RESEARCH PAPER

Online Comments as Input Enhancement

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Abstract

Chapelle (2003) proposed three general types of input enhancement that help L2 learners "acquire features of the linguistic input that they are exposed to during the course reading or listening for meaning" (p. 40): input salience, input modification, and input elaboration. In 2010, Cárdenas-Claros and Gruba argued that Chapelle's different types of input enhancement "can be and have been operationalized through help options" (p. 79) primarily utilized in the teaching of reading, listening, writing, grammar, and vocabulary such as glossed words, video/audio control features, captions, subtitles, and grammar explanations. As understood from Cárdenas-Claros and Gruba's classification of help options, input enhancement can only be accomplished through one of these processes: salience, modification, or elaboration. In this article, we argue that YouTube comments have the potential to be (1) a help option that facilitates both listening comprehension of the videos and vocabulary learning, and that (2) input enhancement accomplished by comments can be achieved by a combination of different types of input enhancement. Put another way, the aural input of a YouTube video can be salient, modified, and elaborated, thanks to the various types of comments YouTube videos often receive.

Keywords

Online comments; input enhancement; help options; listening comprehension

1. Introduction

Nowadays L2 learners are mostly digital natives (Prensky, 2001) and have extended experiences with computer-based language learning. They are also active users of social media (e.g., YouTube) including regularly watching videos and reading and interacting with online comments. Because online comments are often posted to restate, emphasize, paraphrase, elaborate on, or explain the video content captioning the same words, phrases, or even whole sentences heard in the videos, we aim by this research to draw the attention of L2 practitioners and researchers and that of L2 learners to the possible benefits of those rhetorical functions of comments to listening comprehension of the videos and vocabulary learning. In particular, we intend to explain how YouTube comments can be operationalized as (1) input enhancement and (2) as a help option.

2. Input enhancement

Inspired by Ellis' (1999) broader view of 'interaction' that includes not only interpersonal communications but also intrapersonal actions, Chapelle (2003) proposed that "interaction needs to include what takes place between a person and the computer" (p. 55). By extending the interactionist SLA traditional theory that was based primarily on face-to-face interaction, Chapelle adds L2 learner-computer interaction. As the interactionist theory hypothesizes benefits from interaction, Chapelle argued that input is typically enhanced interactively in CALL. To complement the theoretical framework needed for proposing enhanced input in CALL, Chapelle also relied on the cognitive approaches to SLA that confirm that learners' acquisition of linguistic input increases if their attention is drawn to the target linguistic forms (e.g., Robinson, 1995; Schmidt, 1990; Skehan, 1998). Chapelle cited Sharwood Smith's (1993) argument that learners' attention can be drawn to some aspects of the linguistic input through explicit 'input enhancement' and proposed three general types of input enhancement: input salience, input modification, and input elaboration.

2.1. Input salience

Chapelle (2003) confirmed that input in CALL materials could be made salient by, for example, highlighting the target linguistic structures that learners need to attend to while reading the text. The highlighted text should draw the learners' attention to the linguistic form that it contains, such as a grammatical point. The idea is that while a learner is reading the text for meaning, they would notice the grammatical point and ultimately might be able to leave the original text briefly for a grammar explanation. Regarding listening, it is also possible to stress the important words of the aural input in which misunderstandings could occur, particularly if they are part of a dialogue. A second way of making input salient is through repetition of the linguistic forms, as input frequency "is among the factors that figure prominently in theories of the factors that affect noticing of target language input" (Chapelle, p. 42). Repetition can be achieved by creating multiple occurrences of the target form into the input, allowing the learner to see or hear the input multiple times. Another way is to construct the learning task in such a way that the learner will come across multiple exposures of the linguistic form in the input. For example, a listening comprehension question that prompts the learner to listen to the vocabulary word three times: (1) listen to it in a short dialogue, (2) read it in the question prompt, and (3) listen to it in the question prompt.

2.2. Input modification

Input modification in CALL is defined by Chapelle (2003) as "the provision of an accessible rendition of the L2 input such as hypertext or hypermedia links that help the learners to comprehend the input" (p. 45). That expands Larsen-Freeman and Long's (1991) original definition of modification that refers to any form that an interlocutor does during a conversation to clarify meaning in order to ensure the continuity of the conversation such as simplification, repetition, clarification, or L1 translation. One way input modification assists learners in acquiring the meaning of some vocabulary or other textual meaning is through images or videos that depict what is expressed in the language. Citing Plass et al. (1998), Chapelle stated that images and videos could be effective in vocabulary retention when topics in the input are concrete and easy to depict. Other forms of modification are L1 translation and L2 definitions. According to Chapelle, L1 translation has been largely used in reading and conversation studies as a primary help option that provides access to the meaning of the input (e.g., Plass et al.). L2 definitions also have been found to improve reading comprehension, citing Hegelheimer (1998) and Watanabe (1997). Simplification is also another form of modification that refers to the changes that a text receives by altering some aspects of the syntax and vocabulary to make it accessible for the learner. For instance, an authentic text can be simplified by creating another version that contains shorter sentences, more common vocabulary, fewer idiomatic expressions, and simple syntactic structures. Chapelle added that any attempt to make the meaning of the input accessible is a method of input modification.

2.3. Input elaboration

Input elaboration, as conceived by Chapelle (2003), entails the addition of different clauses and phrases to the text such as defining appositives and relative clauses in order to facilitate the meaning carried by the text. Instead of excluding the forms targeted in the input (input simplification), elaboration is a process that should make the meaning clear while maintaining the structural and lexical complexity needed in the text for acquisition. Referring to Yano et al. (1994) and Oh (2001), Chapelle pointed out that research indicates that learners need to be exposed to more elaborated language, emphasizing that input elaboration should be offered in English teaching materials. Underscoring the importance of having access to the authentic input in addition to the assistance needed to clarify the meaning, Chapelle noted that help should be provided 'in addition to' the input rather than 'instead of' it.

3. Listening help options as input enhancement

Cárdenas-Claros and Gruba (2010) argued that various help options and support resources implemented in CALL materials across the different language skills could be operationalized as forms of Chapelle's (2003) input enhancements. As this article is concerned with listening comprehension, discussion of Cárdenas-Claros and Gruba's study will be restricted to their findings on help options employed in L2 listening research. Basing their study on previous research, Cárdenas-Claros and Gruba considered aural repetition, transcripts, and dictionary in Hsu (1994); scripts, gist, and background info in Liou (1997); cultural notes, transcripts, subtitles, and dictionary in Cárdenas-Claros & Gruba (2014) and Pujolà (2002); and repeat button and glossary in Hegelheimer and Tower (2004). They concluded that glossed words, video/audio control features (replay, rewind/ fast forward buttons), repeat button as input salience; transcripts, subtitles, closed captioning, and dictionary as input modification; and cultural notes as input elaboration. A quick glance at the aforementioned help options reveals that they are

mostly of a textual mode indicating that YouTube comments fit perfectly within this collection of help options.

4. YouTube comments as a listening help option

YouTube is an "excellent database of multimedia content" that has been "found to promote autonomous language learning" and, thanks to its multimodal affordances; is "valuable for language learners of all sorts to practice speaking, writing and listening" (Barton & Lee, 2013, p. 156). In the class, YouTube videos provide students with an opportunity to engage meaningfully in the target language (Terantino, 2011). However, L2 learners are not likely to reach a satisfactory listening comprehension of all videos they watch on YouTube, particularly authentic ones. Aside from YouTube traditional help options like captions, subtitles, and audio control buttons, we think that the comments left on videos might also assist viewers in achieving a better understanding of the videos. YouTube comments might provide enhanced input through increased salience, input modification, or input elaboration. In 2018, YouTube Official Blog announced that "daily users are 11% more likely to be commenters than they were last year"; but how is it possible that the growing popularity and the increasing number of comments can facilitate comprehension and vocabulary learning when compared to the other traditional help options?

Analyzing a corpus containing 66,637 YouTube comments drawn from 60 videos, Madden et al. (2013) found that some types of comments provide factual information or an explanation about the video content or context, other types summarize or paraphrase something in the video content, while others directly quote something in the video, on occasions, containing hyperlinks in a time format like "11:07" that direct the reader to a specific point in the video. A close examination of those types of YouTube comments reveals that they restate, emphasize, paraphrase, elaborate on, or explain the video content captioning the same words, phrases, or even whole sentences heard in the videos. Not only that, but YouTube comments have also been considered "a valuable source of user-generated metalinguistic data; in particular, they demonstrate that respondents have strong opinions about language and texting practices, and freely question and evaluate linguistic choices in terms of competence, appropriateness, and correctness" (Jones & Schieffelin, 2009, p. 1062). From our personal experiences as an L2 viewer of YouTube, we cannot count the number of times that comments assisted our listening comprehension. That being said and because multimedia support resources "can reduce frustration in the use of technology, immediately correct flawed understandings, draw attention to specific linguistic features, and ease the demands of second language processing" (Cárdenas-Claros & Gruba, 2010, p. 69), YouTube comments might bring along some linguistic assistance by being a potential listening support resource to all viewers and L2 listeners in particular. As we argue here that YouTube comments can be a potential help option to the comprehension of the aural input in videos and vocabulary learning, we also argue that YouTube comments are a form of input enhancement.

4.1. YouTube comments as input salience

Help options that highlight or repeat the target linguistic forms that the learners need to attend to while listening make the input salient. From Cárdenas-Claros and Gruba's (2010) operationalization of input enhancement, it can be figured out that L2 listening input salience can be achieved through highlighting and hyperlinking the aural input through glossed words (marked input) and by providing learners with access to control features and repeat buttons that allow them to hear the input multiple times (repetition). Also, Cárdenas-Claros and Gruba (2013)

observed that the presence of text in any form (captions or transcripts) could serve to make audio input more salient. With a YouTube video, similar results can be achieved through specific types of comments. There is a very common type of YouTube comment, as mentioned above, that contains direct quotations of words and phrases heard in the video often with blue-colored hyperlinks and a time reference indicating a specific point in the video. Such comments include exact words, phrases, statements, and sometimes an extract of the dialogue heard in the video with the hyperlink. Those comments share the common basic characteristics of subtitles and closed captions in that both of them display the written format of parts of the aural input and attached to a specific time when it will be heard in the video.

Similarly, YouTube videos typically receive a considerable number of comments containing the commenter's reactions or feelings, but, more importantly, along with a hyperlink in a time format. Commenters commonly hyperlink segments of the video (with a quotation or without) which they think other viewers need to pay attention to, either depending on the category of the video, because they are interesting or funny, important, or essential parts of the video. When the viewer comes across those comments, they are supposed to recognize the importance of the segment. These types of comments serves as a highlighter if the reader did not watch that segment, but when readers click on that hyperlink and watch the segment for a second time, the comment becomes a repeater. In both situations, the input has been made salient to the viewer, who should pay attention to the aural input. The function of these types of comments is similar to aural repetition (Hsu, 1994) and repeat button help options (Hegelheimer & Tower, 2004).

4.2. YouTube comments as input modification

As stated earlier, Cárdenas-Claros and Gruba's (2010) consider transcripts, subtitles, and closed captioning as input modifications of listening input. The direct quotation comments with hyperlinks explained in the previous section change the aural input of the video to written input in the comment (input modification). Arguably, these are the most beneficial comments to L2 listeners, particularly in cases when auto-subtitles are not available and when closed captions are not provided. They are also effective as they often highlight important segments of the video.

4.3. YouTube comments as input elaboration

In L2 listening, input elaboration provides learners with further input, such as restatements (Chapelle, 2003) and cultural notes (Cárdenas-Claros & Gruba, 2014; Pujolà, 2002) while maintaining the original input. Khan (2017) observed that YouTube users not only seek information through viewing videos but also through reading comments, and concluded that they "may offer valuable information to users in the most informal setting possible" (p. 243). Madden et al. (2013) found that some types of YouTube comments provide factual information such as details or explanations about the video content or context either in response to another request comment which demonstrates the interactive and/or unsolicited nature of comments, and which shows the willingness of YouTube users to elaborate on video content and contribute to the provision of additional relevant information. These comments might refer to external sources by recommending other videos or provide URLs which point to specific online resources. They also reported that other types of comments summarize or paraphrase something in the video content. These types of comments resemble cultural notes (Cárdenas-Claros & Gruba, 2014; Pujolà, 2002) and restatements (Chapelle, 2003) in that all provide further input for the learner while maintaining the original input (the aural content of the video).

4.4. YouTube comments for vocabulary learning

The advantages of textual help options are not limited to being beneficial in enhancing listening comprehension. Rather, help options (such as captions and textual annotations) have been found to be beneficial in vocabulary acquisition too (e.g., Jones & Plass, 2002; Jones, 2007; Sydorenko, 2010; Winke et al., 2010). The presence of spoken and written representations of the vocabulary words enhances form-meaning mapping and encourages learners' attention to form, resulting in better recall of the vocabulary. YouTube comments that contain direct quotes and those containing words and phrases heard in the videos should enhance the acquisition of those vocabulary words. In fact, many YouTube viewers browse through comments while watching videos, which means they are likely to see and come across words that they are hearing or listening to in the videos. Or, they might click on a hyperlink embedded in a quote-type comment and replay a specific segment of the video while reading the comment.

4.5. Interaction in YouTube comments

Chapelle (2003) stated that "enhancement should be offered interactively" and "the issue of access to enhanced input through interaction has been the source of great interest in classroom research" (p. 45). YouTube comments, thanks to their design, layout, purpose, and popularity, allow for the three types of interaction mentioned earlier. Interpersonal interaction, which entails face-to-face communication for negotiation and co-constructing of meaning, is clearly evident in YouTube comments. As confirmed by Tolson (2010) that YouTube comments "reproduce the feel of face-to-face communication" (p. 277) and by Bou-Franch et al. (2012) that YouTube commentators engage in one-to-one interactions, Madden et al. (2013) pointed out that there are comments containing requests for an explanation of, or further information about, the video content, video context or something unrelated to the video and, in turn, there are comments (replies) that provide factual information in response to those request comments. Benson (2015) also concluded that YouTube comments are "interactionally rich, and oriented towards information exchange and negotiation for meaning" (p. 99). Person-computer interaction is also developed. The access to YouTube comments is also typically interactive because users need to scroll down the video page to read comments, click on 'Read' more to expand and read longer comments, click on 'View' replies to read these and click on embedded hyperlinks to use them. The learner-computer interaction, which is hypothesized to be of value in delivering enhanced input, should enhance intrapersonal interaction simultaneously, allowing learners to focus on linguistic form and perhaps engage other valuable processes as well.

4.6. Strengths of YouTube comments

Chapelle (2003) raised two issues regarding receiving some form of enhanced input; (1) the quality of the input enhancements, and (2) the extent to which the learners engage in the interactions, adding that "learners need to be sufficiently interested and motivated to engage in interaction" (p. 60). For different reasons, some help options (e.g., cultural notes, online dictionaries, and glossed words) have been reported in research to be either ignored, neglected, or undervalued by L2 learners (Cárdenas-Claros, 2005; Cárdenas-Claros & Gruba, 2014; Grgurovic´ & Hegelheimer, 2007; Hegelheimer & Tower, 2004; Pujola`, 2002; Rivens Mompean & Guichon, 2009). One important reason for such non-use is the delayed access to help options usually caused by poorly designed software, which fosters learners' inattention and forgetfulness (Pujolà, 2002), and which consequently disrupts learner-computer interaction. In their attempt to understand further reasons for the non-use of help options, Cárdenas-Claros and Gruba (2014) relied on general help system design research, which identified different

reasons inducing: (1) the user's inability to locate help resources (Dworman & Rosenbaum, 2004; Kelleher & Paucsh, 2005); (2) the user's unwillingness to depart from an ongoing task and look for assistance (Dworman & Rosenbaum, 2004; Ellison, 2007); (3) the user's resistance to click on something called 'help' (Ellison, 2007; Willis, 2006); and (4) the user's tendency to think that a solution can be found without relying on assistance (Dworman & Rosenbaum, 2004).

Thanks to their friendly-user design and layout, access to YouTube comments is effortless as comments appear automatically below the videos. Comments are also easily located by users as they always appear below videos with a head title 'comments'. Users don't have to leave the video page or open another page to access comments. In fact, it is not only the design and layout of comments that make them engaging, but also the content of comments that are found to be interesting, relaxing, and entertaining (Chen, 2020; Jones & Schieffelin, 2009; Khan, 2017; Schultes et al., 2013). YouTube comments are likely to make them more visited, enhancing learners' interaction with them as enhanced input. Another strength of comments is that L2 listeners can post a request comment asking for clarification, assistance, or more information if they could not understand some aspects in the video. And they are likely to receive one or more reply comments from other viewers, perhaps native speakers, providing the needed help. They can even post multiple comments with different requests if they need to overcome multiple comprehension difficulties. The issue raised in the past about YouTube comments being controversial, racist, offensive, or hateful particularly under certain categories (e.g., Madden et al., 2013; Schultes et al., 2013) has been largely controlled. According to YouTube Official Blog (2018), in 2017 YouTube started using "a combination of smart detection technology and human reviewers to flag, review, and remove spam, hate speech, and other abuse in comments" and allowed video creators to "choose to hold all comments for review, or to automatically hold comments that have links or may contain offensive content". In conclusion, YouTube comments seem to be a reliable help option that have the potential to provide high-quality, engaging input enhancement, and which overcome problems such as learners' reluctance to use them, neglect, or difficulty of access.

4.7. Weaknesses of YouTube comments

Like any other help option, YouTube comments unsurprisingly have their shortcomings. The main weakness of YouTube comments is that they will not necessarily be available for all parts of the aural input of a video. It should go without saying that comments should not be expected to provide viewers with the necessary enhancement all the time. Even when much of the aural input of videos need some enhancement for better listening comprehension, there is no guarantee that any kind of enhancement comments will be made, even when an L2 listener posts a request for help. However, it should be understood that YouTube comments assist listening comprehension by accident; they happen to have the potential to assist in listening comprehension of videos. Their value in listening comprehension should not be underestimated, bearing in mind that they were not created or designed to be a help option in the first place. Second, YouTube videos commonly gather quite a number of irrelevant comments such as those "that describe what the commenter is doing at the time of leaving the comment" or "a comment containing a story about a commenter's personal experience" (Madden et al., 2013, p. 701). Comments have the potential to assist listening comprehension only when they are relevant to the video but listening comprehension definitely can't be assisted by irrelevant comments.

5. Conclusion and implications

The claim that YouTube comments might assist listening and vocabulary learning should not imply that they have the potential to be as effective as carefully created help options. Captions, glosses, annotations, etc. are usually planned carefully, reviewed, and redesigned continually by researchers and practitioners. The claim here, however, is that YouTube comments appearing below videos happen to have the potential to support listening and vocabulary learning and this fact should be acknowledged by listening researchers and practitioners. We urge researchers to consider YouTube comments as a unique listening help option that deserves their time and effort. The help options research themes developed by Cross (2017) are relevant in this regard: learner perceptions and experiences; comparisons of different conditions; learner training; and learner variables. Possible research areas include exploring L2 listeners' perceptions of YouTube comments as a help option in listening comprehension, their experiences with reading L2 comments, and whether comments ever assisted their comprehension of videos. Another research opportunity would be an experimental study examining possible differences in listening comprehension gains between two groups of students watching videos with only the experimental students exposed to comments while the control students are only allowed to watch the videos. Comparison studies should ascertain whether videos have received a substantial number of relevant comments in order to draw the best conclusions about YouTube comments. It would also be interesting to ask a group of students to post request comments on certain videos and, then see whether they receive any replies, how long it takes to receive a reply or replies, how many replies they receive for each request, and how useful the replies are. Learners' variables such as overall L2 proficiency, L2 reading proficiency, gender, age, and L1 background should be taken into consideration in YouTube comment research. Also, the quality of comments, category of video, length of the video, etc. might be other factors in listening comprehension improvement caused by reading comments.

When YouTube videos are considered in teaching L2 listening, the quality and relatedness of comments to the videos should be included in the selection criteria. We assume that listening comprehension can be best assisted when a YouTube video receives a large number of relevant comments on multiple parts of the video. As stated by Chapelle (2003), the best enhancement of input might be some combination of different forms of enhancement, and it might be beneficial when there are different types of comments on the same part of the video. For example, one comment directly quotes something in the video, and another comment explains or adds further information on the same part. In conclusion, YouTube comments might have started out as a facility for expressing feelings and reactions, but surely ended up as a potential help option for listening comprehension.

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