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A typology of metacognition: Examining autonomy in a collective blog compiled in a teletandem environment

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Abstract

Learner autonomy has become a leading pedagogical paradigm in foreign language education. Within this context, learners are helped to (learn to) take responsibility for their learning. Given that more recent studies have highlighted the importance of the social dimensions of learner autonomy, we examine, on a qualitative basis, student logs within a collective blog completed during a teletandem experience between French and Australian universities in order to identify different types of metacognitive operations and to develop a descriptive typology.

Key words: autonomy; social dimensions; teletandem; metacognition; blog.

Introduction

The influential work of Henri Holec (1979, 1981; Barbot & Camatarri, 1999) is responsible for the recognition that the notion of autonomy offers an important perspective on studies of the teaching and learning of foreign languages. Since Holec's work, our understanding of autonomy has evolved over time. In the early definitions of learner autonomy, it was often conceived of primarily in individualistic terms (Little, 2012) with the only social support coming from mentors or advisers (Gremmo, 1995). However, thanks to the research by Dam (1995), the social aspects of learner autonomy have taken on added dimensions (Little, 2015; Murray, 2014).

Teletandem (Telles, 2015) is a variation of tandem language learning (Lewis & Walker, 2003), a learning configuration based on the principle of autonomy, among others (Garcia, 2013). Tandem learning often includes the writing of learner logs, which can be defined as a type of metacognitive writing in which learners report what they perceive as relevant to their learning.

In this study, we examine autonomy starting from the definition of learner autonomy in Holec (1981) and its subsequent development, including the social dimensions (Murray, 2014). We assume that autonomy is evidenced by the verbalization of metacognitive operations in the learners' logs. Thus, in the present article, we examine from a qualitative perspective the logs written by students during a teletandem experience between a French university and an Australian university with the goal of finding evidence of autonomy. What is particular about these logs is that, contrary to the traditional form of individual logs (Barbot & Camatarri, 1999; Lewis & Walker, 2003, among others), they were produced within a collective blog in order to allow the learners to read each others' contributions and receive feedback on their own writing and reflections.

Our overall goal is to examine expressions of autonomy in the collective blog and describe what characterizes them. Our findings allow us to then propose a typology of metacognitive operations. This study is relevant for two reasons. First, teletandem environments of this type are of particular interest for research focused more broadly on logs and mediation sessions (Garcia, 2015). Second, this study contributes to the current focus on the social dimensions of learner autonomy (Eneau & Develotte, 2012; Murray, 2014).

In section 1, we focus on the theoretical framework as it relates to tandem and learner autonomy. We then discuss the methodology used in this study and present our analysis of the data. Finally, we discuss the pedagogical implications of the study and some future perspectives.

- 1. Theoretical framework
- 1.1 Tandem to teletandem: Perspectives and principles

Internet communication allows students to cross international borders and creates rich opportunities in terms of tele-teaching and -learning of foreign languages. With the development of new technologies, tandem programs, which have been operational in Europe since the 1960s (Brammerts, 2003; Cziko, 2004), have taken on new dimensions.

In a tandem, linguistic exchanges are promoted through the formation of partnerships between learners of different languages and cultures. According to Little et al. (1999, p. 1), "Tandem language learning is a form of open learning in which two people with different mother tongues work together in order to learn one another's language".

Three principles make up the pillars of learning in tandem: reciprocity, dual language use and autonomy (Schwienhorst, 1998). The principle of reciprocity states that each learner should benefit equally from their partnership. It establishes an interdependence between two peers who support one another in learning. "All tandem partners are experts in their own language and culture: if desired, they can read aloud, discuss topics selected by their partner, correct mistakes, make suggestions for improvement, etc.," (Brammerts, 2003, p. 32).

Dual language use is a principle that implies linguistic balance between partners, according to Vassallo & Telles (2006). It essentially states that the same amount of time should be accorded to each language during a tandem session. For Vassallo and Telles, this encourages and challenges learners to produce their target language.

Autonomy is the third principle. It says that learners have responsibility for managing their own learning (Lewis & Walker, 2003, p. 15). According to Brammerts (2003, p. 33), autonomy

(...) confers on them the obligation and the opportunity to set their own goals for their work in tandem, and to think about how these goals may be reached in collaboration with tandem partners who are, both native speakers of the partner's foreign language, yet learners of their partner's mother tongue.

The learning scenario in tandem, in line with the opportunities offered by new technologies, was the inspiration for the *Teletandem Project Brazil: foreign languages for all* (Telles, 2015), which is the initial model for the environment we are studying here. Based on the author's experiences, teletandem is defined as:

"(...) A virtual, autonomous context that uses VOIP technology resources (webcam images, voice and text). In this context, two students of foreign languages collaborate with each other in learning their respective native languages (or of proficiency) through intercultural interaction and language." (Telles, 2015, p. $1)^i$.

- 1.2 Learner autonomy
- 1.2.1 Holec's definition: "Autonomization" and criteria for the development of autonomy

The first definition of learner autonomy in language learning was given by Holec in the late 1970s. He refers to the ability of an adult to take charge of and be responsible for his/her own learning. This capacity was assumed to be inherent in everyone but it was also assumed that it generally needed to be developed in a formal environment, such as, for example, with the advice of a tutor (Gremmo, 1995).

In his work, Holec clarifies what it means to "take responsibility for one's own learning". Holec describes five actions taken by the teacher in traditional environments (Holec, 1979, p. 4), namely: planning pedagogical objectives; defining course content and progression; selecting methods and techniques; keeping track of the time and place of learning; and evaluation. These responsibilities would thus need to be assumed by the autonomous learner.

It is important to emphasize that, contrary to many misinterpretations, autonomy in Holec's view is not a prerequisite for autonomous learning. Rather, it is an educational goal. In this sense, many authors have thus focused on the development of autonomy (Porcher, 1981; Barbot & Camatarri, 1999; Rivens Mompean, 2013) and distinguished between autonomy as a goal – called "autonomy" – and the process of (trying to) reach it – "autonomization". From this perspective, any mediation on the part of the tutor / counselor is viewed as important in potentially helping the student become more autonomous.

1.2.2 Social aspects of autonomy

According to Little (2012, 2015), Holec's definition of learner autonomy is largely dependent on the socio-cultural context in which it operates. More precisely, this definition reflects mainstream research on adult learning based on the constructivist psychology of Piaget, in which the individual learns through interaction with the environment by testing hypotheses. In addition, Holec's definition arose from his experiences with the University of Nancy's Self-Access Center (CRAPEL)ⁱⁱ and only takes into account the technology available at the time.

Nowadays, educators and researchers (e.g. Murray, 2014) propose a somewhat different view of learner autonomy based mainly on socially oriented learning theories such as sociocultural theory (Vygotsky, 1978; Lantolf & Thorne, 2006). In these frameworks, pedagogical contexts were initially associated with the language classroom (Dam, 1995; Murray, 2014). However, the emergence of new information technologies and means of communication – i.e. Web 2.0 – added a social dimension to learner autonomy (Lewis, 2013), so much so that some authors have questioned the relevance of the concept itself (Toffoli & Sockett, 2012).

For the present study, the main issue arising from previous research relates to Holec's definition of learner autonomy. In light of new technologies, it must be revisited to take into account how, in different environments (such as those mediated by computers), the social dimensions of learning interact with the autonomization process, in the same way that the relationship and dialogue between pairs can lead to individual autonomy (Cappellini, 2015; Eneau & Develotte, 2012; Lewis, 2013). For this reason, we have decided to consider not only Holec's criteria for learner autonomy, but also the emotional dimensions of autonomous learning as defined by O'Leary (2014, p. 27), such as the ability "to lower their [students'] own anxiety, encouraging themselves, taking their emotional temperature, as well as empathizing and cooperating with others".

1.2.3 Learner autonomy and metacognition

Within the pedagogical paradigm of learner autonomy, the concept of metacognition plays an important role. Metacognition can be roughly defined here as the process of reflecting on how one learns. The relationship between learner autonomy and metacognition is a complex one, both on a pedagogical and on a research level. In psychology, metacognition can refer either to monitoring or to control (Perfect & Schwartz, 2002).

Metacognitive monitoring occurs when we "observe, reflect on, or experience [our] own cognitive processes" (*ibid.*, p. 4). Metacognitive control is defined as "conscious or nonconscious *decisions* that we make based on the output of monitoring processes" (*ibid.*).

Another important distinction is between metacognitive knowledge and metacognitive awareness. The former is defined as knowledge about the strengths and weaknesses of one's own knowledge. In Holec's terms, this would correspond to evaluation of one's own learning outcomes. Metacognitive awareness then is defined as "the feelings and experiences we have when engaged in cognitive processes, such as retrieval" (*ibid.* p. 5). In the present article, we use the term metacognition only in its narrow meaning of metacognitive monitoring, both in terms of awareness of the learning process and of the knowledge resulting from this process.

Given these definitions, we can first identify a difference between learner autonomy and metacognition. While learner autonomy is a goal, metacognition is a process. More precisely, metacognition is a means of developing autonomy, a component of autonomization, since it is a way for learners to acquire better knowledge about themselves and in the end to improve their learning (Rivens Mompean, 2013, p. 150). Barbot & Camatarri (1999, p. 200) go so far as to state that one of the main roles of a language trainer (*formateur*) is to "orient the learner in the construction of his/her own metacognition"ⁱⁱⁱ, possibly, we would add, by allowing him/her to compare his/her learning strategies with those of his/her peers (Cappellini, 2015). In sum, metacognition within the learner autonomy paradigm is a "golden ticket" for making a change from passive and unreflective learning to conscious, reflective and active learning.

Metacognition is therefore a process inherent in the five criteria for autonomy listed by Holec and in the emotional dimension described by O'Leary. It is a way of improving how pedagogical objectives are established, how content and progression are defined, how methods and techniques are selected, etc. However, metacognition cannot be assimilated to autonomization. For instance, one can imagine a student who is capable of an in-depth analysis of his/her learning strategies, yet is unable to improve his/her learning, or, on the contrary, a student who is able to learn autonomously but cannot make his/her strategies explicit.

Though the difference between learner autonomy and metacognition should be clear on a theoretical level, we need to underscore that, on the pedagogical and methodological levels, the distinction is not so obvious. On a pedagogical level, metacognition pertains to learner autonomization and it is therefore sometimes difficult to draw a line between the two. On a methodological level, autonomization is detectable in two ways: through observation of learners while learning in order to develop hypotheses about the decision-making processes in relation to learning results; and/or through examination of learners' reflections on their learning, that is, metacognition itself. For this reason, on a methodological level we cannot differentiate between autonomization and metacognition and, in this study, we will describe the former based on the latter.

1.3 Logs

Since their appearance, blogs have attracted the attention of the CALL community for the different possibilities they offer (Lamy & Hampel, 2007). Rivens Mompean (2010), for example, studied how the introduction of a blog activity in an autonomous environment can enhance learners' written productions and interactions. In her pedagogical setting, she asks students in groups of three to keep a blog on a topic of interest and to comment on other groups' blogs. In her study, she shows how the conversion of a social activity (keeping a blog) into a pedagogical one has the effect not only of enhancing students' texts and interactions, but also of making them authentic. Exploiting common interests is also central to Yang's study (2011). Yang examines what Japanese and Taiwanese students do when keeping individual blogs about "discussable" topics and commenting on others' blogs. She finds that

interactions are characterized by the search for a shared space in terms of commonality, which means that students established and maintained contact by discussing shared interests and knowledge.

Beyond authenticity and the co-construction of a shared space, blogs have also been linked to critical thinking. For instance, Godwin-Jones (2006 apud Zaini et al., 2011) affirms that the use of blogs as a writing tool has the following advantages: encouraging feedback and promoting both writing and reading; encouraging critical analysis and articulation of ideas and opinions; offering opportunities for collaborative learning; providing an environment in which students can develop skills of persuasion and argumentation; creating a more student-centered learning environment; and offering practice in reading informal language. As for learner autonomy, some of these characteristics are exploited and studied by Cappellini (2015). He studies a collective blog where students in a guided self-learning course have to keep their learning blog and he finds that students are able to compare their learning strategies and to better define them via such comparisons. Moreover, he also finds a strong social presence in the interactions within the blog.

2. Methodology

Using qualitative methodology (Burns 1999; Denzin & Lincoln, 1998), we are interested in the types of metacognitive operations found in the blog we examine. Below, we describe the participants, the teletandem context with its accompanying blog, data collection procedures and analysis.

2.1 Participants

The participants were 16 university students taking part in a French-English teletandem program conducted via Skype. Half of the group was enrolled in a variety of degree programs at a large public university in France and the other half were students at a large public university in Australia.

Students from both institutions had proficiency levels in their target foreign language (FL) ranging from B2 to C1 according to the *Common European Framework for Languages* (Council of Europe, 2001).

The French participants were completing degrees in English or Psychology. Seven of the students were native speakers of French, while one was a native Spanish speaker from Argentina who was proficient in French as a second language.

The participants from Australia were all students of French along with other subjects, including Geology, Media Studies, Political Science, Indonesian, German, Chemistry, Economics and Engineering.

2.2 Teletandem France – Australia

The data analyzed for this study were generated from programs offered in universities in France and Australia. The students in France participated in the tandem as part of a larger course called "Aide à la mobilité internationale – niveau I" (preparation for travel abroad – level 1) organized to encourage students to prepare to spend time in another country. The primary goal of the course was to educate students about issues related to intercultural communication.

One main component of the course was the organization of (tele)tandems. Each student was paired with a second student from a different linguistic background who was either registered for the same course or motivated to participate in a tandem independently. This was the case of Australian students who were matched with participants from France for a teletandem via Skype.

For the Australian students, participation in the project was voluntary. The main pedagogical objective was to offer them the opportunity to practice oral skills with a native French speaker, as well as to help them gain intercultural understanding.

For the French-Australian teletandem component, students were required to communicate via Skype at least six times during the course. The students were provided with activities they could complete during the sessions. Three activities (the first, the third and the fifth) were mandatory for all participants, while the other activities were self-directed, i.e. students were free to follow the tutors' suggestions or to develop their own activities according to their pedagogical objectives. The activities were compiled from those that had been developed for other tandem projects, including teletandem and a face-to-face tandem in French-English at the French university, the *Seagull Project*^{iv} and the *Cultura Project*^v.

2.3 The teletandem blog

In order to motivate the students to reflect on their learning, they were required to participate in writing a collective online blog. This blog constitutes the source of data for the present study. It allowed students to produce short posts on each of their interaction sessions. They also posted photos, links to websites and animated gifs to share with other participants. For the foreign language component of the course, the posts of the Australian students had to be in French, whereas the students in France were permitted to write in English or French.

2.4 Data collection and analysis

As described above, the teletandem activities involved eight pairs whose exchanges occurred between March and May 2015. In these partnerships, each pair participated in six conversations lasting an hour and a half each. As part of the program, after each interaction, the students wrote posts for the collective online blog. The goal was to encourage them to reflect on their learning by sharing their learning strategies (Cappellini, 2015). For the French students, their participation in the blog was required as part of their final mark in their *Aide à la mobilité internationale* course.

The data were retrieved directly from this blog. The names of participants have been redacted in order to ensure anonymity. In the data cited below, we use brackets [] to indicate where a participant's name has been removed. The blog posts were written in both English and French, as explained above. For this article, we have chosen to maintain the English texts as originally presented. The data in French have however been translated into English by the authors in order to facilitate the reader's access to the questions we want to explore.

The data were analyzed for evidence of metacognitive operations related to learners' autonomization (see section 1.2). These traces were organized according to Holec's categories, restructured following Cappellini et al. (2016):

- setting goals (Holec's first criterion)
- planning learning activities by selecting relevant resources and/or possible learning strategies (joining Holec's second to fourth criteria)
 - evaluating one's own learning and learning strategies (Holec fifth criterion)
 - making explicit the emotional dimensions of learning and taking control of them.

We recognize that there is a certain degree of subjectivity in the analysis proposed. In order to make our analysis as objective and systematic as possible, a series of steps was decided upon. First, the authors divided the blog entries such that each blog entry would be read by two of the three authors. As a second step, each author read his/her assigned blog posts in order to determine whether the statements belonged to one or more of the categories of autonomization outlined above. We outline below the kinds of information that we looked for as part of this sorting effort. In our results section, we provide specific examples of the blog posts to exemplify these categories.

For the first category, setting goals, the authors searched for references to areas that the students were interested in working on or learning about via the tandem scheme. These could include, but were not limited to, grammatical points, lexical fields, linguistic skills, cultural knowledge, etc.

To complete the second category, planning learning activities, the authors read the blog posts for references to both logistical (Holec's fourth criterion) and pedagogical (Holec's second and third criteria) aspects of learning. In terms of logistics, the authors looked for references to decisions about how the teletandem sessions would be organized, e.g. when and how often the two partners planned to hold their sessions. For the pedagogical aspects, the authors looked for references to decisions about how to carry out a particular learning activity or plans for future activities. Sometimes the logistical and pedagogical aspects were expected to overlap, e.g. when students make decisions about how to correct each other's errors and the means they might use to communicate these errors to one another or when students decide how to divide the session so that the two languages are used equally.

For the category of self-evaluation of learning and learning strategies, the authors expected to find references to how the students viewed their performance during a session or in the course overall, as well as comments about what a particular activity allowed them to learn or accomplish. Furthermore, the authors searched for references to the efficacy of the tandem or of the different activities for their learning.

Finally, for the category related to the emotional dimensions of tandem learning, the authors examined the blog entries for references to the emotions, e.g. relief, happiness, shame, satisfaction, that the students discussed. These emotions might be about the teletandem scheme, their relationship with their partner, the linguistic aspects of the tandem and the different activities that they carried out. For the management aspect of this category, we looked for comments about what students did (or did not do) as a reflection of these emotions, e.g. choosing activities or discussion topics that they felt comfortable talking about in the foreign language.

After this initial categorization was complete, results were compared among authors along two parameters. First, the two authors had to agree that the post was indeed relevant to one of the established categories listed above. Second, if a piece of data was considered relevant, the two authors had to agree on which category it belonged in. In cases of disagreement, consensus was sought via discussion among the three authors.

Once the data had been identified and categorized, each category was analyzed individually in order to find recurring themes. These were used to develop a detailed typology as shown below.

3. Discussion and analysis of the data
In this section, we present the results for each of the categories individually.

3.1 Setting goals

No references to the setting of goals were found in the blog posts. This constitutes the only category that was not represented in our data. We conclude that either because of their perception of the purpose of the blog or of the structure of the course, students do not specify this type of metacognitive operation within the blog.

3.2 Planning learning activities by selecting relevant resources and/or possible learning strategies

3.2.1 Scheduling meetings

Agreement on meeting times must be established through efficient communication between the participants (Garcia, 2013) and contribute to the smooth running of partnerships. We observed that the partners did indeed discuss the times of their virtual meetings, as shown by excerpts (1) and (2).

- (1) So [] and I decided to have the teletandem on Fridays.
- (2) However, we made plans to talk via Skype again next Friday. In the meantime, we talk by Facebook to write down minor corrections and to keep in touch.

Interestingly, in addition to agreements on schedules between partners, excerpt (2) reveals active contact with the partner via Facebook. This contact had two goals: (i) provide corrections; and (ii) maintain contact. This indicates that the partnership is engaged in the experience and, via such procedures, they are increasing in autonomy.

3.2.2 Strategies for language learning and feedback

As for the selection of learning strategies, a number of blog posts touch on this topic. For instance, in the excerpt below, the student discusses decisions concerning two related topics: (i) writing down errors on a separate sheet to avoid interrupting their interaction; and (ii) sending the list of errors, along with any explanations, to the other member of the partnership using Facebook.

(3) As regards the "system" we found, we decided to write down on a sheet the mistakes we could hear in order not to interrupt. Then we send it to the other on Facebook with explanations if necessary.

In this case, development of autonomy is mediated by the actions taken in the tandem along with the good working relationship established between the partners and the constant negotiation and decision-making that they are engaged in.

3.2.3 Modifying the task

One trace of autonomy that we identified relates to the way in which students complete the required tasks. We observed that they do not always follow the given tasks. Excerpt (4) illustrates this situation.

(4) [] and I dealt with 7 out of the 14 questions in the list of activity 4. We had some fun choosing a number between 1 and 14 at random and discussing the question to which the number referred (the final list was: 1, 5 7, 10, 12, 13, 14). In this way, the answers could not be premeditated, as we were obliged to contribute to the discussion spontaneously. (Anyway, for me it was an exercise!).

Here, we see that the students decided not to complete all parts of the activity but only half of them. In addition, they decided to complete them out of order. While the contrast between tasks-as-workplan and tasks-as-process is a well-known educational phenomenon (Dooly, 2011), it is interesting to note that, in the excerpt, the students made the decision to slightly modify the task in order to promote a more spontaneous conversation. This decision reveals a certain degree of autonomy in that the students fit the task to their needs. Moreover, the modification of the task is related to what we call emotional dimensions in that the distance between the modified and expected forms of the task allowed for a more spontaneous conversation.

3.3 Evaluation and self-evaluation

3.3.1 Evaluation of emotions and the tandem partnership

Most posts related to (self-)evaluation of learning also involve a relationship with the emotional dimension of the teletandem sessions. This means that students evaluate the quality of their performance, generally with a positive attitude, as well as the development of their relationship, as in the following excerpt.

(5) I think that this activity allowed both of us to get to know each other on a very different basis than the 'Chocolate or Vanilla' questions, indeed sharing your opinions is not always an easy thing, and I think it brought us together a little more, because we share the same views on the world event though we live a world apart from each other!

We discuss below the relationship between this type of (self-)evaluation of learning and the emotional dimensions of teletandem.

3.3.2 Language assessment: Learning strategies and mutual understanding Though tentative, linguistic (self-)evaluation is found as well. Such evaluation is most often associated with the ability to reach mutual understanding during interaction in the foreign language, which is considered evidence for (sometimes unexpected) language skills, as in (6).

(6) even though I did have to ask him to repete a couple of times, I could understand what he said!

Another area of assessment related to the linguistic aspect of teletandem is the evaluation of communication and learning strategies used during the interaction, for example, how to make corrections:

(7) Regarding each other's mistakes, we kept on writing them to send explanations afterwards since we found out it worked well.

For us, these two areas of evaluation indicate that linguistic (self-)assessment in teletandem is related to the purpose of learning and the context of communication. The metacognitive operation of evaluation is therefore present within the blog.

A final comment on linguistic evaluation in teletandem concerns a form of assessment we consider to be specific to the (tele)tandem context. We see examples in (8) and (9).

- (8) She speaks French so good.
- (9) It was obvious that [] studied philosophy for the simple reason that she seemed very comfortable discussing such issues. She organized her arguments very skillfully. On the other hand, it was difficult for me to express myself and clarify my ideas. However, I felt a few moments of euphoria every time I managed to make one of my opinions clear.

When blogging, students often publicly acknowledge their partner's skills in their foreign language. This relates to what Porcher (1981) observes about evaluation in FL education – that the easiest way to evaluate one's own skills is to engage in conversation with a more proficient speaker. This observation plays a role in teletandem, in which students compare their skills in the two languages. This aligns with research on other (tele)tandem contexts (Cappellini et al., 2016).

Finally, in some posts, the students make it clear that, through greater knowledge of the foreign language structures and questions to their partner about his/her own native language, they increase their metalinguistic knowledge of their own language, another finding that is also found in the literature (Appel, 1999).

3.3.3 Cultural and intercultural evaluation

One last area of (self-)evaluation belongs to what we call the cultural and intercultural domain. Such a designation is problematic as most of what was written in the blog is related to cultural issues and could be seen as evidence of the development of intercultural competence, especially in terms of factual knowledge (Byram, 1997). As such, the evaluation of cultural knowledge generally involves the discovery of unknown phenomena in the partner's country. However, in some cases, we find evidence of intercultural development via a comparison between the two countries, as in (10).

(10) We discussed it and came to the agreement that we could not really see what a "typical family" was, whether Australian or French. Even if we compare several families from the same country, they will be very different and thus is rather difficult to find a "typical family".

In excerpt (10), the student not only makes a comparison between the two countries but also realizes that what is associated with one country or another is not in itself a factor that predicts people's behavior. In this sense, it shows the transition from a culturalist to an intercultural perspective (Abdallah-Pretceille & Porcher, 1996), which is related to learner autonomy (Barbot & Dervin, 2011).

To conclude this section on evaluation and self-evaluation, we cite a long excerpt that shows how the three different areas we have identified connect and relate to individual student growth.

(11) If this is my last post, I'd like to add that [] and the teletandem in general somehow helped me grow up as an individual and it was a strange experience I must say (in a very good way!) but one that allowed me to really question what I would say or how I'm saying it in both French and English, something that I would not have done without the program and I would not change anything.

3.4 Emotional dimensions

3.4.1 Two types of emotions: Anxiety and relief

It has long been recognized that emotion, particularly anxiety, plays a key role in language learning (Scovel, 2001). Oxford (1990) states that efficient language learners are able to control their emotions to decrease anxiety and motivate themselves. Studies on autonomous learning situations have shown that these learners are aware of the emotional aspects of language learning and make use of different strategies to master them (So & Dominguez, 2005). We therefore examined the teletandem blog for evidence of the participants' metacognitive reflection to control the emotional dimensions of their experience.

In early entries, we see that participants tend to make reference to anxiety before the first session with their Skype partner, followed by the relief from the relative ease of their first contact with their partner. For example, an Australian student wrote:

(12) At first, we were both a little nervous. But we think, answering questions, we had a lot in common and we could talk about many other things.

In general, this anxiety is resolved when the first interaction occurs and the ice is broken. After the initial contact, the students reported feeling happy and stimulated by the exchange. These feelings are exposed in the posts of some of the French participants:

(13) I feel more confortable with her, she's a really a nice and a clever girl

(14) I really liked the exchange that we had. It was very rich and interesting

Thus, this issue relates to the aforementioned idea that students care about the social dimensions of their learning. They seem to feel that, for the tandem to be successful in terms of learning, it should be also successful on the social level of the partnership. Therefore, in the early stages of the tandem, they strive to feel comfortable with their partner rather than focus on the linguistic aspects of learning in tandem.

3.4.2 Relationship with computer mediated learning

A second recurring theme regarding the emotional dimensions is related to the particular context of the teletandem. Some participants said that anxiety related to the idea of interaction with the partner via internet. One of the Australian participants commented:

(15) Before our first connection, I was a little nervous. Also, my weak internet connection was determined to make me even less comprehensible during the first few minutes. Fortunately, [] was very patient and finally, my wi-fi and I

were comfortable and we were able discover who was speaking to us from the other side of the planet.

As we can see from the posts, the social aspects receive much more emphasis, especially in the beginning when the students were anxious about getting to know their partner. This does not mean that there was no discussion of the linguistic aspects but only that it is not very prominent in the data

3.5 Overview

In the previous sections, we have illustrated the types of metacognitive operations observed in the student blog. In this section, we discuss some questions related to these operations in light of previous studies. This discussion focuses in particular on the analysis of our data and attempts to contextualize it in order to explore its relevance and validity.

3.5.1 Three types of metacognitive operations

First, we can distinguish three types of metacognitive operations as they appear in the blog. In the first type, we find operations that are rare or absent. One of these is setting learning goals. The other one is choosing learning activities to reach the established goals. We suggest that the two are related; if students do not make explicit learning goals in teletandem interactions, they cannot select learning activities based on them.

The second type of metacognitive operations is characterized by the fact that they appear frequently in the blog. These are planning learning activities and (self-)evaluation of learning. With respect to the latter, we identified some phenomena as specific to the context of (tele)tandem, such as assessment relating to mutual understanding between partner and the comparison of the two partners in terms of their skills in their foreign language (see Cappellini et al., 2016). Moreover, assessment is sometimes related to a growing awareness of one's own language (which aligns with Appel, 1999).

The third type consists of a single metacognitive operation, related to the emotional dimensions of learning. Students manage their emotions related to learning. For example, students reported their anxiety before their first teletandem session (which corroborates the work of Guichon et al., 2008) or managed emotions related to the context of distance learning, e.g. with the posting of photos. In addition, we saw that the emotional dimensions are also present in other metacognitive operations, such as when learners modified the expected task in order to make it more interesting or lively, or when learners reported feeling relieved with respect to their anxiety about their level in the FL. In this sense, the third group of metacognitive operations – managing emotional dimensions – pervades the other two.

3.5.2 General observations

To have a more complete understanding of the social dimensions of learner autonomy in our corpus, we now relate these results to the existing literature on learner autonomy and language learning on social networking sites.

The first group of observations is that within the teletandem blog, the metacognitive operations reveal that autonomy is developed via social relations. This follows from the social context inherent in tandem learning. In other words, the autonomy of each learner is developed through interaction with the partner, e.g. when determining the time of the exchange or deciding to modify the original task. In this sense, the partner is not only a resource for language learning but also a kind of "travelling companion", with whom one shares difficulties in learning and is happy to discuss interesting topics.

The second set of observations relates to the blog itself. The emotional dimensions generally seen in the posts relate to a friendly atmosphere. In this sense, it is therefore possible that the students transferred the social use of social networking sites to the context of the blog. In other words, they transferred their culture-of-use (Thorne, 2003) to a formal environment perceived as quite informal, via discussions of shared interests. This can be related to Yang's analysis of shared space in student blogs. Like Yang's study, in our data,

students establish and keep contact through discussion of shared interests and common knowledge about global entertainment (such as Hollywood movies). Moreover, this shared space is also present within the blog, where students can comment on posts by noting that their teletandem pair presents similar conversational dynamics.

Besides, the blog was intended to stimulate interaction on a metacognitive level beyond the teletandem pair. However, although there was good participation in the blog, there are few interactions among students, contrary to what is reported in Cappellini (2015). This does not mean that the social dimension is absent. On the contrary, it is present in the way that the members address the community (significantly, one student begins his post by saying "hello teletandemers"), almost as if they were revealing their thoughts to an audience. The social dimension is present not because each student posted in order to talk with a community, but rather to a community. The blog then becomes

a collaborative space where the participants pool what they have learned and provide support to each other in a community of practice that shares the same doubts and is going through the same stages of discovery (Rivens Mompean, 2013, $p.\ 150$) vi .

The verb 'pool' (*mutualiser*) is important given its distance from other concepts such as *cooperate* or *collaborate*. In pooling, the user posts something, thereby making it available to others without necessarily determining a division of labor (cooperation) or working with a co-author (collaboration) (Lamy & Mangenot, 2013). In this sense, it would be better to speak not of a "community of practice" but rather of a "community." The community shares a specific, common concern – in this case learning via teletandem sessions – but does not have a shared purpose (Murphy, 2014: 122). In other words, our analysis calls into question the "collective" nature of this specific blog, which is collective not because it forms a whole expressing a single voice, but because it represents a collection of voices on a common concern.

Beyond links with learner autonomy in terms of shared strategies and resources, as noted in an earlier study (Cappellini, 2015), the social dimension of autonomy in our corpus lies in this type of social bonding: at the junction of a culture—of-use imported from social networking sites and a community (i.e. teletandemers) to which participants can post, relating to one another and building a shared space based on commonality.

4. Pedagogical implications

In this section, we turn to some pedagogical implications, without going so far as to call them recommendations. The first relates to the relevance of mandatory activities in a learner-autonomy-oriented environment. Our analysis reveals that students distanced themselves from such activities by modifying them, which, in our view, is a sign of autonomy. However, this autonomous behavior was not carried out in order to achieve particular educational goals, but rather for reasons related to the search for a shared space (Yang, 2011).

Tutors and teachers should take this phenomenon into consideration. Depending on the pedagogical goals of the environment, one could, for example, find a balance between requiring students to do certain activities and allowing them more autonomy to choose their own activity or giving them a choice of activities. Another possibility that takes autonomy into account would be to use more directed activities at the beginning of the course and then gradually allow students to have more and more control over how to carry out an activity and over which activity they do, until they eventually design their own activities, thus developing their autonomy.

Other considerations come from what we found on the blog. We first look at setting learning goals. This aspect of learner autonomy is clearly not facilitated by the blog itself, since no student discussed goals in the blog. Because of this, we think that other elements of

the teletandem context, in particular counseling sessions with tutors, would be more useful for allowing or helping learners to set their own goals (Gremmo, 1995).

A final pedagogical consideration is the importance of the social and emotional dimensions in teletandem sessions and (b)logs. In fact, our data suggest that the blog contributions recounting students' teletandem sessions and their pleasant atmosphere to the community had a motivating effect, as shown by the fact that none of the teletandem pairs reduced their participation. However, it should be noted that future studies on collective blogs would be needed to confirm this effect.

5. Conclusions

In this article, we have proposed a typology of the metacognitive operations found in a blog in the context of a teletandem exchange. This typology helps us to understand how a reflective, collective blog allows students to voice their metacognition and therefore, we hope, exercise their autonomy. On the other hand, this typology reveals the limits of this teletandem environment. Furthermore, in our discussion, we observe that the production of reflective writing by students can be seen as an authentic implementation of the tandem principle of autonomy as it relates to the social dimensions of learner autonomy. In particular, we note a dual social dimension to learner autonomy. First, autonomy naturally takes on a social dimension because of the social relationship between the two teletandem partners. Second, the social dimension can be related to the larger group of teletandem students as a whole, which is present through the blog.

Our study also raises some other questions. First, it is important to compare our findings with work carried out in similar contexts in order to determine whether our results are relevant beyond the corpus used here. It would also be interesting to expand our focus to include not only the blog, but the other types of interaction within the environment (Rivens Mompean & Cappellini, 2015).

A final, more specific potential development related to our data would be to analyze the distance between the tasks-as-plan and the tasks-as-process from the perspective of learner autonomy. This would take into account the potential tensions between the social dimensions as they become visible in the construction of the relationship and the (potentially self-determined) pedagogical objectives.

In addition to the issues raised in this paper, we hope that these results will be of interest to researchers dealing with the development of learner autonomy through online social interactions and with teletandem and telecollaboration.

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ⁱ Our translation. In the original: "(...) um contexto virtual e autônomo que utiliza recursos de tecnologia VOIP (imagens de webcam, voz e texto). Neste contexto, dois estudantes de línguas estrangeiras colaboram um com o outro na aprendizagem de sua respectivas línguas nativas (ou de proficiência) por meio da interação intercultural e linguística."

ii http://www.atilf.fr/spip.php?article811

iii In the original: "orienter l'apprenant dans la construction de sa propre métacognition".

iv http://seagull-tandem.eu/

v https://cultura.mit.edu/

vi Our translation of the original text: "Un espace collaborative pour mutualiser les acquis et apporter un soutien via la communauté de pratiques qui partage finalement les mêmes doutes et passe par les mêmes phases de découverte".