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From anxiety to pleasure: a case study of online foreign language learning

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Introduction

This paper examines the textual manifestations of affective factors, notably anxiety and pleasure, as expressed by Chinese and French students during a computer-mediated communication (CMC) collaboration project in English supported by Wikispaces, Animoto, and Skype¹ (Blin, 2012; Dooly & O'Dowd, 2012). Many studies investigating CMC contexts have discussed the importance of student involvement and motivation, as well as challenges of cross-cultural communication (Mangenot & Tanaka, 2008; Jauregi & Bañados, 2010), the importance of organizational considerations (Cloke, 2010; Fratter & Helm, 2010), cultural differences in giving feedback (Guth & Marini-Maio, 2010), the positive impact on social register use (Cunningham & Vyatkina, 2012), learner identity (Develotte, 2009).

Speaking a foreign language in an academic setting is a textbook example of performance anxiety (Young, 1991). Here, we examine three learning conditions that may reduce performance anxiety: exploring pleasurable subjects, such as tourism; interacting with peers in a cross-cultural setting; and finally techniques for recording students' oral production.

CMC and locating affect

This study examines written traces of affect, a topic that has received increased attention over the last forty years following previous behavioural-based

Animoto: the easy way to create and share extraordinary videos. <animoto.com>.

Skype: a voice-over-IP and instant messaging service. < www.skype.com>.

¹ Wikispaces: a free wiki host providing community wiki spaces, visual page editing, and discussion areas. https://www.wikispaces.com/.

and then cognitive-based models of learning. Affect, or the expression of emotion, may be either conscious or unconscious with varying degrees of pervasiveness and duration (Dörnyei, 2009). A primary negative emotion, fear, is generated in the right-brain amygdala, which constantly assesses the environment for danger as part of a basic condition for survival. However, other processing of emotion, such as happiness, and most language processing and production appears to occur primarily in the left side of the brain. As within many academic contexts, fear is significant in that it interferes with language production. Expressions of emotion including aspects such as prosody and facial clues are beyond the scope of this study, therefore we will focus on the linguistic and textual aspects.

Multiple mental functions

Dörnyei (2009) divides human mental functions into three distinguishable but often blended categories: cognitive, affective, and motivational. In contrast to other mental activities, affect is a reaction to stimuli in the environment that occurs systematically with a physical response or responses. Ledoux (2005: 294) also highlights the physical qualities linked to affect that are not found in other mental processes:

Quand nous sommes dans les affres d'une émotion, c'est parce qu'il se produit quelque chose d'important [...] et une grosse partie de nos ressources cérébrales se concentre sur le problème à résoudre. Les émotions créent une effervescence d'activités dédiées à un seul but. Les pensées, à moins qu'elles déclenchent les systèmes émotionnels, ne font pas cela.

For second language learning (SLL), cognition is generally cited in regard to three aspects: language aptitude, learning style and learning strategies. There are various types of motivation, *e.g.* extrinsic or intrinsic. For SLL, one of the most commonly evoked individual differences is the learners' level of anxiety. Dörnyei (2009: 183-184) notes the lack of agreement about defining *anxiety*. Nevertheless, anxiety plays a role in motivational constructs, specifically in relation to self-confidence, as a personality trait, but also a basic emotion.

Categories of emotion

In the renowned treatise *Passions of the Soul* (1649) attributed to Descartes and based on his seven-year philosophical correspondence with Princess Elisabeth of Bohemia, six categories of cerebral states were proposed: wonder, love, hate, desire, joy, and sadness. A visionary, Elisabeth of Bohemia questioned Descartes' dualistic view of considering body and mind (and its emotions) as two distinct substances, putting forward cases in which poor bodily conditions, such as "the vapors" hinder cognitive capacities (Shapiro, 2013). Today, Princess Elisabeth of Bohemia's precursor argument of linked physical and emotional responses of affect is firmly established.

Although the body-mind link of affect remains firmly established, new categories of affect continue to be debated. A leader in the modern field, Ekman

(1972; 1999) has augmented over decades of research, his view of the number of affect categories. Plutchik (1980) notably put forward the notion of positive and negative emotions, while Lovheim (2011) brought in the perspective of hormonal influences.

A second issue related to categorizing affects is their slippery qualities. Linguists have also noted that the lexis of emotions is resistant to rigid classifications and complicated by polysemy (Novakova & Tutin, 2009). This difficulty was minor in this study as students consistently expressed a reduced quantity of affects.

Taking this into account, we adopted the following ten broad categories of emotion: anger (or contempt), fear, joy (or happiness/contentment/amusement, pride (or satisfaction), excitement, sensory pleasure, disgust, sadness, surprise, shame (or embarrassment/guilt). Within a learning experience, one might hope that joy and pride are key affects. In the case of language learning, sensory pleasure might also be a positive factor as this includes reactions to oral stimulus. However, fear, which encompasses the notion of anxiety, remains a recurrent factor in foreign language learning.

Levels of academic fear or anxiety

A stimulus elicits varying levels of emotional and physical response in regard to the person and context. Anxiety related to academic performance may be specific to the task (specific anxiety). In the case of social phobia there is "a marked and persistent fear of social or performance situations in which embarrassment may occur" (American Psychiatric Association [APA], 2000: 450). Furthermore, according to the APA, when avoidance, fear, or anxious anticipation of social situations is so pervasive that it interferes significantly with the person's daily routine, occupational functioning and social life is restricted, then "anxiety" is categorized as an anxiety disorder. Although most students will not be faced with an anxiety disorder, the elements of these definitions of specific and social anxiety disorders help to understand the link between the affect of fear or unpleasant anticipation as it is related to performance by normally-functioning students in the foreign language classroom.

Research questions

The context of corresponding with a foreign audience via CMC about common interests clearly played a role in student involvement. Furthermore, the progression of assignments was carefully chosen by the instructors to reduce performance anxiety. The order of assignments moved from short written texts (Wikispaces), to short oral recordings (Audacity and Animoto), to written interaction (Skype chat) and finally oral interaction (Skype). Each step led into the next and was scaffolded by the instructors.

Our research questions were, in this intercultural CMC context:

- What categories of affect were evoked through the students' production?

- How did they interplay with performance anxiety?

Establishing distinct cultural differences between the two populations is beyond the scope of this paper. After describing the context, assignments, and methodology, we will specifically examine two assignments in common and the final French self-reflective assignment that elicited contrasting affects.

A bi-cultural CMC context

The two instructors of this project were motivated by the desire to implement CMC tasks within an English-as-a-foreign-language context with the objective of creating a positive learning environment. It was hoped that a cross-cultural setting would open new horizons for students and that the common theme of European travel, discussed through diverse CMC techniques would help to create positive learning conditions.

Population

Between January and April 2013, 25 third-year French students enrolled in a *Licence en Management du Sport* program and 40 Chinese sophomores of an undergraduate program in Business Management communicated via a Wikispaces platform. Students uploaded their assignments onto the Wikispaces for comment by other students and also communicated via Skype.

Assignments

Although all students completed the first introductory assignment, the succeeding assignments varied in function with the objectives of the students' academic program in either Tourism (France) or Business (China). The common bond between the two populations was exploring European travel. However, the French perspective was from personal experience and professional objectives, while the Chinese perspective issued from a personal or academic wish to travel in Europe.

The first project was a short self-description. No explicit instructions were given to the French students as to what should be included in the paragraph, but as this exercise was done in class, there were general discussions in class between these students during the first class about the content and form of this assignment. The outcome was that all students included certain information such as their age or place of origin but in contrast some students incorporated images while others did not. The Chinese students joined the Wikispaces later and adopted the same general paragraph format for their self-descriptions.

Over the semester, there were a series of assignments including a group-constructed, 30-second Animoto video project about students' place of origin incorporating photographs or other images in the form of a slide show and an oral document. As the class in China began four weeks after the French class, the Animoto projects were produced in two waves. The French productions incorporated images of places or events taken from the Internet. In contrast to the

impersonal French productions, the Chinese students included many personal pictures of themselves visiting famous sites in China or participating in artistic or athletic events. The French students expressed their enthusiasm concerning what they interpreted as the Chinese students' overall outgoing and friendly manner. This positive reception became a continuing motivating factor for the French students over the semester.

Next, students were required to communicate via Skype to gather information about the other culture. The Chinese students were to budget a 700-pound trip within Europe originating in Liverpool. Many of these students were motivated by a possible year of study abroad in Liverpool the following year. For their final project of a three-day, sport-oriented package with flyer and recorded oral description, the French students were instructed to particularly target a Chinese clientele. Hence, the French students were motivated to ask specific questions about the Chinese students' preferred modes of travel. One of the recurring topics was Chinese and French cuisine, a significant source of *sensory pleasure*.

Following this, Chinese students also commented on the French students' final project, while French students completed a self-reflective description of their participation over the semester (Appendix 1). Fourteen Chinese students also completed a survey on the use of Skype (Appendix 2). These different projects were defined with respect to the particular specificities of each group's academic objectives. Overall, the Chinese students had a slightly higher level of English.

Procedures

For this study, all of the written text was extracted from the Wikispaces platform, including introductions and student comments about the uploaded assignments of their peers. This amounted to 15,000 words. The French self-evaluations (6,900 words) were also analysed. From this corpus, the terms or expressions related to an affect were identified and categorized. For example, in the sentence "Chinese correspondents were really friendly and always eager to speak to us", "friendly" was not included in the data as it refers to a character trait, while "eager" was categorized under the affect of *excitement*. The data were then validated by a certified specialist in the state of California (United States) with a Master's degree in Psychology.

Results of the lexical analysis and student comments on technology

Introductory common assignment

For this study, the texts of the presentations (80 to 200 words per student) by both the French and the Chinese students were examined and 83 references to an affect were found. These references only fell within three categories: *sensory pleasure* (68 occurrences), *happiness* (12 occurrences), and *excitement* (2 occurrences). The most recurrent term was "like" (60 occurrences), followed by

"love" (17 occurrences) and one "fond" referring to the sensory stimuli of sports, movies, music or food and a rare reference to "taking photographs" or "the sea". Both the French and the Chinese students had similar tastes in these "pleasures" that rely heavily on specific senses. Only one French student mentioned a stimulus with an interpersonal aspect "I like to play a lot of sports with friends". The words "like", "love" and "fond" did not refer here to a person or an intimate relationship for which a different affect category would be more appropriate.

Within the category of *joy*, the most recurrent expression was "I'm glad/happy to make friends with you" (4 occurrences) or similar variants (3). Other stimuli for the affect *joy* included games, travelling and again food. We find the same objects triggering the two occurrences of the affect *excitement*: "I'm excited when I watch the game" and "I'm excited about meeting new friends". Chinese students produced all of the expressions of *joy* and *excitement* found in this first assignment. This may be a combination of context and culture. First, the Chinese students were responding to specific French students by name, while the French students had written without any knowledge of their Chinese peers. Second, it may be due to the linguistic politeness of this Chinese community. In either case, the French students commented positively in class about this unexpected and explicitly emotionally-laden invitation to further the discussion.

Second common assignment

During the semester, the students completed projects that required communication with their peers, but were related to their academic requirements as mentioned above. The second common project for all students was to give feedback on the French flyer and recorded oral presentation of a three-day "package" in France. This elicited 43 student entries totaling 1,850 words related to the quality of the flyer or possibilities of improving it and also opinions on the package and the desire it elicited.

A total of 24 terms related to affect were categorized. Once again, the *sensual pleasure* related to liking ("like", 9 occurrences and "love", 9 occurrences) was the most prevalent affect and all of them referred directly to the student production or some specific aspect of it. A tenth "like" was found in the comment "I love your ideas even it's in a region I don't like very much." Three terms were related to *joy*: "enjoy" (2 occurrences) and "glad" (1 occurrence). Finally, there was one reference each to the affects of *excitement* and *surprise*.

These positive comments were coupled with precise suggestions on improving the flyer, often again referring to sensual pleasures: "it would be better if the project [provided] some delicious food information". Furthermore, the interpersonal comments were also present during the assignment, such as "Thanks for your careful work".

Final French assignment

The French students completed self-reflective reports at the end of the semester following correspondence with their Chinese peers about European travel. This assignment was not part of the Chinese syllabus. These reports were analyzed for references to affective factors. The results contrasted considerably with those of the common assignments in that there was a much wider range of affects mentioned. The three categories of *pride* (4), *sadness* (2) and *fear* (1) were now added to the previously found categories of *joy* (4), *sensory pleasure* (4), and *excitement* (2). Hence, the weight of *sensory pleasure* is considerably reduced in this assignment compared to other affects and two affects, *sadness* and *fear*, considered as "negative", are now found in the data. However, lexical references to four other categories considered as negative (*anger, surprise, shame,* and *disgust*) were still not present in the data. Students thus adopt manifestations of affect to a given context. For the CMC, the focus remained consistently positive, as might be expected in this case of bonding with a new community. In contrast, the more private student-instructor assignment drew a wider range of affects.

The stimuli eliciting the affects were also of a much broader scope. The most frequent stimulus was related to communicating with the Chinese students (6). Other stimuli eliciting an affect included their relationship to practicing the English language (4), the class project (3), and the use of technology in class (3). Only one student wrote about practicing sports, a common topic during the first assignment.

Joy (4) was the most frequent affect mentioned, twice related to the project (i.e. "I hope that you [the teacher] will enjoy my three-day trip and my oral presentation") and twice to the inter-personal context of correspondence (i.e. "Chinese correspondents were very happy to talk to us" and "I really enjoyed this conversation"). This inter-personal factor was also present as students discussed a sense of satisfaction of participating in class activities (i.e. "I had the feeling of being invested"). The stimuli for the affect of sensory pleasure (4) was, in contrast, oriented towards the technology used in class and specifically its possibilities related to one's own voice (i.e. "I loved working on an oral recording"). French students also commented on their impression of Chinese students' feelings, as in the remark "Chinese correspondents were not shy and were very happy to talk to us". The quality of being "shy", which was found in many of the texts, refers to a character trait and not an affect. However, the notion happy does fall into the category of joy.

The negative affects included *sadness* (2) and *fear* (1). This contrasts with the two common assignments, in which no negative affects were mentioned. *Sadness* was mentioned in reference to class activities. One student said she was "disappointed" when her correspondent did not answer her messages, highlighting the appreciation for the interpersonal aspects otherwise present over the semester.

A second student said he "deplored" the absence of grammatical instruction during the class. *Deplore* is defined as to regret deeply or strongly, to disapprove of or censure, to feel or express deep grief, while the etymology of the word is the Latin *plōrāre*, meaning to weep (*Webster's Encyclopedic Unabridged Dictionary*, 2001). Hence, this term was categorized as pertaining to *sadness*. This student was one of the most proficient English learners and generously helped a student in difficulty during class time. Interestingly, the student in difficulty initially decided to concentrate his class time on on-line grammar instruction, convinced that he would be unable to participate in the CMC project. By the end of the semester, he was energetically relying upon Google translate² and a dictionary in order to communicate with his Chinese correspondent via Skype chat. This student in difficulty later professed personal satisfaction at being able to communicate despite having to invest more effort than his peers.

A third student related that she is "a little less afraid of speaking in English" following the experience. Her conception is that this CMC experience over the semester helped her to lessen what is commonly called "performance anxiety".

Student responses to the CMC

Within the context of a discussion about test or language anxiety, it is interesting to note that both Chinese and French students declared appreciating certain aspects of technology use. These comments about the learning experience occurred outside of class projects and were directed towards the instructor. On a scale of one (strongly agree) to five (strongly disagree), most Chinese students agreed that "Skype provides an effective approach for one-on-one interaction". However, they tended to use "more instant message (typing messages) than video message or voice call when [chatting] with French students on Skype" (Hartwell & Zou, 2013). This supports the notion that Skype chat permits spontaneous written interaction, which created less anxiety than spontaneous oral interaction.

Audacity and Skype recording tools allowed students to practice oral expression within a context of reduced anxiety. A French student highlighted this appreciation for technology, stating: "I preferred to record at home quietly", and another: "I really liked creating a voice recording". It might be argued that student responses are not valid for research purposes as they were responding non-anonymously to a survey to be read by the teacher within a class context. However, student responses of these types had no effect on grades and, in the case of the French students, were spontaneous comments beyond the scope of the survey questions, therefore these comments do offer a perspective into student impressions (Appendix 1).

² *Google Translate*: an on-line translating tool. https://translate.google.com/>.

Discussion

The first element that these results reveal is that although anxiety is often a concern in foreign language learning, it was rarely mentioned by the students within the CMC context. This is not to say that specific or social/performance anxiety was not a factor during the semester. During class activities, anxiety was certainly a factor, notably when a student was to speak. To avoid this, both Chinese and French students privileged text chatting over direct speaking via Skype. Although the Chinese students' level of English was higher than that of the French students, certain Chinese students initially expressed the fear of not being as competent in English as their French peers.

Second, the complexity of understanding and defining character trait (such as *shyness*) and emotions (such as *excitement*) is expressed in the comment of a Chinese student: "Maybe I am a little shy on the first conversation, but I am really excited about meeting new friends!" Several French students also reported having the character trait of *shyness*. The link between the trait of shyness and the affect fear/anxiety is that a person who is shy may be more susceptible to performance anxiety in the classroom, but performance anxiety is not limited to shy people. The student comments would confirm the notion that is may be socially more acceptable to express being *shy*, rather than mentioning *anxiety*.

Third, it is interesting to note the importance students gave to inter-relational factors, accentuated by the communication with foreign peers. The early infusion by the Chinese students of joyful personal pictures had an immediate effect, that of reducing anxiety for the French students. During the French students' first writing assignment, the overwhelming stimuli eliciting an affective reaction was an external object or activity that engendered a *sensory pleasure*, such as skiing or playing the guitar. This contrasts with the Chinese interpersonal comments which explicitly pair communication and positive affective factors. This does not mean that the French students did not have relationships, but that evoking an affect about a new relationship remained subdued, favoring appreciation for common shared interests.

For example, a French student wrote in his first assignment: "I spend a lot of time with my friends and I like to watch TV". Hence, "spend a lot of time" is a factual statement about an activity that one might only assume he likes as he gives no affirmation of this. In other words, in the French discourse, the affective aspects related to pleasurable topics remained implicit over the semester. Thus, both groups discuss common pleasurable topics, which serve to form communicative bonds, necessary to creating a comfortable learning experience.

 and the inter-personal engagement remains implicit. However, the Chinese students specifically addressed the French students as "friends" and being "happy" to meet them. This personal mode of communication was augmented by numerous pictures from their childhood, trips and cultural activities.

In Young's (1991) interview of Krashen and Terrel, Krashen exhorts the interest of students being invited to join a literacy club, which is a powerful concept in language learning. Krashen notes that this club membership reduces the affective filter and that students will then "begin to acquire, automatically, those aspects of language that mark group membership". The affective interpersonal qualities implicit in the French welcome and the explicitly affect-rich language of the Chinese helped to construct this community. Terrel further posits that language acquisition is not an automatic process, but that "target language group identification" sets up a positive drive that encourages learners to attend to language input (*ibid*.: 9-11). The group identification in the target language that was constructed via this CMC context contributed to the "positive drive" to communicate.

Conclusion

This study suggests that certain conditions available within computer mediated communication (CMC) collaboration projects can reduce specific or social anxiety commonly related to oral language performance in the classroom. The first condition was the discussion of pleasurable stimuli (*i.e.* cinema, music, sports), which helped to create a setting that reduced affective "filters" that hinder language performance. Furthermore, there were multiple references to *joy* and *excitement* about meeting each other or abut class projects. Second, the creation of an on-line "community" dynamic engendered communication. These two aspects of technology, written interaction and voice recording, are not easily obtained in a traditional classroom, but require specific teacher attention for success within a CMC collaboration project.

While the instructors designed a program intended to reduce anxiety by progressing towards oral interaction, student engagement was an unknown factor that played a significant role. Particular attention was paid to creating an environment in which students can feel confident enough to mobilize the foreign language knowledge and skills available to them. Performance anxiety is a constant in the foreign language classroom. However, students manifested multiple positive affects related to meeting new peers and communication about shared sources of enjoyment. This reflected a positive outcome due to their own engagement and to the process of incrementally difficult tasks within a scaffolded CMC project.

Appendices

Appendix 1: French survey

English Correspondence Project

Self-evaluation (to be completed for the last day of class)

- 1. Briefly describe your participation in this project (ex.: research for information, technical aspects, helping others, etc.).
- 2. What did you learn from this project (ex.: better pronunciation, oral communication skills, understanding of a foreign culture, etc.)? Be specific.
- 3. What were the most challenging aspects of this project (ex.: managing your time, video recording, working as part of a team, etc.)?
- 4. Other comments.

Appendix 2: Selected questions from the Chinese survey

Questionnaire for China-France Language Exchange Programme on Wiki

In answer to each question below, please choose the relevant number to indicate:

1: Strongly agree – 2: Agree – 3: Neutral – 4. Disagree – 5: Strongly disagree

- 4. I find it fun to use Skype to chat with French students, as it's possible to type in various facial expressions.
- 7. I use more instant message (typing message) than video message or voice call when I chat with French students on Skype.
- 9. I find Skype provides effective approach for one-on-one interaction.

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