Managing written and oral negative feedback in a synchronous online teaching situation

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Abstract

This case study focuses on the feedback that is provided by tutors to learners in the course of synchronous online teaching. More specifically, we study how trainee tutors used the affordances of Visu, an experimental web videoconferencing system, to provide negative feedback. Visu features classical functionalities such as video and chat, but it also offers a unique marking tool that allows tutors to take time-coded notes during the online interactions for later pedagogical remediation. Our study shows that tutors mainly use verbal and chat feedback, with significant inter-individual variability, and that tutors who provide verbal feedback are more likely to use markers. Marking takes time because of the dual task that it entails for the tutor. Idiosyncratic strategies in the use of markers are evidenced. These results clearly show the value of markers for negative feedback, signal the need for their explicitness, and also call for an evolution of the Visu interface so that tutors can better negotiate the task of online tutoring and the pedagogical stance they have to take on in their interactions with the learners.

key words: *negative feedback; videoconferencing; tutoring aids; teaching strategies*

1. Introduction

This case study examines how novice teachers, learning to teach French online via a web videoconferencing tool, develop skills pertaining to the provision of feedback. Concerning this type of pedagogical regulation, online tutors have to use the appropriate semiotic system (visual, written and/or verbal cues) to maintain a learner friendly environment and contribute to learning (cf. Develotte, Guichon & Vincent, 2010). The provision of negative feedback intervenes when teachers want to inform their learners of a gap in their performance and get them to recast their utterances, an element deemed central in the tenets of second language acquisition (see for example Long, 1996). In line with Doughty & Long's (2003) psycholinguistic approach to distance language learning, questions concerning the degree of explicitness and the intrusiveness of negative feedback are raised,the importance of these questions becomes even more essential when it comes to teaching language at a distance.

The participants in this study are Master's Degree students in Teaching French as a Foreign Language using Visu, a videoconferencing tool that was specifically designed for synchronous online language teaching, to tutor upper-intermediate students of French at UC Berkeley, a north-American university, in seven online sessions.

Of the several functionalities devised to facilitate teacher work, Visu provides a dynamic timeline that teachers can annotate by leaving simple or enriched written markers at relevant moments, so that they can keep track of these events and return to them after the session to provide feedback without interrupting the flow of the conversation (cf. Bétrancourt, Guichon & Prié, 2011).

The present pilot study examines how these novice teachers provided feedback, particularly negative feedback, and how they used the functionalities of Visuduring the fourth session, once they were already used to the interface. To complete the study of the trainees' behaviours, six of them were confronted with a dynamic recording of the session in order to examine (1) how they have perceived their use of the marking tool in the course of the interaction and (2) how they define their role in this pedagogical situation, specifically with regards to their feedback behaviour.

2. Negative feedback and the development of learner language in a synchronous online interaction

In the last ten years, more and more researchers have investigated the potential of web-mediated synchronous interactions for language learning and teaching. From an SLA perspective, interactions that allow for conversations between native speakers (NS) and non-native speakers (NNS) can form "the basis for the development of language rather than being only a forum for practice of specific language features" (Gass, 2003: 234). Because it relies on two crucial notions, negotiation for meaning and negative feedback, Long's Interaction Hypothesis (Long, 1996) is crucial to understanding why conversational interaction - be it face-to-face or online - can help develop learner language competence. According to Long (1996: 451-2), "negotiation for meaning, and especially negotiation work that triggers interactional adjustments by the NS or more competent interlocutor, facilitates acquisition because it connects input, internal learner capacities, particularly selective attention, and output in productive ways". Long adds that "negative feedback obtained during negotiation work or elsewhere may be facilitative of L2 development, at least for vocabulary, morphology, and language-specific syntax, and essential for learning certain specifiable L1-L2 contrasts" (ibid., p. 414). Several studies have indicated that when NS ask learners to clarify incomprehensible remarks, learners self-correct their errors and a higher level of accuracy in their comprehensible output is therefore attained (cf. Plass & Jones, 2005: 476).

Until recently, research concerning the provision of negative feedback in online interactions has mainly focused on written exchanges occurring in forums (for instance Mangenot & Zourou, 2007), in chatrooms (Sotillo, 2005; Kost, 2008; Bower & Kawaguchi, 2011), or by email (Vinagre & Muñoz, 2011), but, to the authors' knowledge, there is still little research on negative feedback provided to language learners in a synchronous interaction relying on videoconferencing tools. One study led by Sotillo (2005) has examined corrective feedback episodes in an instant messaging environment (*Yahoo! Instant Messenger*). The experiment put in contact NS-NNS and NNS-NNS dyads for 7 weeks. Sotillo has found that in an instant messaging context, "more indirect corrective feedback that focuses primarily on grammatical and lexical errors is provided to L2 learners".

Many of the pedagogical experiments that studysynchronous computer-mediated collaboration between NS and NNS usually put learners from different countries in contact through telecollaborative projects (O'Dowd, 2007). It has been observed that attention to form is minimal in these synchronous interactions because language learners usually prefer to focus on negotiation for meaning and are not always capable of providing useful feedback (Levy & Stockwell, 2006: 89; Ware & O'Dowd, 2008). This sporadic attention to form is not surprising, as Norrick (1991:80)has stressed, because "other-correction poses a potential face threat between approximate equals, because it entails a judgment by one participant about a gap in the other's speaking ability or world knowledge". In line with previous studies (see Belz & Mueller-Hartmann, 2003), the present experiment sees language learners interacting with native French speakers who are being trained to become language teachers (see section 3.2. below). As we are dealing with a pedagogical situation here, negative feedback therefore

acquires special status in the online interaction, since learners expect to receive negative feedback from NS playing a teacher's role.

Among several tasks online teachers have to carry out (see Guichon, 2009), the provision of negative feedback requires shifting attention between two procedures: while they devote most of their attention to meaning-focused communication with the distant learners, they must from time to time (i.e., when communication breakdowns occur) use some strategies that allow for a contextualised shift of the learners' attention to certain linguistic features in order to induce noticing. Schmidt (2001: 6) has pointed out that noticing is crucial in the learning process: "it is what allows speakers to become aware of the mismatch or gap between what they can produce and what they need to produce, as well as what they produce and what proficient language speakers produce."

Although there is general agreement on the facilitative nature of negative feedback, Doughty & Long (2003) contend that the best manner to provide feedback is "a matter of local circumstance". During interaction via a videoconferencing tool, we suggest that a teacher can harness different strategies to raise the learners' attention to problems in their production and provide feedback. The characteristics of negative feedback are as follows:

- it can be more or less explicit: recasts occur naturally in the conversation and consist of the reformulation of the learner's ill-formed utterances. Some forms of negative feedback will more explicitly address one given error in the learner's production but require several turns and rely on metalinguistic discussion;
- it can occur right after a mistake or be postponed, for instance once the teacher has identified a pattern.In her study, Sotillo (2005) examined the types of turns (i.e., immediate correction vs. corrective sequence spread out beyond one or two turns) in an instant-messaging environment that saw advanced NNSs and NSs interact with less experienced L2 learners. Her study showed that most corrective turns (82%) occurred right after the learner's incorrect production. This temporal dimension is crucial in our study as markers provide tutors with an opportunity to identify recurrent mistakes and to keep track of them for later feedback;
- it can be more or less overt. Negative feedback is deemed to be overt and intrusive whereas recasts are a more covert, and hence less intrusive, form of negative feedback (Doughty & Long, 2003).

The situation under study presents two features that need to be taken into account to fully grasp the complexity of providing negative feedback. First, the teachers are in training: although the contract between them and the learners is that of the "pedagogical conversation" (see Guichon, 2009), trainees can choose among several pedagogical stances that will have an impact on the way they provide feedback; second, the conversation is mediated by a web conferencing tool: the affordances of the tool and the semiotic repertoire it offers also have an influence on the trainee teachers' strategies to provide feedback.

3. Methodology

3.1. Context of the study

The context of this pilot study is a training programme at Lyon 2 University that trains future teachers of French as a Foreign Language to teach online (see Develotte, Guichon & Kern, 2008). This programme is organized in two stages. At first, trainees are sensitized to a pedagogical approach that is specific to online teaching and they learn, for instance, to prepare tasks that are appropriate to distance teaching and to use Visu, the desktop videoconferencing platform designed for this training programme (see 3.3). Then, during the second semester and for seven weeks, the trainees are put in the situation of:

- preparing online sessions in accordance with the curriculum of the French teacher at UC Berkeley; thus, for a lesson that focuses on stereotypes about the bourgeoisie in today's France, they prepare four tasks along with the teaching material (various documents, key words and instructions) that are discussed with their peers and the teacher trainers before being validated by the Berkeley language teacher;
- tutoring synchronous online sessions via Visu that last from 30 to 45 minutes;
- providing feedback to their distant learners on their performance either during the course of the interaction, at the end of the interaction during a brief wrap-up, or once the session is finished;
- analysing their own performance as an online teacher thanks to the trace of the session that has been kept on the server and that they can access in the retrospection room (see 3.3.). The retrospection room has been used to feed the debriefing but this aspect will not be the focus of the present study.

3.2. Participants

The participants in this pilot study are 8 trainee teachers at Lyon 2 and 18 upper-intermediate students of Frenchat UC Berkeley. The age of the trainees varies from 21 to 35 while the learners' age is around 21. All of the participants were familiar with web videoconferencing for personal communication but none of them had used this tool for teaching or learning purposes. Only 3 trainees had substantial offline teaching experience (more than 3 years). Two trainees were paired with two Berkeley students, 3 trainees worked on their own with 2 students each, and 3 were engaged in one-to-one pedagogical interaction. All the participants signed an informed consent sheet prior to the beginning of the experiment. Pseudonyms have been used for all the participants.

3.3. The Visu platform: tools designed to facilitate the provision of feedback

Visu is a web videoconferencing platform specifically designed for synchronous language teaching. This application is the outcome of a research and development project involving computer scientists and specialists of language education and cognitive psychology (see Bétrancourt, Guichon & Prié, 2011). The Visu platform[1] is composed of several components including an interaction room (figure 1) and a retrospection room (figure 2).

[1]for a detailed presentation of Visu's interaction room, see Guichon, 2010

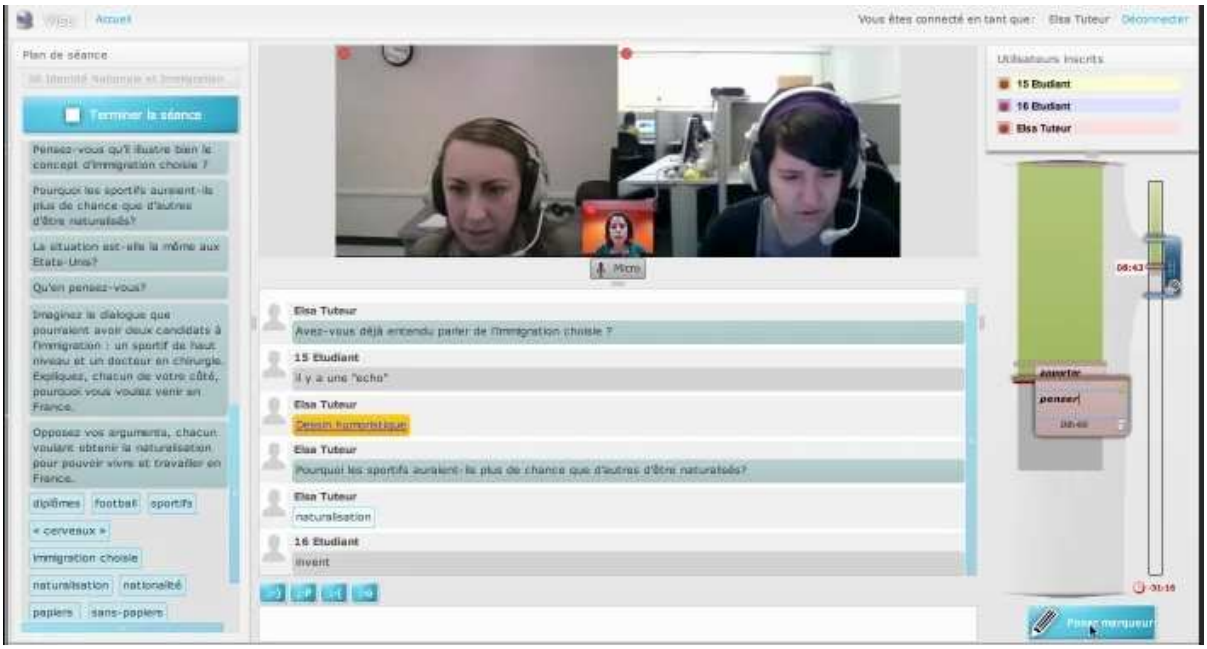

Figure 1 : Screen capture of Visu's interaction room

If we concentrate on the right part of the interaction room (cf. figure 1), we see that the trainee is in the process of leaving an annotation on the vertical time-line. To do so, she had to click on the ("*poser marqueur*" [set marker]) button at the bottom of the time-line and type her text (here some vocabulary) in a pop-up window. The marker is a device that is designed to help the teacher to quickly annotate certain aspects of learner output while maintaining his/her attention on the conversation. The markers set by the tutors are not visible by the learners as it was thought this would affect the quality of the interaction and focus the learners' attention too much on their errors. Visu therefore offers tutors with the possibility of writing annotations that differ from synchronous feedback that can be provided visually (mimics visible thanks to the webcam), verbally (through recasts or oral corrections), in writing through the written chat window. Before the interactions with the Berkeley students actually started, the tutors were trained to use the different tools (written and verbal chat, webcam and annotation tool) and several discussions were organized to discuss the potential benefits and limitations of these functionalities.

After the interaction, the trainees can access the retrospection room (figure 2) in their own time and review the teaching session. The annotations left during the interaction, symbolized by pencils, now appear on the horizontal time-line along with the key words, instructions, documents and written messages. The tutors can then select pertinent elements from the interaction and organize how they are going to provide feedback to their distant learners.

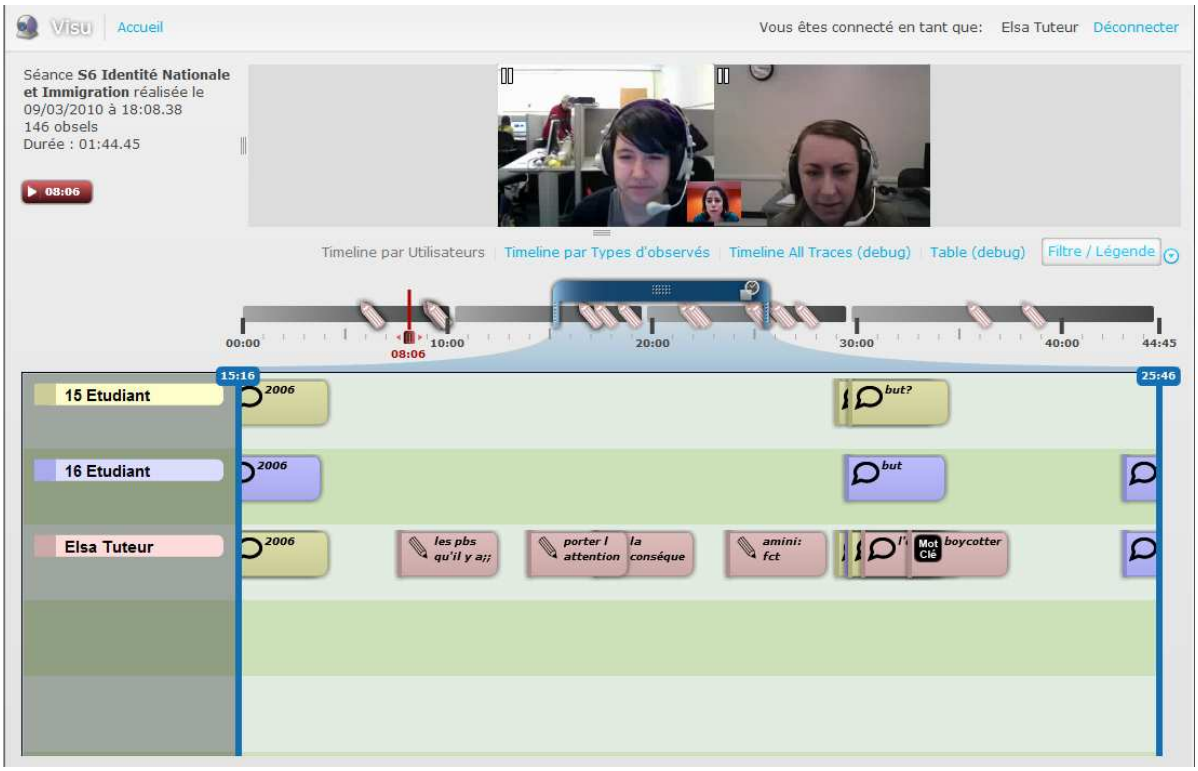

Figure 2: Screen capture of Visu's retrospection room

3.4. Research questions and data collection procedure

The present research is an exploratory investigation of the different strategies devised by tutors to provide feedback with functionalities offered by Visu, and particularly the marking functionality.Concerning the provision of feedback, two questions are raised:

- What strategies, identified through the study of the data,are used by each tutor to provide feedback according to the modalities offered by the tool?
- Can inter-individual differences be identified among tutors?

To examine how trainees used the marking functionality, the study will look at the three following issues:

- What is the content of the markers?
- How explicit are the markers?
- What is the cognitive cost of setting markers? By cognitive cost we mean the amount of attentional resources allocated to the task, which depends on the number and complexity of processes required in working memory (e.g., Sweller, 2005).

In order to answer these questions, we collectedin the retrospection room the recorded interactions of the 8 tutors and their learners (video and audio recording, chat messages and markers) that took place during the fourth week of the telecollaborative project. In addition, we conducted interviews with 6 of the tutors on the day after the fourth session. This second dataset will mainly be used to elucidate certain identified behaviours. The relevant extracts have been translated from French to English.

4. Results

4.1.Overview of the data: relation between providing feedback and setting markers

Table 1 provides an overview of the data and mentions the duration of the pedagogical session, the total number of negative feedback tutors provided their students and the total number of annotations they wrote thanks to the marking tool. One first question was how feedback behaviour was affected by the functionalities of Visu and particularly how tutors handled the possibility to set markers, and if it was related to their feedback behaviour.
Table 1 displays an overview of the total number of negative feedback and annotations with the marker functionality (referred to as markers) provided by each tutor in the course of the session under analysis.

Table 1 :*Overview of the negative feedback and markers produced by the tutors during the 4th session*

Tutor name	Duration of the session	Total number of negative feedback	Total number of markers
Eva(E)	34:33:00	4	13
Gabrielle /Jules (G/J)	35:09:00	19	1
Malika (M)	31:43:00	13	0
Namibia (Na)	45:00:00	8	5
Nolwenn (No)	35:56:00	16	9
Saké (S)	37:49:00	13	4
Virginie (V)	39:39:00	23	14
Total	-	*96*	*46*

4.2. Strategies for the provision of negative feedback

Some of the possible strategies to provide negative feedback are presented in table 2 according to the modality that is used and the teaching strategy that it affords. The identified strategies are based on the study of the data and form a typology of feedback in a web-based videoconferencing interaction. Sometimes a corrective sequence can continue over several turns and require several modalities (e.g. verbal feedback and then written feedback) but the choice has been made to focus on every single feedback provision and not on sequences, given the methodological difficulty of objectively sequencing the interaction.

Table 2 : different strategies to provide negative feedback

	Tutors							
Modality to provide negative feedback and strategies	E	G/J	M	Na	No	S	V	*Total*
1. webcam image : Signaling (feigned) incomprehension or the need for self-correction by a gesture or a face	0	0	0	0	0	0	2	*2*
2. verbal: Emitting short verbal messages (e.g., uh?) to incite the learner to reformulate	1	0	0	1	1	1	2	*6*
3. verbal: Recasting the learner's production with the correct form, word, pronunciation, etc.	2	7	4	0	12	10	9	*44*
4. verbal: Correcting the learner's production with a clarification or an example (e.g., A native French wouldn't say "vous" in this situation but "tu").	1	2	1	4	0	1	5	*14*
5. written message: Providing negative feedback in the text chat with no further verbal explanation	0	10	8	3	3	1	5	*30*
Total	*4*	*19*	*13*	*8*	*16*	*13*	*23*	*96*

Several strategies to provide feedback can be inferred from Table 2. Only one tutor (Virginie) exploits the potential of the webcam to signal her incomprehension (in both cases she touches her ear and frowns), thus inciting the learner to reformulate her utterance. Though they are natural in a social conversation, short verbal messages are used on few occasions (6 times) to get the learners to reformulate their message.

Verbally recasting the learner's production with the correct form is the strategy that is used in almost half the cases and seems trainees' preferred way of providing feedback.

Another way of providing negative feedback without interrupting the flow of the conversation consists of writing the correct form in the text chat. This strategy is used in one third of the cases, thus indicating that this communicational affordance is seen as efficient by the tutors. Gabrielle explains why she uses the text chat to provide negative feedback: "*They* [*the learners*] *need to speak, they need to speak their mind. If you stop them every time they make a mistake, they are likely to lose the thread*".

In the following extract, Helen (learner) and Nolwenn (tutor) are engaged in a task in which Helen and the other learner (not present in the extract) have to choose a holiday destination and discuss what they would do there. The error committed by Helen concerning the conjugation of "pouvoir" is first orally recast by Nolwenn. But since there is a moment of hesitation after the recast (either signaling the learner's incomprehension or the fact that she is looking for words to complete her utterance), the tutor chooses to clarify her correction by writing the right conjugation through the chat window (*nous pouvons faire*). In the next turn, the learner reformulates her sentence with the right conjugation and moves on with the rest of the utterance.

turns	**speaker**	**duration**	**oral modality**	**written modality**
19	Helen	4.6 sec.	nous peut euh euh faire de l'alpininisme [we can uh uh go mountain climbing]	
20	Nolwenn	2.6 sec.	ouais nous POUVONS faire de l'alpinisme [yep, we COULD go mountain climbing]	
21	Helen	1.1 sec.	Uh, uh	
22	Nolwenn	3.2 sec.		nouspouvons faire [we could go]

23	Helen	6.2 sec.	oui, oui, nous pouvons faire de l'alpinisme et euh, euh, aussi aller visiter le lac. [yes, yes, we could go mountain climbing and uh, uh, visit the lake too]	

Extract 1: example of different feedback strategies

As this extract illustrates, the recast can be more or less marked (here the tutor has chosen to verbally stress the right form, i.e. *nous POUVONS faire*) to help the learner's noticing process. Negative feedback can also be further provided by writing when the tutor estimates it useful. The written recast, because it remains for some time in the chat window, can act as a reminder of the correct form and facilitate uptake as seems to be the case in turn 23. Thus, online tutors operating in a web-mediated videoconferencing environment can alternate different strategies to provide feedback without interrupting too much the flow of the conversation.

Strategy 4 (verbally correcting the learner's production with a clarification or an example), requiring several turns for a verbal explanation, sometimes occurs but is quite rare overall (only 14 times out of 96). This may be because this is the most intrusive strategy as it requires stepping back from the interaction and engaging in an exchange more focused on form, thus reminding participants of the pedagogical nature of the exchange. The intrusive nature of such feedback is underlined by Nolwenn: "*If we start interrupting them all the time, it can be annoying. Because they do make a lot of mistakes, but if you spend too much time on correcting them, the thread of the conversation - and the pleasure one gets from a fluid interaction - can be lost. They might become frustrated*".

On the other hand, the 4 other strategies listed in table 1 are less intrusive but some (1 and 5) require learners to shift their attention between the verbal interaction and other components of the interface (the video window and the text chat window).

From a quantitative point of view, although the sample is very small, correlations have been computed between the number of markers and the number of feedback generated by the tutors in order to evaluate their congruency. The correlation between markers and feedback was very low (R^2 = .07), but looking more closely, there is a positive correlation between verbal feedback and markers (R = .35) and a negative correlation between written feedback and markers (R = -.49). Though these correlations did not reach a level of significance, they suggest that tutors who set a lot of markers would tend to give verbal rather than written feedback (Virginie and Nolwenn are good examples of this behaviour). Conversely, the ones who wrote the most feedback hardly set markers (i.e., Gabrielle/Jules and Malika).

4.3. Number and content of markers

Table 3 presents the number and content of the markers set by the trainees. A first observation is that here too there is wide variability across tutors in both the number and content of the markers. A majority of them (25 out of 42 non empty markers, i.e. 60%) pertain to linguistic difficulties experienced by the learners. While all tutors set linguistic markers, only 3 of them set markers concerning the profile of the learner or the task. Grammar and syntax (e.g., *s'assoir SUR la terre / par terre [sit ABOVE the ground / on the ground]*) are the most frequent items. This might be due to the fact that negative feedback concerning vocabulary and pronunciation can be more readily provided in the course of the interaction thanks to verbal and written recasts (see above).

[2] Spearman Rho for non parametric data has been computed.

Table 3 :*Classification of the markers according to their content for each tutor*

Tutors	Content of the marker							
	Empty	About learner production			About the learner and the task			*Total*
		Grammar /syntax	Voc.	Pronun-ciation	Learnerpro filing	Activityeval uation	Memo	
Eva	0	3	4	1	0	0	5	*13*
Gabrielle / Jules	0	1	0	0	0	0	0	*1*
Malika	0	0	0	0	0	0	0	*0*
Namibia	0	2	0	0	3	0	0	*5*
Nolwenn	2	6	0	1	0	0	0	*9*
Saké	1	1	2	0	0	0	0	*4*
Virginie	1	1	2	1	7	2	0	*14*
Total	*4*	*14*	*8*	*3*	*10*	*2*	*5*	46

Results also indicate idiosyncratic uses of the marker that had not been anticipated by the designers. They were grouped under the category “about the learner and the task”:

- profiling of the learners (e.g., student needs to be encouraged; they write down the vocabulary);
- on-the-spot evaluation of the tutoring activity (e.g.,this document does not work);
- noting something that has to be done after the interaction (e.g., look up the French translation of a word that was used in English by the learner).

Marking thus goes beyond compiling learner mistakes to facilitate the delayed provision of feedback: some of the uncovered functions (profiling, self-assessment, memorizing) signal that the activity of setting markers can potentially yield rich information when the tutors review the interaction in the retrospection room.

4.4. Explicitness of the markers

To attain their full potential, markers have to be explicit so that, when reviewing them at the end of the interaction, the tutor can have sufficient information to provide the learner with useful feedback. There is a clear trade-off between the explicitness of the marker and the time it takes to write them. Table 4 presents the degree of explicitness for each type of marker. Each marker was assessed with the following scheme:

- an empty marker is not explicit at all;
- a marker with "pr" (for pronunciation) but bearing no reference to a specific word is not very explicit;
- a marker with "pr: *tellement*" indicating a problem of pronunciation with the adverb *tellement* is explicit;
- a marker with "pr: *tellemenT*", indicating a problem of pronunciation with the final part of the adverb *tellement*, is very explicit.

Table 4: *Explicitness of markers according totype*

Degree of explicitness	Type of marker								
	Empty	Grammar /syntax	Voc.	Pronun-ciation	Learnerp rofiling	Learnerev al.	Tutore val.	Memo	*Total amount*
Not explicit at all	4	1	2	0	0	0	0	0	*7*
Not very explicit	0	6	0	0	0	2	0	0	*8*
Explicit	0	1	2	1	0	0	0	0	*4*
Very explicit	0	6	4	2	5	3	2	5	*27*
Total	*4*	*14*	*8*	*3*	*5*	*5*	*2*	*5*	*46*

In short, when tutors do set markers, they make sure their contents are either explicit or very explicit. Yet, since 25 out of the 27 very explicit markers come from only 2 tutors, this reflects individual differences in the way the markers are set across tutors. One of these two tutors explained during the interview that during one session she had set a linguistic marker by indicating the correct expression, so that she was not able to remember what the mistake was and provided inadequate feedback to the student. From that time one, she always made sure to write explicit markers. Further data would be needed to know whether the variation in the degree of explicitness is due to the type of markers set or to individual strategies.

4.5. The task of setting markers for feedback: cognitive cost and tutors' perceptions

The on-line tutoring situation is likely to be experienced as difficult by the trainees since they have to handle the interaction with the learner while keeping track of the learner's mistakes and of their own behaviour using the marker functionality. Setting a marker requires adopting a self-centred perspective, since the marker is self-addressed. It is particularly the case for profiling, self-assessment and memo markers described in 4.3.Moreover, it should be explicit enough to be understood later on. Finally, although tutors have used the system three times before, they have to manage the interaction with the interface itself. Therefore, setting a marker while tutoring can be considered a "dual task" situation, in which two tasks requiring similar types of processing are in competition on the cognitive resources level (Baddeley, 1986; Band et al., 2006; Wickens, 1983). In the present situation, the tutors' attention and cognitive resources are split across two tasks (interacting with the learners and setting markers).While experts have cognitive routines to handle dual tasks, novices are usually overwhelmed and their general performance is impaired due to cognitive overload (split-attention effect, Mayer & Moreno, 2002; Kalyuga, Chandler & Sweller, 1999).If one of the tasks is perceived of primary importance, the performance on the task that is perceived as secondary is impaired. In the present situation, it is likely that tutors considered the interaction as the primary task and marker setting as the secondary task. Thus the following analysis aims at estimating the cognitive cost of setting marker while interacting with the learners through behavioral and subjective indicators. To do so, the time interval required by tutors between the moment they set a marker and the event that incited them to do so was calculated.

Table 5: Time interval (in seconds) between event and marker setting (Mean, Median and Standard Deviation) for each tutor and on average (only tutors who set more than one marker are indicated here)

	Eva	Namibia	Nolwenn	Saké	Virginie	Total*
Mean time	14.92	26.75	13.71	16.75	28.15	20,24
SD	23.87	20.43	12.11	20.69	33.16	25,07
Median	7	18.5	11	9	14	12

* computed across all markers independently of the tutors who set them

As shown in table 5, marker-setting is a time-consuming activity. It took an average of 20 seconds to set a marker, with huge standard deviations between individuals. This suggests that the time taken to set a marker depends heavily on the type of event and/or marker. The median time within and across tutors was considerably lower, indicating that half the markers took 12 seconds or less to set, and a minority of markers took more than 40 seconds. A look at these markers reveal that they pertain to feedback concerning grammatical aspects and learner profiling, that seem to require more time than other types of markers.

When writing a marker, a series of operations are required from the tutors: they have to identify an event that is deemed relevant; they have to categorize it (vocabulary, pronunciation, etc.), address it (in case the tutor handles two or more learners) and fill in a

marker explicitly enough for the tutor to remember what it means at the end of the session or afterwards. These operations occur while devoting some of their attention to the spoken interaction. This is a typical dual task situation involving split attention, which has an impact on the interaction as has been highlighted by Eva: "*I feel that when I set markers, my eyes are looking at the bottom of the screen. As a result, I don't feel fully engaged in the conversation. We have an exchange but she [the learner] can see that I am writing something down*."
As a result, the tutors developed strategies to gain efficiency, for instance by using the initial of the learner's names, or by shortening some categorizations (gr for grammar). They also devised idiosyncratic "codes", such as symbols (e.g., *"++ intérêt"*) or capital letters to indicate where the problem lies (e.g. *tellemenT*), in order to avoid ambiguity later. Other strategies appeared to avoid handling the two tasks simultaneously, for example in giving the learner a task (e.g. study an image) so as to "buy" some time for setting a marker.

5. Discussion and conclusion

This study aimed at exploring the potential of the Visu system in assisting online tutoring in a foreign language course. The data were collected during an online tutoring session with eight novice tutors. We were interested in two aspects: the functionalities and channels tutors use to provide negative feedback to learners, and the tutors' use of markers to provide negative feedback.
Regarding the use of corrective feedback, the results of this pilot study indicate great individual differences among tutors. Our findings suggest that novice tutors experience difficulty in using efficient feedback strategies that make the most of the range of modalities afforded by the web videoconferencing tool (see table 2). We saw that the potential of the webcam image was barely exploited and that most negative feedback consisted of verbal and written recasts. Yet, these two strategies present the potential of maintaining the flow of the interaction without undue interruptions. Besides, as Sotillo (2005) has pointed out, the effectiveness of error correction when it is provided immediately through oral recasts or written clarifications might be greater than when it is delayed because it encourages learners "to incorporate the feedback into their subsequent output."
The second focus of interest was the use of the annotating functionality that provides tutors with the possibility of setting markers to enrich the trace recorded by the system in the course of the interaction. The findings demonstrate that tutors spontaneously developed strategic uses of the markers in order to assist their feedback behaviour, both directly and indirectly. Markers were thus used to keep track of learners' mistakes, to help specify the learner's profile, to monitor their own tutoring activity or to set memos for delayed examination. Not only can the markers assist the tutoring activity but they serve as a professional development tool that can help tutors regulate their own activity and monitor learner progress, two objectives that are crucial in online teacher training (Guichon, 2009). However, the results also indicate that very few tutors were able to develop the full range of strategic uses, if they used them at all. The analyses reported here suggest several levels of explanation. First, marker setting turned out to be a complex activity requiring reflexive and strategic thinking in order to be useful later on. Because marker setting had to be handled simultaneously to the verbal interaction, it created a dual task situation, which usually proves difficult to manage by novices (Baddeley, 1986; Band *et al.*, 2006; Wickens, 1983). Few tutors developed strategies to make the marking more efficient (such as using idiosyncratic codes), which might indicate that most tutors could not manage the dual task at this stage of their training. A second level of explanation is that marker setting is seen as pertinent for certain linguistic features that require metalinguistic explanations but seems less so when it comes to feedback on lexical or phonological mistakes that can more readily be taken care of in the chat window or orally (see

table 3). Moreover, more elaborate use of the markers, such as learner profiling and monitoring of their own tutoring activity, rarely occurred.
This exploratory study of the provision of negative feedback by novice language tutors has also helped us identify tensions arising between different pedagogical roles ("from teacher to peer" as pointed out by Dejean-Thircuir & Mangenot, 2006) according to whether the pedagogical emphasis lies more on the learners' accuracy or more on their fluency and interactional competence. It seems that the role of tutor is an intermediate position (see figure 3) with this pedagogical model, maintaining the verbal interaction as the central element, while offering moments to shift the learner's attention to form.
If it is strategically incorporated by online tutors, the marker-setting functionality could turn out to be especially useful to maintain this intermediary position that seems appropriate to online tutors and yet allow them to deal with metalinguistic aspects of L2 learning that are less likely to be addressed in such a situation (see Vinagre & Muñoz, 2011). Thus, the pedagogical conversation could focus on negotiation of meaning and present opportunities for verbal recasts and minor corrections through the chat window. Then, after the conversation itself, tutors could use markers to provide learners with individualized negative feedback by dwelling on identified episodes that occurred during the interaction.

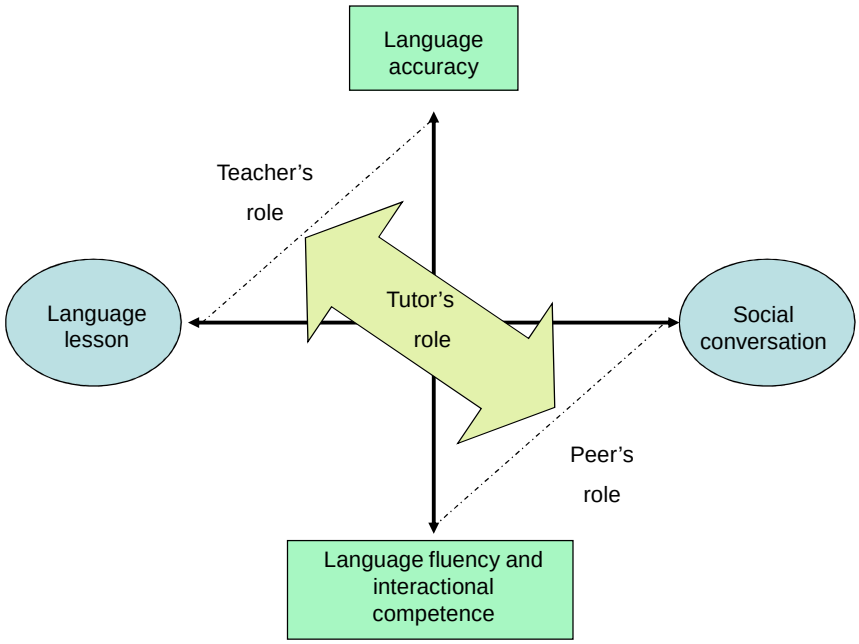

Figure 3: Tensions between several poles

Insightful as they may be, the findings of this pilot study have been obtained in a very specific situation where novice tutors had to handle a new functionality in an unfamiliar situation in which they were also learners. Moreover, data has been collected on a limited number of tutors, which precludes generalization of the findings, especially with large heterogeneity of behaviors. Finally, for practical reasons, UC Berkeley learners' behaviours and perceptions have not been taken into account in the analysis.
Despite these limitations, the findings of this pilot study suggest two directions. The first is to provide tutors with adequate training in the use of the system, both on the techno-semiotic level (i.e., dealing with the interface and adjusting one's behaviour to the semiotic potential of the system) and on the pedagogical level. Such training should encompass the multiple strategic use of the markers, not only for keeping track of learners' mistakes but also for monitoring their own tutoring activity in order to develop critical awareness of their

competence as tutors (see Guichon & Hauck, 2011). The second direction is to redesign the interface in order to limit the split of attention between the setting of markers and the verbal interaction. Tutors indicated that they felt uncomfortable while setting markers because the learners could see that they were typing and not looking at them. Research has provided evidence for the importance of eye contact in video-mediated communication (e.g, Joiner *et al.*, 2002). Therefore, in the new version of Visu, the marker entry field will be set close to the webcam image and beside the chat entry field so as to make the interface more integrated (Chandler & Sweller, 1996) and facilitate tutors' work.
With the interface redesigned according to the findings, future research will address how tutors trained to the multiple strategic functions of the markers use Visu's functionalities both for teaching an L2 and for learning to become online tutors.

Acknowledgements

ITHACA (Interactive Traces for Human Awareness and Collaborative Annotation) is a project funded by the French Research Agency (ANR), (see http://liris.cnrs.fr/ithaca). The authors wish to acknowledge the contribution of Olivier Aubert, Lionel Breduillieard and Serguei Sayfulin who are the main developers. The authors also wish to acknowledge the insightful comments of Denyze Toffoli on an earlier version of this article.

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