

Cognitive Conflict, Disagreement and Repetition in Collaborative Groups: Affective and Social Dimensions from an Insider's Perspective

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Abstract: This paper examines conflict, disagreement, and repetition in a collaborative group and the social interactions and lessons that occur due to them. By examining my own participation and reflections in a content-based collaboratively structured course and analyzing them from within a sociocultural theory of mind, the point is made that the study of cognitive conflict, disagreement and repetition in collaborative groups holds substantial potential for understanding the socially mediated process of learning. This understanding will, in turn, provide insightful information about group work in L2 classrooms.

Résumé : Cet article examine conflit, désaccord et répétition dans un groupe coopératif ainsi que les interactions sociales et les leçons qui en découlent. En considérant ma propre participation et mes réflexions dans un cours coopératif fondé sur le contenu, et en les analysant dans le cadre d'une théorie socioculturelle de la pensée, il ressort que l'étude du conflit cognitif, du désaccord et de la répétition dans les groupes coopératifs offre un potentiel considérable pour comprendre le processus d'apprentissage sous influence sociale. Cette connaissance permettra à son tour de mieux comprendre le travail de groupe dans les classes de langue seconde.

And ... why do I think of collaborative dialogue as something running smoothly and enjoyable, maybe it's not like that! We are taking that for granted ... Am I taking that for granted?

(Session - Feb. 14; turns 387, 389)

Introduction

Introspection (that is, documenting one's own learning experiences) has increasingly been used in educational research (see Connelly & Claninin, 1990; Conle, 1992; Warden, Lapkin, Swain, & Hart, 1995) and is the focus of the present study. This paper presents the social interactions, language, and academic development in a collaborative group and

the effects these have had on my own understanding of peer-peer collaboration in second language education.

The focus of my introspective study lies in three issues that are rarely discussed in studies about collaborative learning but yet are inherent to group work: conflict, disagreement, and repetition. Conflict is a form of social exchange that denotes incompatibility between at least two people, their goals, behaviour, perspectives and/or opinions (Shantz, 1987). It is perhaps important to say at the very outset of this paper that a cooperative/collaborative¹ foundation for learning cannot be maintained unless cognitive conflicts are encouraged and managed constructively. The greater the positive interdependence amongst group members, the greater the likelihood of cognitive conflict and disagreement since different perceptions, reasons, learning processes, and information are to co-exist. According to Johnson and Johnson (1999), how conflict is managed largely determines how successful collaborative efforts tend to be. Whereas there is a clear awareness about what conflict is and how to manage it in studies with first language (L1) young learners (see Johnson & Johnson, 1979, 1985, 1989, 1995a, 1995b; Kruger, 1992, 1993; Mugny & Doise, 1978; Shantz, 1987; Sharan & Sharan, 1992), few second language acquisition (SLA) studies have documented the difficulties and challenges of having adult second language (L2) students work in collaborative groups (Chi, 1999; DiNitto, 2000; Lewin, 2000; Storch, 1999, 2000, 2001; Swain, Brooks, & Tocalli-Beller, 2002; Swain & Miccoli, 1994; Tang & Tithecott, 1999). Moreover, there has been little direct investigation of cognitive conflicts and the disagreement and repetition that they may generate. Therefore, I will provide insights into how I myself made use of the theory studied and the mediational means available in a graduate course to examine my own learning in such a course. Firstly, I will briefly review SLA research findings on collaborative learning and explain the most fundamental concept of sociocultural theory (henceforth, SCT): mediation. Secondly, I will describe the research context (i.e., the nature and structure of the course and my own collaborative group) and the research question. The remainder of the paper will present the findings that made new connections in my learning and on my perceptions of collaborative work, conflict, and disagreement, and the repetition they may prompt.

Theoretical background

Collaborative learning: Research findings

Collaborative learning refers to instructional methods in which students of all performance levels are organized into small groups to work

together towards a common goal, which, in general, is the discovery and mastery of the academic content at hand. Positive outcomes from collaborative learning are numerous, namely: higher academic achievement, improved social interpersonal social skills, enhanced self-esteem, liking of school, academic cooperativeness, and altruism (Slavin, 1987).

Research on L2 learning and bilingual education has also been marshalled towards favouring collaboration among students (Fathman & Kessler, 1993; Holt, 1993; Kowal & Swain, 1994). McGroarty (1993) points to three cardinal aspects of the instructional process of collaborative learning which are critical to the mastery of the L2: repeated and varied exposure to the target language, interaction as a foundation of learning, and negotiation as a key process. The negotiation that takes place in these situations prompts the interlocutors to provide 'comprehensible output' (Swain, 1993). Variables that foster L2 learning, and are enhanced by collaborative work, are input and output (Gass, 1997). Input should be comprehensible and developmentally appropriate. Output should be functional and communicative because speech should be meaningful and representative of the way a speaker uses the language. Students' discourse will then entail negotiation of meaning and form (Swain, 1993). Moreover, students will become fluent in language and confident in the academic content if they can speak repeatedly on the same topic (Lynch & Maclean, 2001), a situation enhanced in collaborative groups. Collaborative dialogue, the type of output that hopefully emerges in collaborative groups, has been defined as 'the joint construction of language or knowledge about language by two or more individuals; it's what allows performance to outstrip competence; it's where language use and language learning can co-occur' (Swain, 1997, p.1).

Mediation: Learning 'beyond the skin'

As Lantolf (2000b) puts it, 'the most fundamental concept of sociocultural theory is that the human mind is mediated' (p.1). Therefore, the importance of mediation cannot be overlooked. Mediation is key to all aspects of knowledge building because physical and psychological tools mediate social and individual functioning, and connect the external and the internal, the social and the individual (Wertsch & Stone, 1985). Vygotsky (1978) listed a number of mediational means: numbers, arithmetic systems, music, art, and above all, language. Humans use these means to establish relationships between themselves and the world. Therefore, to analyze these relationships and what grows out of them, it is crucial to take a closer look at the mediational means

involved. In Vygotskian thinking, higher mental functions arise in the interactions individuals or agents enter into with other members of their culture and with the experiences they have with the artefacts produced by and available in their culture. This is indeed how we can explain the oft-quoted phrase 'human agency extends beyond the skin' (Wertsch, Tulviste, & Hagstrom, 1993).

Mediation is the instrument of cognitive processes and cognitive change, both requisites for learning. Mediation in learning can be of two kinds: artefact mediation, which can take the form of textbooks or computers, and social-mediation in the form of discourse patterns, opportunities for interactions or various kinds of teacher and/or peer assistance (Donato & McCormick, 1994, p. 456). Learning as a mediated process will be taken as the core, fundamental construct in this paper. Besides the class discussions and activities, I experienced social mediation available through my collaborative group.

The research context and the research question

The course

During the time the data for the present study were collected, I was an adult L2 learner in a graduate course in a large university in North America, which was collaboratively structured. The course was intended to further students' understanding of L2 learning processes from a SCT standpoint. There were three basic components to the course, namely: the class, across-universities-discussions over the Internet, and small group discussions. The latter two were to provide students with data about their own learning to be analyzed and presented as a major assignment of the course. This assignment was conceived as a means of having students collaborate in the analysis of their own developmental learning throughout the semester.

The class was composed of ten students completing graduate degrees in second language education who met once a week for three hours over a whole term (12 sessions). The first part of the course (approximately three sessions) was devoted to fundamental writings from Vygotsky's original works and concepts and principles of Vygotskian and neo-Vygotskian theory. During the second part of the course, these concepts and principles were revisited for the insights they provided into the process of learning a second/foreign language. Moreover, students reviewed empirical studies in SLA that took an SCT perspective.

As a course requirement, students met on a regular basis in either pairs or trios to discuss the assigned readings for the next session or

anything that was of interest for the group. Their discussions were taped to be analyzed at the end of the course. On the first day of class, students chose their own partners. My fellow group members were Yu-mei (pseudonym), for whom English was also her second language, and John (pseudonym), a native speaker of English. Both Yu-mei and John had already taken courses with similar theoretical bases as the new course that now brought the group together. The group discussions were taped during the course of the complete semester. Transcribing and analyzing our discussions as a source of learning and language development was the original goal of my group. We would therefore collaborate on a joint term-paper about our learning process as a group. However, as I will explain later, by the end of the course, I faced the great challenge of analyzing the data on my own.² I therefore embarked on a fascinating introspective journey that was guided by the following question: Can conflicting perspectives and disagreement co-exist in a collaborative group and enhance learning?

The collaborative group: My social-mediated learning context

I met on a weekly basis with Yu-mei and John for one to two hours per session. When I entered the group I thought of the other members as the 'experts' and of myself as the 'novice,' who was willing to learn *from* them because John and Yu-mei had already taken courses in SCT. However, as the group meetings progressed, my views about our roles changed.

Excerpt A*

499 ME: You can be a novice and even you when you [we] started this group, remember that I told you that I felt that I was going to be the novice in this group? Because I felt that you were from [that other] course and all that.

500 JOHN: So, are you disappointed now? [laughs]

501 ME: No, no [laughs] No, I'm not going there. But this is what I'm trying to say. I mean, I may clarify some points to you that are not clear to you and ... Come on! [laughs].

(Session - January 23)

As expressed in turn 499, as time went by and group meetings took place, I started to see myself as another group member willing to learn *with* Yu-mei and John and wanted to voice my opinion more and more.

* See transcription conventions at the end of the paper.

In turn 500, John jokes about their not being 'experts' as I had thought. In turn 501, I express my realization that the expertise can be a shared feature in a group. Yet, my point of view was either not explained well or it was not understood by the group, as I was not taken seriously.

One month into the course, I approached the group with some concerns about the dynamics of the discussions as I was having difficulty in working as a team and finding opportunities to contribute. Not surprisingly, this led to a discussion about what the group was required, supposed or expected to do and provoked more discussions about the group's discourse structure and development. As said before, Yu-mei and John were, for me, particularly well read in the field of SCT. However, John's knowledge and usual excitement, admirable in some episodes, coupled with his assertiveness generated a certain amount of intimidation and difficulty in 'getting a word in edgewise.'

While getting ready for a new group discussion, John and I were discussing this issue prior to Yu-mei's arrival, when the taping started:

Excerpt B

- 1 JOHN: [reporting to Yu-mei] Okay, her concern, first of all, is that she is not interacting enough.
 - 2 ME: No ... [looking at some transcriptions] Yes, I was analyzing our interactions here, because -
 - 3 JOHN: and my comment was that she doesn't have to interact to contribute, right?
 - 4 YU-MEI: Yeah.
 - 5 ME: Because I was telling John that I realize that he does most of the talking.
 - 6 JOHN: Only now. Only the beginning, right?
 - 7 YU-MEI: [to me] How would you like it to be?
 - 8 ME: I don't know! I don't know. Good -
 - 9 JOHN: She is voicing her concern.
 - 10 ME: Yeah, I don't know ... Maybe -
 - 11 JOHN: And that's good.
 - 12 ME: I feel that I don't do so much er talking ... I am not giving, I mean doing my ... part ... share -
 - 13 JOHN: Hum ... I have something for you guys ... I have something to give you. Do you guys know the tapestry of curriculum?
 - 14 YU-MEI & ME: No.
- (Session - January 23)

In turns 1 to 5, John and I explain to Yu-mei what we discussed briefly in her absence. In turn 6, John seems to be open to a change and, in turn

7, Yu-mei shows explicit interest in what I would like of the group. In turn 12, I point out that I would like to be able to talk more but, in turn 13, John decides to put an end to the discussion by changing the topic.

Though surprised and disappointed, I respected John's decision as in our previous discussion (before Yu-mei's arrival) he had not only said he was aware of his 'doing most of the talking' but was also prompt to recognize my claim of giving all the members of the group a chance to talk. My directness in approaching this issue and actually having said to him that he was monopolizing the discussions put him, obviously, on the defensive. As Shantz (1987) puts it: 'a state of conflict denotes incompatible behaviours or goals. The incompatibility is expressed when one person overtly opposes another person's actions or statements' (p.284). The initial act to which a person objects may not, however, be intended to harm its recipient.

It seems clear that the outset of the conflict episode described above involved the blocking of my own goals by John, who, in turn 13, diverted our attention to something he himself wanted to discuss. Different goals began to arise in the group and, consequently, new strategies emerged for me since I had one goal in mind: to speak more and mediate my own learning through interacting with Yu-mei and John. However, identifying the goal of an action is only the first step of it. To fulfill that goal, I needed an active and strategic response (Donato & McCormick, 1994).

Strategies as mediation

As illustrated above, I started to develop a critical awareness concerning the dynamics of the group. In doing so, I self-assessed my own performance and set for myself the goal of speaking more as a way of increasing motivation to participate and moving towards a more expanded way of learning and knowing (Donato & McCormick, 1994). Strategies are goal-directed actions. In my case, the strategy to start speaking more in the group consisted of taking notes of the required readings prior to meeting with the group. In those notes I summarized the main points of the articles that I would like to discuss and, most importantly, I wrote questions and comments to bring up in the group. (Later in some transcripts we will see how I make reference to the notes when discussing readings with the group.) I gradually became an active transformer of the group rather than a passive participant that accepted what was, for me, an unbalanced discussion structure.

To validate this point, I will provide some quantitative insights into my own personal claim. I have counted the words spoken by the three

FIGURE 1
Word count per student per session

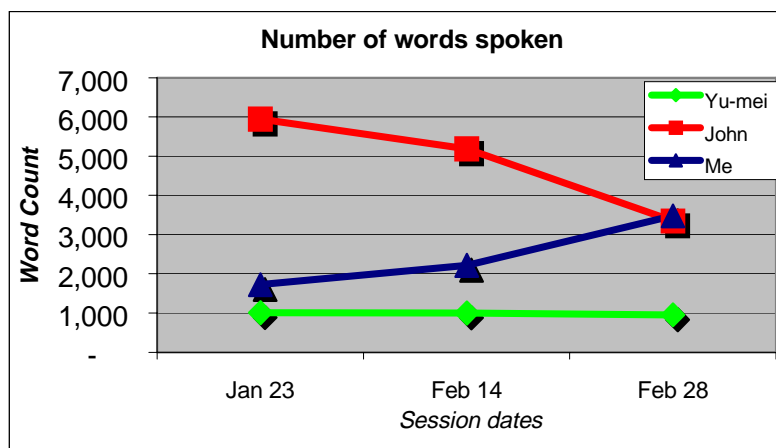


TABLE 1
Word count per student per session*

Student	Words			Turns			Words per turn		
	Jan 23	Feb 14	Feb 28	Jan 23	Feb 14	Feb 28	Jan 23	Feb 14	Feb 28
Yu-me	1,010	999	957	150	154	119	6.7	6.5	8.0
John	5,947	5,183	3,347	278	228	220	21.4	22.7	15.2
Me	1,722	2,219	3,477	188	139	189	9.2	16.0	18.4

* Every time a student talked, even if it was just one word, I counted as turn.

group members over time. I will report only data from the session that took place almost one month into the course (Session, January 23), a mid-term session (Session, February 14) and the second-to-last session (Session, February 28).³ The latter two sessions took place at the time when and right after I voiced my concerns.

Indeed, on January 23, John did 'most of the talking.' He spoke over four times more than Yu-me and I. Over time, however, I started to speak more but my speaking more was not at the expense of Yu-me's participation. In fact, Yu-me's participation seems to be very stable throughout the discussions and she did not seem to be affected by the competition for speaking ground between John and myself. Yu-me spoke around 1,000 words in each session, whereas I, by the session of February 28, tripled the words spoken on January 23. I was indeed

determined to make the most of the social interactions with the group and my notes seem to have helped by giving me more confidence in what was being discussed. The strategic approach of making notes prior to the meetings as a preparation for social interaction, coupled with my awareness and deeper understanding of the importance of social interaction and of speaking as a form of mediation, made me eager to participate. As shown in Table 1, on February 28, two months into the course, I managed to speak as much as John did on that day. The importance of speaking, especially during this session, will be addressed later. For the time being, I will only add that I disagree with what John and Yu-mei said in turns three and four of excerpt B: I *did* 'have to interact to contribute,' for learning is, at base, a process mediated by social interaction.

Findings

My research question set me to examine episodes of conflict and disagreement in my group to see if I would be able to draw useful lessons from them. My knowledge of the literature, and what I thought it portrayed, coupled with what I was experiencing in my group, made me realize that we might stand to learn a great deal from these kinds of episodes.

The major theme of Vygotsky's theory is that social interaction plays a fundamental role in development. The main tenet in SCT is that 'every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (interpsychological) and then inside the child (intrapsychological)' (Vygotsky, 1978). In other words, all cognitive development is first and foremost interpsychological because it arises as a result of a concrete social interaction (Donato, 1994).

Most of the L2 research in SCT focuses on the concrete social interaction between experts and novices, mainly teachers and students. However, not all social mediation comes from an expert. People are capable of working collaboratively and of co-constructing knowledge and, in doing so, the expertise emerges as a feature of the group (Lantolf, 2000a, 2000b). In fact, Swain (1995) claims that the dialogue of learners working jointly can be as effective as that of teacher or expert and student or novice. Research on peer-mediated L2 and content learning has shown that learners are in fact capable of scaffolding each other quite effectively (Donato, 1994, 2000; Ohta, 2000; Swain, 2000; Swain & Lapkin, 1998). The group critically analyzed this line of research.

Finding 1: Collaborative values and training

Excerpt C

- 428 ME: So, maybe we should ask the whole class why is it that every single article that we read on collaborative dialogue, everybody is so kind! Everybody is so respectful!
- 429 JOHN: That's right! Let's bring out the punching.
- 430 ME: I can lose my temper! I can say: [shouting in a villain voice] Come on Yu-mei, it's wrong! [laughs]
- 431 YU-MEI: [laughs]
- 432 ME: Are we still going to be in a collaborative mood and still going to scaffold our interactions? Or that would break it down?
- 433 YU-MEI: I would like to read something that, you know, everything that could go wrong in a collaborative work ... [laughs]
- (Session - February 14)

As described earlier, central to the course in which I was a student, was the idea of collaboration, especially among the members of the small discussion groups. For there to be potential ground for collaboration, there has to be trust, reliability and respect towards each of the members of the group, as well as a commitment to learning, of course. However, more often than not, as expressed in turn 428 as well as in the opening quote, these characteristics come across in the literature as easy to achieve and, thus, they seem to be taken for granted. Therefore, just like Yu-mei in turn 433, one cannot help but wonder what the outcome of a non-collaborative group would be. In Excerpt D below, my group discussed the issue of what collaborative work entails and what it takes for collaborative learning to work at length.

Excerpt D

- 257 ME: But I was thinking, if you put two learners together, one is really bossy and I mean they are not going to work in their ZPD [=zone of proximal development]. So, what ... you as a teacher, you have to teach them how to collaborate and you have to say what -
- 258 JOHN: You have to socialize them.
[...]
- 259 YU-MEI: [referring to her poster presentation about collaborative work for another course] I actually put that down on my triangle thing [activity theory diagram], and the bottom of the "rule" part, right ... it says rules of collaboration. What I believe is that -

- 260 ME: I am sorry that I didn't read your poster because I, I - because we were presenting at the same time.
261 YU-MEI: That's all right.
(Session - February 14)

After having met four times, the group discussed what is important for a collaborative group to work. In turn 257, the idea of training emerges clearly and it is precisely around the concept of training that the discussion goes on some turns later in that session.

In the next excerpt, I reintroduce the topic of training by drawing Yu-mei and John's attention to how well the students in one of the required readings collaborated.

Excerpt E

- 345 ME: Yeah, so, Yu-mei, what you were claiming is that we need to train students.
346 YU-MEI: Yeah, I think you have to have rules of collaboration established. xx mutual trust and -
347 JOHN: Right, but what I think is that rather than rules, what you need is, and this is something that we can talk about cause this is like what I'd like to put in my MRP [=master's research paper] as well, right.
348 YU-MEI: Yeah. But the reason why I use "rules" is because the ... how do you pronounce his name ...? Engeström! His terms.
349 JOHN: Okay, but what I am thinking is that they need to be socialized, which means that they need to be enculturated [acculturated].
350 YU-MEI: Oh, yeah.
351 JOHN: Collaborative values.
352 YU-MEI: Oh, yeah.
[...]
357 JOHN: But the thing is like that macho stand is okay, but ... um ... for collaborative activities, they have to be ... they have to collaborate, they have to be taught, uh, rules. What kind of rules do you mean? Like?
358 ME: Be patient, don't just -
359 JOHN: They have to be, their assumptions have to be challenged, like they have to know that they can learn from um ...
360 YU-MEI: Co-dependency! That's one.
361 JOHN: Which, which means that they can learn from people who don't know as much as they do? Okay, what I was going to say is: you can learn from somebody who doesn't know as much as you do.

362 YU-MEI: Yeah, of course.
(Session - February 14)

In response to the idea of training (turn 345), in turns 346 to 348, Yu-mei talks about the idea of establishing mutual trust to make the group work. John agrees and, in turn 351, points to the need of instilling 'collaborative values.' Interestingly, just as John expresses it in turn 359, my idea and/or assumptions about collaborative work were challenged by discussing them and by actually being part of this new collaborative group. The discussion went on and it was mainly centred on the affective side of collaboration work, a topic that I will address later.

Even though I had read an article in which adult learners, who were also in a graduate course, reported (after consciously reflecting on their small group dynamics) that they needed 'more help with group functioning,' until this experience I never thought that that was necessary. But this time the words of those students were becoming my own: "Even though we are adults, we are experiencing conflicts ..." ... "Who would have said that as mature adults we would need instruction about how to behave?" ... "If we need instruction with getting along, imagine how much help our students need" (Swain & Miccoli, 1994, p.25).

In hindsight, I see no coincidence on the topics that were discussed in the excerpts above and what I started to become aware of about collaborative work. In the lines of Vygotskian thinking, what happened in the social domain was what shaped my thinking and ideas.

Finding 2: Intersubjectivity with disagreement in collaborative activity

All linguistic interaction is dependent on intersubjectivity of attention, that is to say on the belief, reciprocally held, that each is attending to the same event or state of affairs as the other(s) and knows this to be the case. However, although observable very early in an infant's development, *the ability to establish and maintain joint attention has to be learned* [emphasis added]. (Wells, n.d.)

This quote parallels what the group discussed earlier as it points to the need to learn or receive training.⁵ Intersubjectivity refers to the notion of the mutual belief of the group members in an interaction, who are jointly attending to the same aspect of the situation in which they are involved. My notion of intersubjectivity was first co-constructed in the social domain of my group discussion. The group successfully reached

a co-constructed definition of intersubjectivity, which is consistent with the definitions in the SCT literature, as shown in Table 2.

The description of intersubjectivity by Lantolf (2000b) would not make sense if one expected interactants to come to a discussion with exactly the same ideas or perspectives. If that were the case, there would not even be a need to discuss the issue at hand. Matusov (1996) defines intersubjectivity as 'a process of a coordination of participants' contributions in joint activity [which] incorporates the dynamics of both agreement and disagreement' (p. 25). She argues that 'a traditional definition of intersubjectivity as a state of overlap of individual understandings overemphasizes agreement and de-emphasizes disagreement among the participants in joint activity' (p. 25). It disregards disagreement, she says, at two levels: 1) by focusing only on integrative, consensus seeking activities, in which disagreement is viewed as only the initial point of the joint activity, and 2) by considering disagreements as only nuisances or obstacles while focusing on integrative activities.

The notion of culture acknowledges that its members are not homogenous. That is, they do not necessarily share the same point of view, practices, backgrounds, or goals and they should coordinate them by taking complementary roles in the group or by greeting contested relationships with each other, by 'disagreeing about some features of

TABLE 2
Comparison between the group's co-constructed definition and SCT definitions

Group	SCT Literature
513. JOHN: [Intersubjectivity] is part of the <i>socialization</i> , isn't it?	"Two voices coming into contact and <i>interanimating each other</i> " (Wertsch, 1991, as cited in Lantolf, 2000b, p. 85)
514. YU-MEI: <i>Through dialogue</i> , yeah!	"Intersubjectivity is <i>verbally negotiated over a considerable stretch of discourse</i> " (Wells, n.d.)
523. JOHN: you have to be interested in each other. (...) you have to do something that makes them respect each other, that makes them think <i>oh yeah this other person knows something that I don't know</i> .	"Human communication becomes intersubjective when interlocutors undertake not only to share a perspective with regard to the reference of their talk, but it also allows for the <i>taking of the other person's perspective and the suspending of one's own at least temporarily in order to value the other person's perspective</i> " (Lantolf, 2000b).
522. ME: And they have to be convinced that <i>whatever they do together is going to be better than whatever they do alone</i> .	"Importantly, <i>in coming to value the other person's take on things, one also comes to understand and to even critique one's own perspective</i> " (Lantolf, 2000b).

their own roles or community direction while requiring some common ground that community members share (even if they contest it)' (Rogoff, 1994, p. 15 as cited in Matusov, 1996). Given that collaborative learning views learning as a construction of knowledge within a social context and which therefore encourages acculturation of individuals into a learning community (Oxford, 1997), we should expect and even encourage 'a collaborative learning culture,' as it were, to be heterogeneous. We should not expect its members (the group members) to agree all the time but yet expect them to know how to co-ordinate, enhance, and learn from different points of view.

On one occasion the group faced evident disagreement over a course reading. John had a very strong opinion about the article in discussion and, upon explaining it, Yu-mei came to agree with him. However, I did not share their view. In fact, I was quite sure and confident of what I myself had interpreted. The disagreement encountered was, unfortunately, not properly handled and affected the group adversely. However, disagreement can provide a drive to collaborative dialogue because, as I will show later on, it may push speakers to voice their opinions more clearly and articulately. Therefore, it is not so much what one disagrees about but how one disagrees.

Finding 3: Affect in collaborative activity

As Storch (2000) notes, in collaborative group discussions, disagreements arise and when they do, the students try to resolve such disagreements and usually succeed in doing so. That is, they engage in 'exploratory talk' (Wegerif & Mercer, 1996) as opposed to "disputational talk" in which there is an inability or unwillingness to negotiate and/or reach consensus on the part of the students. If collaborative talk is to thrive, participants should be well-disposed to each other and attentive to their perspectives on the topic at issue (Wells, n.d.), as well as involved in the deliberations and receptive to the assistance provided by their peers or the resolution reached (Storch, 2000). In the context where different cultural and linguistic backgrounds co-exist and are put to work together – which happens to be the case of many L2 students in schools or university level programs in North America such as the course in which I was a student – good collaboration could be even more difficult to achieve. When other feelings dominate, whether it be antipathy to the others or disapproval of the way they express themselves, this interferes with the openness, trust, and sense of reliance on other group members that are prerequisites for making the most of their communicative acts. 'This may be less apparent in its outward manifes-

tation in adult-adult interaction; here it is more likely to result in misunderstanding, which is likely, in turn, to exacerbate the negative feeling state' (Wells, n.d.). Conversely, when participants have positive feelings towards each other, it will be more likely and even easier to achieve intersubjective agreement about the topic they are discussing or at least to agree amicably to disagree and, thus, carry on with other topics in a cooperative spirit.

In discussing the article for which the group had different interpretations (Saville-Troike, 1988), I found it quite hard to voice my opinion because, as once expressed to the group, I find it difficult to share my thoughts and opinion when they were greeted with aggressive or disrespectful reactions: *'I get tense and probably I am not ...'*; *'And I ... in order to learn and to interact, I need to feel comfortable and at ease and know that I am putting, giving my best for us to learn together and I am hoping that you do the same'* (Session - February 14). However, though hard for me, I dealt with the interruptions, abrupt comments and the tension that started to mount and, as the discussion progressed, made comments that showed my discomfort with the situation.

Excerpt F

337 ME: What I am trying to say is that you are questioning more, that it seems to me, I may be wrong, but what I am hearing from you is that you are more concentrated more on pha -

338 YU-MEI: No.

339 ME: This is *my* interpretation, I may be wrong, but let me finish.

361 ME: It's OK that we do not agree. In fact, I think that it is great.

487 ME: Going back to our article, because I really like it today. Everybody had like a different point of view. If you were to say, summarize in one or two sentences, what would you say about this article?

495 ME: OK, I think it's a good part what you said [noticing the expression on John's face] Why? Why? Let me finish. You are hard [difficult] today.

(Session - February 28)

In turn 338, Yu-mei interrupts me. Consequently, in turn 339, I feel the need to stress that my interpretation, though different, is still valid and I ask to be listened to. By turn 361, I started to become aware that disagreement was not a bad thing to happen. Later on, in turn 487, I wanted to listen to their different point of view but, in turn 495, once again, I have to ask to be listened to.

A week later, after reflecting about the group session and getting upset about the tone of the discussion, I broached the topic with the

group. John was again prompt to recognise his inappropriate remarks and behaviour and apologized. Nevertheless, the hostile atmosphere prevailed. Disagreement provoked discussions about things that, unfortunately, had not been discussed early enough in the semester to aid collaboration.

Finding 4: Not all conflicts are created equal: C-type and A-type conflicts

Conflict is not defined as an individual's behaviour, a response or a personality trait. Quite the contrary, it takes two or more people to be in social conflict or disagreement. 'As such, conflict is a dyadic relation of individuals, variously described as a "form of social exchange between at least two people" (Hays, 1984, p.2) or a state of "mutual resistance" between two or more people' (Shantz, 1987, p. 285). Though from a different field of study, the paper by Amason, Thompson, Kenneth, Harrison, & Allison (1995)⁶ provides an insightful distinction to the foregoing discussion. The authors say that (management) teams generally experience two types of conflict – one that improves group effectiveness and one that is detrimental to the group. That is, the consequences of conflict, whether positive or negative, are largely dependent upon the types of differences that lead to the disagreement.

A cognitive conflict (C-type) is, in essence, the disagreement among group members that is bound to occur in order to make the group an important source of learning. As long as this type of conflict occurs within facilitative conditions, there is evidence that such conflicts will prompt interesting and insightful discussions that will, in turn, create feelings of uncertainty and curiosity and 'promote the students' transitions from one stage of cognitive ... reasoning to another; increase the quality of students' problem-solving; and increase students' creativeness' (Johnson & Johnson, 1979, p.62). In the case of my group, we had different interpretations of the same text and this itself was a valuable learning opportunity. As a matter of fact, the groups that are comfortable with C-type conflict can evaluate the different viewpoints and alternatives quickly and efficiently without worrying about the personal ramifications of their discussions and choices. Groups that are uncomfortable with conflicting perspectives tend either to avoid them altogether or allow the C-type conflict to drift onto any number of unrelated issues, which can produce long, meaningless discussions and bring about frustration and cynicism.

The remarks and feelings expressed in Excerpt F point to the fact that indeed there can be another type of conflict, which can be harmful. This

type of conflict is known as affective conflict (A-type). Unlike disagreement over issue-oriented matters, which tend to be largely beneficial, disagreement over personalized, individually oriented matters can provoke animosity among group members (Amason et al., 1995). In all likelihood, then, the learning quality decline along with the commitment and understanding necessary to manage any kind of conflict constructively. Not showing interest, let alone not allowing to express one's own opinion can be (and, in all likelihood, will be) greatly detrimental to the relationships at play and thus, the group performance. The question for collaborative groups is not so much a matter of whether to allow conflict, but how to channel it when it exists, because, by allowing conflict, teams run the risk of provoking destructive, A-type conflict. Therefore, groups need to learn to accept and to handle conflict to be able to reach their full potential (Amason et al., 1995).⁷

Along the lines of SCT, in particular Activity Theory, I believe that it would have been very useful for the group to understand and place themselves within the Activity Theory framework (as Yu-mei expressed it in Excerpt D). The concept of activity answers to a specific need of the active agent (which can be individual or collective); it moves toward the object of this need and terminates when it is satisfied. Moreover, the concept of activity is necessarily connected with the concept of motive (Engeström, Miettinen, & Punamäki-Gitai, 1999). In the case of my group, the motive was clearly to understand the content of the course by interacting with each other, and later produce an analysis that would shed light into each participant's learning as both an individual agent and an agent mediated by others' thought and behaviour as well as by cultural artefacts. Unfortunately, the A-type conflict in the group, ended up undermining the group's ability to function effectively in the future. Unable to ease the personalized discussions and respect each other's views, the group dissolved before reaching the final state of producing an analysis of their learning.⁸

The Activity Theory model of social mediation is characterized by division of labour and rules that mediate the interaction between individuals in the activity system (Engeström et al., 1999). It has become clear that the rules of collaboration and the notion of different types of conflicts and how to manage them constructively and thrive in disagreement should have been clearly and explicitly stated early when we came together to form a group. There can of course be some flexibility or modification along the way, but when these issues are not clear and an A-type conflict arises, as in the case of my group, there is no framework or 'contract' to fall back on and, thus, the quality and performance of the group is likely to suffer greatly.

Notwithstanding this caveat, when analyzing the group's discussion during the session of February 28 (when a great deal of disagreement occurred) it is fascinating for me to see that knowledge was still, in my case, mediated by interacting with others. This time, then, I must agree with John and Yu-mei when they said (in Excerpt G below) that even when things do not go as expected or planned, one still learns.

Excerpt G

434 JOHN: Learning, okay, learning is ahead of development, so, but they are not equal. They are not the same thing. So what happens is you have an argument with a bossy guy -

435 YU-MEI: Um-hum.

436 JOHN: A week later, something in you changes. That's development.

437 YU-MEI: Yes!

438 JOHN: So, it doesn't matter.

439 YU-MEI: I know.

440 JOHN: Even if things go wrong, you still develop.

(Session - February 14)

I therefore also concur with Matusov (1996) that disagreement and misunderstanding among the participants is not less relevant to joint activity than agreement and understanding. As we will see next upon confronting disagreement and, hence, upon encountering C-type conflict and before we allowed it to completely become an A-type conflict, I faced a more cognitively demanding task that pushed me to speak more and repeat myself and, thus, make better use of both my L2 linguistic knowledge and the content of the course.

Finding 5: Repetition as mediation

Upon facing and explaining our differences to each other at length, the group tried to reach intersubjectivity so that, even though we might not agree with each other, at least we could acknowledge each other's viewpoint. Although not always in a good-humoured manner, the lengthy discussion allowed me to express myself better each time. The discussion lasted 543 turns. This time, as I had been trying to 'output' more each time, I managed to speak more or less as much as John (see again Table 1 for details about the participants' output). Upon disagreeing mainly with what he was saying and being allowed to voice my own interpretation of the article at hand, I tried to express my views each time more clearly. In other words, the number of words and clarity of

expression increased towards the end of the session. As shown in Table 3, with each turn I tried to verbalize my opinion better.

In turn 222, I expressed, in my own everyday language, what I thought was the intention of the author of the article we were discussing. Having been confronted by opposing views and disagreement, I was prompted to repeat my interpretation more than once. In doing so, I was able to use my second language better and even use content-appropriate vocabulary (private speech, for example). In turn 251, what I wanted to say did not change in terms of the content but it did change in terms of its linguistic quality.

Disagreement also prompted me to read part of the text to the group and further discuss it (turn 255). Studies with L2 learners have shown

TABLE 3
Repetition in social discourse

Turn #	My discourse	# of Words
222	You know how I interpreted it? I interpreted as, I am saying that the beauty of the article is "hold that", "see, what is going on ... what seems to be silence is active, in another domain."	37
251	It's just studying, it's analysing what's going on in those private eh ... speech instances and see whether what they do is conducive to L2 learner [learning] and what she saw is good strategies that are related to L2 learning.	39
255	Ok. I interpreted it as: her hypothesis was those who are quiet and ... She says it explicitly, let me read this to you because I wrote it in my notes: "this article challenges the now dominant conception that whoever is active in the social domain is learning. I am questioning the tendency to equate active, overt production to learning" And I think her claim is non-overt, passive does not mean that that person is not learning. And so what she said was: Ok, let's see how I can take xx from that inaudible speech, something that they are engaging, self-engaging, I mean, self-collaborating, right? So she puts microphones, video and when she analyses the data she says: "Oh, my god, what they were doing, I mean, is related to L2 learning because they were repeating ..."	136
491	Ok, I would say if I have to, ok "You know, read this article, it's great". I would say it is a case study and they studied the private speech of those who apparently were silent and, surprisingly enough, they were active and they were like xxx self-collaborating, they were rehearsing things that were conducive to L2 learner, learning because they were like good strategies. Whereas other students were directly interacting and moving on a more overt performance. And that's all and you will say, probably, if I can understand, what you said is that, you'll probably show that there is a contradiction.	104

that 'people can construct meaning from a text after the reading process itself had ended [and] they do this by conversing with others' (Appel & Lantolf, 1994, p.449). Upon talking about the text, I developed a better understanding of the content of the text. Indeed, recovery of that part of information from the notes ascertained that I had understood the text. However, it was not until I actually said it and read it to the group that this became evident. What happened here, then, is consistent with what Appel and Lantolf (1994) say about speaking as mediation: 'Comprehension of written material need not be a process that occurs simultaneously with the reading process, furthermore, understanding textual material when it does happen, is not necessarily a covert process, but can be externalized as speech' (p. 449). Furthermore, if 'the amount of time spent explaining correlates highly with the amount learned' (Johnson & Johnson, 1989, p. 57), it follows that having the opportunity to explain to others what one interprets will accelerate comprehension and learning. If all group members were to hold the same views, this is much less likely to happen because it is actually cognitive conflict and disagreement that prompt us to verbalize our thoughts, sometimes repeatedly. Moreover, 'the thought is not expressed but completed in the word' (Rieber & Carton, 1987, p. 250).

The results of the social discourse of the February 28 session (from which Table 3 comes into being) indicate that a C-type conflict promoted the most verbal rehearsal and exchange of the assigned reading, the most concern that all group members mastered the assigned material, the most active search for more information about the topic being studied and, very importantly, the most reevaluation of one's position (Johnson & Johnson, 1985). Moreover, particularly in my case, better language use and learning were not the only outcomes of the group interactions and repetitions but also mastery of the course content and the scientific terminology specific to it. It goes without saying that the latter two would not have been possible without my second language as a mediational tool. That is, it became evident to me that, when confronting a C-type conflict and disagreement, I had to stretch my linguistic resources to make my discourse both more comprehensible to John and Yu-mei and more reflective of my own understanding of the topic. To that end, not only did I repeat my own views (self-repetition - turns 222, 251, 255, and 491) but also the other group members' views (allo-repetition - turn 491).

Unlike earlier uses of repetition and behaviourist accounts of its role in language learning, SLA researchers are starting to acknowledge that repetition is meaningful and relevant to learners (DiCamilla & Anton,

1997; Duff, 2000; Lynch & Maclean, 2000). Repetition may be used to direct attention and involvement, help students practice difficult terminology and reinforce meanings (Duff, 2000). In the Lynch and Maclean (2000) study, through the repetition that was naturally built into the class activity, the researchers were able to observe the language development and improvement for learners of different proficiency levels. As Duff (2000) notes: 'for learners, the academic and cognitive benefits of repetition are to hear multiple occurrences of a potentially problematic term, to practice articulating the term, and to join together with other classmates in the common pursuit of new knowledge' (p. 135). This was in fact what I believe happened to me. In order to reach a common understanding with the group, repetition made me more articulate and specific as more appropriate and topic-specific terminology was prompted to emerge. Improved lexical selection (e.g., private speech, non-overt, self-engaging/collaborating, etc.) has probably been the result of having the opportunity to repeat and rephrase my interpretation of the text (Lynch & Maclean, 2000).

According to Tannen (1987, 1989) repetition in interaction discourse contributes to the creation of meaning. She points to several functions of repetition. At the group's interactional level of conversation, my repetition can be said to also function as a device for holding the floor, showing listenership, providing back-channel response and so forth. Another function of repetition, according to Johnstone (1994), is to prepare or express disagreement. Clearly, I take a position and repeat my views and those of John's and Yu-mei's to signal disagreement. Furthermore, by repeating I tried 'to point, to direct a hearer back to something and say "Pay attention to this again. This is still salient, this still has potential meaning; let's make use of it in some way"' (Johnstone, 1994, p. 14). In other words, by repeating, I was trying to reach intersubjectivity. The purpose of the repetition was, in the words of Di Camilla and Anton (1997), to 'construct and hold in place scaffolded help while achieving and maintaining intersubjectivity, which are two critical elements of successful collaboration' (p. 614).

The repetition episode also accounts for the cognitive utility of repetition. As Tomlin (1994) asserts 'repetition is a social act with cognitive consequences' (p. 115). Getting the group's attention on a token of input allowed the group to have something to work on to create, that is, a cognitive space in which to think, hypothesize and evaluate, and from which to build and generate more language (Di Camilla & Anton, 1997). Indeed, repetition pushed me to stretch my L2 linguistic resources and make use of a wider range of linguistic

functions to better explain complex ideas. By repeating my interpretation of the content at hand, I think I was able to make my output more comprehensible to my fellow group members and even to myself.

Concluding remarks and pedagogical implications

Documenting my own learning experience has been extremely enlightening and empowering to me as an ESL speaker, a graduate student, and as a second language teacher and researcher. Without a doubt, it has been an eye-opener as it prompted me to investigate three issues that have regrettably attracted little attention in the research of and about L2 collaborative learning: conflict, disagreement, and repetition.

Though the central idea of collaborative learning is that harmonious social coordination of actions facilitates and aids, precedes, and improves individual coordination and learning, one stands to learn a great deal more about social-mediated learning if one does not ignore forms of conflict and disagreement. Creating a truly collaborative group is not (and should not be) easy, let alone if we endorse disagreement and intellectual conflict as learning opportunities. However, as long as this is not acknowledged and we think of collaborative work as second nature to L2 learners, the idea of peer-mediated learning as an easy, only consensus-driven activity will prevail, much to our disservice and, most importantly, to the disservice of our students.

Effective, high performance collaborative groups are those groups that learn to coordinate the diverse perspectives and learning approaches of their members. To that end, it is imperative that students understand the difference between a C-type conflict and an A-type conflict so that the latter, in the event that it arises, is acknowledged and resolved and the former, encouraged, greeted without fear and constructively channelled to strengthen the group (Amason et al., 1995).

Effective collaborative group should encourage creative thinking by getting the group to think differently and thus gain a new enhanced perspective. Conflicts that arouse personal animosity and that strain the interpersonal relationships among the group members will obstruct creativity and hinder group performance. Truly collaborative groups should 'enjoy a culture that allows their members to speak freely and challenge the premises of other members' viewpoints, without the threat of anger, resentment, or retribution. Open communications are central to getting sincere involvement from team members' (Amason et al., 1995, p. 23). As Chi (1999) points out, group processing can benefit greatly from metacognitive problem-solving, that is, from group

members reflecting on how well they are working together and what they need to do to make the most of their collaborative group. Moreover, teachers need to help learners see how collaboration enhances learners and assist them in becoming comfortable with others as some L2 learners 'may not be educated to work in cooperative groups and do not know about the benefits [and challenges] of collaborative learning' (Chi, 1999, p. 19). Tang and Tithcott (1999) believe that students should be given intensive training to enable them to participate fully in the process of collaboration, and they need to be taught appropriate behaviour (for example, politeness strategies and facilitative language). The time and effort for mitigating difficulties are, undoubtedly, worth expending. As Storch (1999) concludes about her study, students working in dyads (even self-selected dyads) may not necessarily work in a collaborative fashion but when they do their performance is better.

This paper has also addressed the benefits of repetition. As Lynch and Maclean (2000) note, the process of repetition is promising, but it will require some 'selling' because people usually equate repetition with boredom. Repetition that naturally builds into tasks and/or emerges from natural discourse as an attempt to attract attention or to express disagreement can be a site for content learning and linguistic improvement to occur. Interaction and mental activity can be mediated by repetition of one's own utterance as well as of others' as it can create and maintain a shared perspective of the topic of discussion and construct scaffolded support and guidance (DiCamilla & Anton, 1997). As Wong (2000) prompts us to realize, nowadays 'repetition is not merely the extraneous material that one ignores or discards when engaged in data analysis of naturally occurring interaction' (p. 420). Repetition is indeed a relevant part of our language system and social interaction.

By analyzing my own learning and discourse and the group dynamics, the point has been made that the study of cognitive conflict, disagreement, and repetition in collaborative groups holds substantial potential for understanding the social, interpersonal process of learning (both language and content) that will, in turn, provide information about the cognitive, intrapersonal, and linguistic development of the participants. Conflict and disagreement can indeed co-exist and enhance learning in a collaborative group but we need to acknowledge both their potential and threats to be able to make the most of them. As a matter of fact, the outcomes and strategies prompted by conflicting perspectives and disagreement in peer-peer interactions (such as repetition) are particularly revealing of some learning processes, and, hence, deserve more study.

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Transcription Convention

Layout	Turns are numbered consecutively.
	Indented turn: overlapping speech
-	Incomplete utterances
.	Turn completed.
?!	Interrogative or exclamatory intention
bold	
type	Emphasis
[]	Comments/clarification and/or descriptions of relevant behavior
[=]	Glossary
" "	Utterances read from text.
xx	Indecipherable speech.

Notes

- 1 Throughout the paper I will use the terms cooperative and collaborative interchangeably. The distinction between these two terms is far from being a hard and fast one. For a somewhat distinctive definition see Oxford (1997).
- 2 John and Yu-mei signed letters of consent for me to use our data. However, I will only analyze my own learning and no interpretation of their own learning process will be presented.
- 3 All three sessions reported in this paper were transcribed and read by John, Yu-mei, and myself respectively. Moreover, both John and Yu-mei read the analysis that I carried out for this current paper and an earlier version of it.

- 4 All three sessions were approximately equal in length (520-600 turns).
- 5 Training, however, may just consist of a set of guidelines for each person to read before getting into groups as some adults may think that, upon reaching a mature age, too much training along the lines of 'getting along with people' is unnecessary.
- 6 Yu-mei posted this reference in the web-forum, i.e., our Internet discussions with our sister class.
- 7 An anonymous reviewer pointed out the difficulty of separating C- and A-type of conflict because s/he believes cognition and affect are very much interconnected. As much I see his/her point and agree that people are invested in their own interests, interpretations, ideas, opinions, etc. I do think (or at least hope) that an individual can and should be able to separate them at critical points. That is, confronting disagreement of ideas and opinions should never be interpreted as disapproving the individual as a whole. In fact, if we could only see disagreement as a learning site, we would probably invest less effort and affect in trying to prove our point and just put our minds to work more actively and fruitfully without feeling threatened by others with views different to ours.
- 8 It was not until this point that the group approached the course instructor and explained the problems they had encountered. The group members had taken pains to keep hostility in the group from the instructor's awareness, probably because they felt it implied 'failure' as a group or 'betrayal' to the group members. Moreover, I believe it was the first time we all experienced difficulties with group work. I think that had the course instructor been aware of these difficulties, she would have taken action to help resolve them. The current paper is based on my own term paper, which both John and Yu-mei read prior to submission.

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