's answer was not appropriate, the teacher corrected him with a surprised tone of voice, exaggerating her sense of wonder. This made other students start laughing.

Excerpt #1: The very hairy nun from Monza¹

Participants in the discourse: Teacher (T), Matteo (M), Pietro (P), Franco (F), Alfredo (A), Gabriele (G), and Emilio (E)²

By tuning in and participating in the interaction, the class co-created an episode of class mood that revealed a regulation process aimed at searching for closeness while reducing distances. In the whole exchange, the class revealed solidarity and complicity by laughing together and enjoying the interaction. In the episode, the students could display and achieve agency by contributing to the way class mood unfolded.

Discourse and interaction (1) T: who was this lady?	Non-verbal conduct	Comment to the episode T gives the turn to M.
(2) M: eh She is called Gertrude and she was she was a nun who had been forced from the age of 14 years by the Prince to do this job for		M responds by using the word 'job' which seems not to be appropriate for T.
(3) T: job? ³	The other students first observe and soon they start smiling.	T reacts to M's answer with a stance of surprise, emphasised through the use of an emotional tone of voice. She is jokingly surprised and exaggerates humour. With this reaction, T opens up to an episode of interpersonal regulation mood.
(4) M: to make this choice.		M replies.
(5) T: to make this choice, they forced her to this choice, therefore she was a nun		T first repeats M's answer, thus signalling that she has heard and registered the utterance. By rewording M's answer, T confirms the answer is correct. T then prompts M to complete the sentence.
(6) M: or or nun.	M gesticulates, then smiles, then gets serious, then starts giggling. It is a sequence of affective nonverbal affective stances.	M hesitates, he does not seem to know the answer.
(7) T: she was a nun?	The other students observe and smile, looking at each other.	
(8) P: cloistered.		Another student answers by self-assignment, and by doing so he takes a risk in interfering the oral testing of M.
(9) M: cloist of	The class is attentive and looks really amused.	M is not able to repeat the correct answer. And his test is not going well.
(10) T: cloistered! She was not a common nun, what's the difference, oh my God! between a common nun and a cloistered nun?	T's eyes go upwards (her mimicry indicates she is 'looking' at God).	T clarifies by repeating P's answer. While doing so, she also comments on her own question. In the phrase "oh my God!", her tone of voice reveals she is joking. The public message she gives to the classroom relieves the tension created by the mistake.
(11) M: ehhhhhhh I mean uh uh uh.	Students look at each other silently and show signs of involvement.	M. stutters. This creates a tension in the class, the attention is focused. Even if there is some growing concern about M's test, the class participates with aside comments.

Discourse and interaction (cont'd)	Non-verbal conduct (cont'd)	Comment to the episode (cont'd)
(12) T: these things they will see it in Finland I do not know	All class participates to this interaction and starts chuckling.	This utterance works on different levels. T steps aside epistemic frame by nourishing class mood with irony. With the stance "I do not know", T pretends to be worried and upset, even though her tone of voice reveals she is joking. Concerns about M's many mistakes are smoothed, and T transforms tension into collective participation in the interaction.
(13) F: at least they do not understand Italian.		F (by self-selection) picks up and gives a mocking consolation by pointing out that people in Finland will not understand Italian. The gag revives with the same irony.
(14) T: you'd better translate into Latin.		T continues with the joke by suggesting to the researcher an absurd and impossible strategy (to translate in Latin all the interaction), to make sure that people in Finland will not be able to understand.
(15) M: eh I mean that perhaps the one who is cloistered lives right inside the convention?		M takes back the turn and answers the pending question (turn 10). In doing so, he ends the side-sequence about the recording situation and brings the interaction back to the lesson topic. In his answer, he uses the wrong word 'convention'.
(16) T: in the convention?	All the pupils laugh. M laughs as well, and thus shows to have fun with the classroom.	Here again T reacts to the mistake by choosing again a humoristic tone of voice. She shows surprise for the blunder, since M confused 'convention' and 'convent'.
(17) T: the cloistered nun cannot get out! She remains inside the convent, ok? While secular nuns are those who have made a vow, though they live as those who run kindergartens, they are those who live among people, ok? Then they forced her to this choice, why?		With this turn, T takes the discourse back to the oral test. The classroom recomposes to a serious attitude.
(18) M: because she was not the first-born daughter.	All the class is very attentive to what is going on.	M provides the answer.

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Discourse and interaction (cont'd)	Non-verbal conduct (cont'd)	Comment to the episode (cont'd)
(19) T: and then what did you have to preserve?		T does not make a move of accepting. She directly asks a new question that contains a massive hint about the expected answer.
(20) M: huh that it was maintained the family's wealth, because if because if it was distributed among several children after		M answers.
(21) T: it would have been decreased, while the name had to be accompanied by a lot of money and properties, ok? okay, then explain, indeed A, explain how she appears, how she is presented		T assigns the turn to a new speaker, now orally tested.
(22) A: then, yes, right away, the nun is appears to Lucia and her mother, uh immediately at first glance we see that the nun uh it's not really a nun like all the others, in fact eh it appears on the detail of the ca of the er of the curl that comes out of the dress and		A answers by focusing on the nun's appearance and gives a reason why Gertrude did not look like a nun, but uses a wrong word (dress).
(23) T: dress?	The class laughs again.	T again makes a mistake- reaction based on joking and exaggerating the surprised tone of voice.
(24) G: the veil.		Another pupil (by self- selection) takes the turn and gives the right word.
(25) M: the hat (gesturing a nun veil).	All the class starts laughing again.	M (by self-selection) takes the turn even if the teacher is now testing A. He provides a wrong answer, featuring a form of a hat with his hands on his head and laughing himself of the mimicry. The tension for his wrong answers has now turned into collective cheerfulness.
(26) T: hat?		T repeats the wrong word with rising intonation. She does not leave space to M for self-correction.
(27) T: the veil! then! Go on!	The class laughs.	By exaggerating the tone of voice, T encourages the Student to continue.

Discourse and interaction (cont'd)	Non-verbal conduct (cont'd)	Comment to the episode (cont'd)
(28) A: and by precisely by the veil, and you see that		A (under test) continues his answer (turn 22) that was interrupted by the correction of his wrong choice of 'dress' instead of 'veil'. But he cannot complete his statement as he is interrupted by laughs.
(30) E: wide or for a man?	The class also joins in smiling or laughing.	E (by self-selection) utters a funny question. Altogether, these humoristic exchanges contribute to the coconstruction of the quite grotesque picture of the nun.
(31) T: it turns out that under the nun outfit there was a very hairy woman!		T joins the general final laugh. She answers the question she had made in turn 21. She is joking, figuring the nun as a 'hairy woman' with a lot of hair coming out from the nun's outfit.
(32) T: come on!		With this turn, the class mood episode comes to an end, and the lesson's structure is reestablished.

¹ The excerpts used in this article were translated from Italian to English. Standard punctuation was used for readability.

For example, in turn 12 the teacher encouraged the pupils and at the same time she also jokingly expressed worries. By doing so, she was able to create a collective involvement that is typical of class mood episodes. Short afterwards, another mood wave arose, when a student confounded 'convent' with 'convention'. Again, the teacher used a surprised, humoristic tone of voice to prompt mistake-correction, and the class tuned in.

The teacher's communicative style was determinant in the episode, and so was the students' chain of surprising mistakes and performances that gave life to an emotional collective play. All through the episode, the teacher's use of humour and jokes came out to be a mean for reducing interpersonal distances and eventually transformed a structured individual oral test into an emotional collective state. After each mistake, the teacher repeated it with a surprised tone of voice that provoked hilarity in the classroom. Not blaming, not judging, but playing with what came out spontaneously. Matteo and others tuned in by using sense of humour that demonstrates their agency, thus playing the same game and creating a rhythmic exchange. Even if most of them stayed in the background, all students participated in the interaction and joined the emotional tuning.

² All through the paper we made use of cover names for the students.

³ In bold, the turn corresponding to the shift that provoked a class mood interaction.

⁴Teacher and students are aware that researchers will share the video-material with Finnish colleagues.

All through the exchange process, the teacher used several affective stances of humour. She often exaggerated in order to create a reaction, a self-correction, and in doing so she made the entire classroom having fun, paying attention and participating. Alternatively, the teacher could have reacted to Matteo's and Alfredo's mistakes just remarking the wrong answers, and concluding the oral test with a low mark. By the use of stances showing surprise, she instead involved several students in a mockery interaction and fostered class participation and the display of collective emotions. In this way, the teacher created a rhythmic pattern that, allowing students to tune in and co-construct class mood, eventually sustained and fostered students' agency. The episode came to an end when the teacher went back to a more structured epistemic pattern.

The following excerpt reports an interpersonal regulation class mood episode that developed through a different interactive dynamic, characterised by the sharp marking of distances between the teacher and the students. It is an abstract from a Latin lesson, which started when the teacher asked Simone to read the translation of a text from Latin to Italian that he was supposed to do as homework.

Excerpt #2: You poor little thing!

Participants in the discourse: Teacher (T), Simone (S), and Barbara (B)

In this interactive exchange, the teacher regulates interpersonal activity by marking her distance from students. The episode started from the teacher's emotional utterance showing irritation, and it developed through a prolonging tension between the witty teacher and the tricky student who had been unmasked. The teacher was explicitly irritated when she realized that Simone had downloaded the translation of the Latin version. The classroom

Simone nau downloaded the	e translation of the La	till version. The classiooni
Discourse and interaction	Non-verbal conduct	Comment to the episode
(1) T: S would you like to		T invites S to read the
volunteer? Have you done it?		translation of a Latin version.
(2) S: yes, yes		S starts reading his translation.
		First he reads some sentences in
		Latin, then in Italian.
(3) T: Well look! Since the		T joins the general final laugh.
beginning (incipit) since the		She answers the question she
beginning eh I got the origin		had made in turn 21. She is
of the translation (long pause.		joking, figuring the nun as a
Have you downloaded the text?		'hairy woman' with a lot of
		hair coming out from the nun's
(4) St. ah2 ma	S looks downwards	outfit.
(4) S: eh? no no	showing embarrassment.	
(5) TO 1 11 T 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		TT T (1.1)
(5) T: look! Listen to me my dear	The class looks restless,	The way T says 'Look!' secures
boy, you must know that you	with students smiling,	attention from S and the class.
are dealing with a 60 years old fox Do you get what I mean?	giggling and whispering to each other.	T shows anger and rebukes the student by forbidding to go on
So do not treat me like that! You	to each other.	acting toward her in the way he
offend me! How can you imagine		has done.
I would not understand from		nuo done.
this incipit with such a choice of		

Discourse and interaction (cont'd)	Non-verbal conduct (cont'd)	Comment to the episode (cont'd)
(6) S: a bit I was not able		S stutters, he weakly tries to find an excuse, even though his embarrassment for being 'caught' is evident.
(7) T: oh yes! You poor little thing		T is sarcastic. 'Oh yes!' is an ironic acceptance of an incomplete excuse. 'Poor little thing' is an ironic consolation.
(8) T: B go ahead.		T gives the turn to B.
(9) B: this sentence		T does not give time to B to go on, as she is still on S.
(10) T: when you hear such a precise strike so come on	The class is very attentive.	T motivates her point, specifying that S obviously must have copied. In her voice, there is still irritation. Then she gives the turn to B again, and the class mood episode ends.

silently participated in the mood episode, as the video showed that all students stared alternatively at the teacher and at Simone. The student was 'alone' to face the teacher's irritation, and he looked really embarrassed and hardly talked. Simone's reply is weak when he tries to make up an excuse. Nevertheless, he is agentic in revealing publicly his embarrassment thus assuming responsibilities for an action that is contrary to the moral order established in the classroom. Simone's face expression showed in fact that he was upset in front of the teacher's attack. From her part, the teacher made clear use of her power in order to re-establish distance and authority.

Class mood is here signalled by the fact that the episode captured the classroom's attention and emotional engagement. Few minutes later, we observed another interaction between the teacher and Simone, which is informative in terms of agency.

Excerpt #3: Shut up you, lazybones!

Participants in the discourse: Teacher (T) and Simone (S)

In this episode, Carlo started a negotiation in order to have more time for the exercise. At the beginning, the teacher did not agree the request, but Carlo kept on and added motives for the request. By silently sustaining him, the other students contributed to the creation of a class mood episode that supported Carlo's achievement of agency. In the end, he succeeded in gaining five minutes more to work on group task. This exchange created in

gaming nive minutes more t	o work on group tubik	. This exchange created in
Discourse and interaction	Non-verbal conduct	Comment to the episode
(1) S: is it correct to translate		After being rebuked by
"Great benefactor of the state?"		T, S does not renounce to
		participate in the lesson and,
and the second second	4 8	by self-selection, he makes a
	•	suggestion for the translation.
(2) T. great hanafactor ahaha	Students nervously look at	T laughs at him

(2) T: great benefactor ahaha.

Students nervously look at T laughs at him.

Discourse and interaction (cont'd)	Non-verbal conduct (cont'd)	Comment to the episode (cont'd)
(3) S: no but no, this one I have done it by myself.		S sustains he has autonomously translated the sentence.
(4) T: well I would say this is the best choice for sure, you have done a very good choice ahahah.		T reacts with sarcasm.
(5) S: no teacher truly no		S stands for his point. He is determined to show his effort to T.
(6) T: shut up you lazybones sush, shut up, quiet! (looking to the class) Come on let's go ahead (S smiles and looks at his mates).	The class participates with non-verbal movements. S smiles.	T does not give time to B to go on, as she is still on S.

In this short exchange, the Simone is agentic in establishing an interaction with the teacher even though he is aware that she might still be angry and react badly. With his initiative, Simone takes the risk to be rejected and scolded, but he succeeds as he makes the teacher smile and the class aligns with him

Class mood episodes of material negotiation

In daily school routines, there are always moments dedicated to negotiating classroom practices. Part of the lesson is in fact taken by activities of planning, discussing and making arrangements that sometimes provoke contrasts. In our video-material, we observed that class mood episodes of negotiation emerged when teacher-student confrontations about school tasks or activities arose. These episodes were characterised by a contractual interactive process, which was visible in the tension between what was planned by the teacher and students' requests or needs. The class mood process developed through haggling daily schedule, deadlines, or dealing with an emergent necessity. The episodes might start with a question, a proposal, a command, or a statement regarding the practical school routines or assignments that provoked a contrast between two positions, that of the teacher who wanted to impose his or her own planning and that of the class who complained, protested, discussed, made requests. In these dynamics, emotions showed up through words as well as non-verbal language. Anxiety, worry, joy, satisfaction, relief could be observed in the course of these mood episodes, which generally ended with an agreement made, a settlement.

The process of negotiation mood episodes unfolded in ways similar to those previously described. However, differently from the interpersonal regulation mood, in this form of mood the interaction was focused on material, procedures or practical issues. In other words, negotiation happened in a context in which objects, not people, provoked emotions that nevertheless were a doorway to the assumption of agency.

In the first episode of material negotiation that we describe, the teacher was giving instructions for the study of History before passing to Grammar. Roberto tried to advance a suggestion, but the teacher did not listen to him

and went on with her plans. A couple of turns after, the teacher accepted another suggestion from the same student, and opened a negotiation.

Excerpt #4: Shall I invent?

Participants in the discourse: Teacher (T), Roberto (R), and Federica (F)

Discourse and interaction	Non-verbal conduct	Comment to the episode
(1) T: Well		T is about to start a new activity.
(2) R: if we analyse the History textbook isn't it quicker?		R goes back to History. He is challenging T who has just assigned a search for information on the web as homework. R suggests to do it instead on the History textbook.
(3) T: so Analyse these sentences.	The classroom is preparing to write.	T disregards R's suggestion and starts to assign a Grammar exercise. She is ready to read and dictate the sentences.
(4) R: but don't you invent them yourself, teacher?		R again interrupts T asking the teacher to invent the sentences herself instead of reading them from the book. With this utterance, R makes an explicit request to modify the ongoing activity.
(5) T: ah, shall I invent them myself?	Some students are attentive, others are careless.	T shows surprise ('ah'). She prompts him, thus opening to the exploration of alternatives.
(6) R: yes! It is much more beautiful!		R sustains the interaction by expressing his appreciation and liking. There is a tension between what was planned and what is requested.
(7) T: about yourselves?	Students observe and nod.	T now asks R to specify what kind of sentences he wants her to invent.
(8) R and F: Yes!		Another pupil, F, joins R's request and reinforces it.
(9) T: ok So, "Federica was away from school for at least a week because she was sick".		T accepts the request. She starts dictating the sentences inventing them. After this negotiation, T goes back to the previous frame and restarts dictating.

In this sequence, we first notice that Roberto tried to tell his opinion at the end of the History lesson, but the teacher did not listen to him and went on with what she had pre-planned, starting a Grammar lesson. She was going to dictate some ready-made sentences taken from a book, which she asked students to analyse. But Roberto did not give up his intent to make suggestions on class activities, and this time he formulated his comment with a very

assertive tone of voice. This influenced the episode's process, as the teacher listened to him, stopped for a few seconds and then asked for clarification. Roberto answered with an affective expression: 'it is much more beautiful' and with a voice tone that showed volition. Here a contrast is observable between the teacher, who wanted students to do what she had planned, and Roberto and Federica, who asked the teacher to act differently. At this point in the exchange (turn 7), the teacher did not only accept the suggestion, but she also asked students for more details. From the whole interaction, we can deduce that inventing sentences for grammar analysis is not a new practice in the classroom. But this time the request came from the students, and when the teacher asked if the characters of the sentences had to be the students themselves they all nodded. For these aspects, the exchange reveals a negotiation in which the teacher's volition gives up in front of the students' voices, which were explicitly expressed by Roberto and Federica while the other pupils silently aligned with them. In this episode of negotiation mood Roberto achieved agency, as his expressions of volition and his emotional engagement were eventually able to transform the interactional context.

The following excerpt is another example of material negotiation mood taken from a lesson during which students were asked to search for information on their personal devices. Students worked in groups on different topics. At the end, they would be asked to publicly present what they had found. This activity had never been done before, and the class showed excitement for the novelty.

Excerpt #5: This task is difficult
Participants in the discourse: Teacher (T) and Carlo (C)

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Discourse and interaction (1) T: so, two more minutes and that's it. At 12, I mean at 11	Non-verbal conduct	Comment to the episode T informs that time is running.
(2) C: At 12 o'clock, come on teacher!		There is a shift, arising from C's request to have more time for the task, not only for himself but for the class. A negotiation starts.
(3) T: at 12? no10 minutes more?	Others students who were working in groups raise their heads and nod.	T negatively replies. Her tone of voice shows surprise for C's request.
(4) C: Eh teacher this task is difficult eh!	C's mates are carefully observing this interaction in the background.	C tries to convince T by calling for the task's difficulty. He is enforcing his position with the utterance 'eh'.
(5) T: they are difficult but we are interested in the fact that you have started it, so to the maximum we can arrive at 11.55, not more! At	:41	T accepts the objection and adds her motivation. She allows 5 more minutes.

the classroom a negotiation mood to which all students participated in the background, and they all were eventually affected by the final decision. In the short sequence, Carlo achieved agency by managing to influence the course of the activity.

Class mood episodes of resistance

The third type of class mood that we observed, which we called resistance mood, was mostly triggered by a stance that revealed the class opposition to the teacher's plans or questions. In the identified episodes, we noticed that this form of class mood was signalled in two ways. First, when the entire classroom was compact in remaining silent in front of a teacher's request. Here we identify a mood process created by a non-verbal affective stance, i.e. class compact silence in response to an epistemic invitation acted by the teacher. And secondly, when the students pervasively continued to be talky and noisy in front of the teacher who repeatedly tried to catch their attention and asked for attention. In both cases, the students communicated a clear message of 'no' to what the teacher was saying or asking, and thus challenged the teacher's authority in that moment without offering opening to any form of alternative exploration (as it was observed in the material negotiation class mood episodes). A condition for resistance to turn into a class mood was in the collective expression of the oppositional message.

The following excerpt is taken from the beginning of a school day. The teacher entered the classroom and started the lesson by asking pupils which subject they wanted to do first, since they had two hours in a row.

Excerpt #6: Italian or History?

Participants in the discourse: Teacher (T) and the class

The students' agency was signalled in the dispute that challenged the teacher's authority. Students do not respond to repeated invitations made by the teacher. In the episode, the massive students' non-response isolated the teacher, who is momentarily powerless in dealing with the interaction.

We can track agency also in episodes of resistance mood characterised by chaos in the classroom. We do not refer here to the messy situations

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Discourse and interaction	Non-verbal conduct	Comment to the episode
(1) T: what shall we do first?		T wants the students to choose which subject to do first.
(2) (4.0)	Students do not respond to teacher's invitation.	The mood is created from this 'contradiction': to the teacher's request, the students reply with a compact silence that lasts in a time-space.
(3) T: eh? Shall we do Italian or History?	Students stare at the teacher silently or continue to look their books.	T asks again, prompting students. The students are oppositional in their no-reply attitude.
(4) (3.0)	Students stare at the teacher in silence.	The class behaviour is unanimous in compactness.

Discourse and interaction (cont'd)	Non-verbal conduct (cont'd)	Comment to the episode (cont'd)
(5) T: what do you want to do?		T does not give up. He keeps insisting in eliciting the answer from the pupils, this time he tries with a direct question. But his endeavour fails again.
(6) (1.5)	Students stare at the teacher silently.	
(7) T: Italian or History? What shall we do? Let's do Italian then.		T makes a last attempt, and again he suggests the alternative. Since no answer comes from the students, he decides himself.

that are typical of school routines, normally developing when activities are changing, or while having a pause. We coded interactional episodes as resistance mood when the class chaos was compactly expressing an explicit opposition to a teacher's request. As observed before with the class showing up a compact silence, the persistent chaos was signalling a resistance to what the teacher was doing, be it an activity, a proposal or a request. On these occasions, the teacher used to repeatedly ask for attention, or for silence, but the class, altogether, went on undaunted in chaos. Throughout the interaction, the students' strong sense of 'we do not want this' revealed their agentic positioning, which was co-constructed and used as a tool to communicate collectively a feeling of not being at ease, rejection, or simply boredom.

In line with Rajala and colleagues (2016), student opposition is to be considered as an educational challenge that has an important transformative potential that teachers should be able to grasp. The developing of resistance mood episodes can thus be interpreted as emergent tracks for displaying agency that empowers students in collective public emotional situations.

Discussion

In their research, Stone and Thompson (2014) described class mood in help seeking and help giving during first grade literacy lessons, and concluded that it increased collaboration in learning processes. In the current study, we explored the arising and unfolding of class mood in secondary school standard lesson, with a clear focus on the emotional side of classroom interaction. In this way, we could trace the influential process of student agency, which was evidenced in situations in which the students could transform the context of interaction.

Our findings showed that class mood episodes unrolled in different qualitative forms. In particular, we could describe three processes that informed us about the interactive dynamics through which students and teachers engaged in: interpersonal regulation, material negotiation or resistance to teachers' solicitations.

In the identified forms of mood, agency was achieved in various ways. In interpersonal regulation mood, agency was observed when students were able to tune in with the emotional interaction, in ways that allowed a tension relief. In material negotiation mood, it was achieved through interactions that succeeded in changing a pre-planned activity or influencing the ongoing task. Finally, in resistance mood students were agentic in taking the power to block or drift the ongoing interaction. In agreement with Martin (2016), students' agency was here observed when students took over a psychological location reflecting a sense of engagement in the ongoing interaction. Given the emotional properties of class mood episodes, students were agentic when they publicly revealed and assumed responsibility for their own feelings and emotions, throughout the dynamic flux of the exchange.

In sum, our findings confirm that students' emotions should not be left in the backyard or remain overlooked in everyday school life, as they continuously intertwine with the cognitive work of the classroom life and its learning opportunities. School managers and teachers should think and rethink about how to produce school curricula that consider emotions and their central role in learning and development (Hohti, 2016). Moreover, being trained to observe these movements in classroom interaction is of the utmost importance for teachers to be able to support students' true participation to learning activities and overcome a vision of them as mere reproducers of already made knowledge.

Furthermore, our research confirms that class mood is an emerging phenomenon situated in a time and space unit. Seizing the unexpected in classroom life is a challenge for teachers, as to step out from curricula and follow improvisations is a no-man's land risk that can easily derail. According to Sawyer (2005), effective teachers are those who tap into a variety of repertoires and should always be ready to combine structure and improvisation. Shifting from scaffolds and activity formats to emergent emotional issues (Molinari & Canovi, 2016) is a way for teachers and students to leave space to awareness, creativity and consequently agency. From our results, we can see that teachers have a great responsibility in dealing with classroom emotions. Being aware of how emotions sustain class dynamics is both a possibility and an educational challenge that can support quality at school.

This study raises several research questions that need to be addressed in the future. We are aware that the method for observing class mood still lacks a definite systematization. Moreover, our description of class mood dynamics is only partial, as there might be other interactive processes that trigger different forms of mood. We are also aware of the cultural specificity of our context, and that interactional dynamics may be different in other contexts. More research is needed in these directions. Beyond these limits, we believe that the individuation of emotionally-rich class mood episodes and the observation of related student agency are important topics that we

have started to consider. We see the potential of placing collective emotions under the focus of educational practices and policies. Understanding and supporting the development of students' emotional agency is in fact vital for helping youngsters to become responsible adults capable to express, collaborate with, and understand themselves and others.

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