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Teaching repetition as a communicative and cognitive tool: evidence from a Spanish conversation class

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The development of conversational abilities in the second language depends upon the appropriation of both cognitive and communicative skills, in addition to overall linguistic improvement. In terms of needed skills, speaking is often considered at the expense of listening, which has long been thought of as a passive exercise. However, listening and speaking must be developed together as active discursive practice, that is, in the same way in which they are used in conversation. The focus of the present project is to investigate whether or not students can be taught to use a specific linguistic tool, a feature of private speech known as repetition, as a cognitive and communicative resource in order to facilitate their interactions with other learners. Analysis of students' production in several different classroom tasks suggests that learners are able to use repetition for a number of communicative and cognitive functions, in response to instruction and extended practice.

Introduction

Interpersonal communication occurs when multiple linguistic and communicative abilities are used together within specific social contexts. A widely used form of interpersonal communication is conversation. The development of conversational abilities in the second language depends upon the appropriation of both cognitive and communicative skills, in addition to overall linguistic improvement. In terms of the skill areas needed to successfully engage in conversation, listening and speaking must be considered jointly. Listening, long thought of as a passive skill, emerges as active practice, while speaking must also project the act of listening (through back-channeling, repetition, etc.) Thus, second language learners must be allowed to improve their listening comprehension and discourse management skills in cooperation with their speaking skills in interactive and interpersonal activities.

The focus of this project is to investigate whether or not students can be taught to use a specific linguistic tool, a feature of private speech known as repetition, as a cognitive and communicative resource in order to facilitate their interactions with other learners. This follows from Vygotsky's (1978,

1986) fundamental insight that speech bears a private, organizing function in addition to its primal, communicative function, as well as his claim that all mental functions develop out of social interaction with others. In what follows, we provide the theoretical background, as well as the rationale for the study, and offer evidence that learners are able to use repetition for a number of communicative and cognitive functions, in response to instruction and extended practice.

Sociocultural theory

Sociocultural theory is a framework concerned with the way in which people function and acquire concepts in and from their surrounding social environment. It is based on the ideas of Lev Vygotsky, who in turn drew from the work of Marx and Engels. There are several crucial concepts that form the basis of sociocultural theory and that are of particular importance to the present study. First, all higher mental functions in individuals emerge out of social interaction (Vygotsky 1978). Secondly, language is the principal tool that mediates mental functions, both as they originate in social practice and later as they transform themselves into individual activity (Vygotsky 1986; Wertsch 1985). Finally, learning, or the acquisition of social and cognitive activity systems, occurs as a result of collaborative discovery in social interaction (Gallimore and Tharp 1990).

Vygotsky (1986) proposed that all higher mental functions arise first on the social or interpsychological plane, and then on the individual or intrapsychological plane. Thus, learning is at the same time an individual yet a socioculturally situated and collaborative process. Initially, children do not have the cognitive skills necessary to carry out tasks by themselves. Instead, they must rely on adults or other more capable persons who direct their attention and activity by means of gestures or speech. In the transition to the individual plane, when children first attempt to take control of these processes, they do so following the model provided to them by their semiotically constituted interaction with others. That is, they try to regulate their own behavior via speech. Thus, Vygotsky (1986) argued, language has a cognitive function in addition to the communicative and affective roles from which it develops. Importantly, the communicative use of language creates the social conditions that are needed for cognitive development, for the means used to direct social interaction are ultimately the same ones needed to mediate mental activity (Donato and McCormick 1994; Vygotsky 1981b).

Language, then, becomes the tool through which children are able to plan, direct, and evaluate their behavior. Although it may be communicative in form, language that has the function of directing one's own actions is referred to as *private speech.* Eventually, private speech becomes more abbreviated until it "goes underground" and evolves into *inner* (non-vocalized)

speech (Vygotsky 1986). However, private speech remains a part of one's cognitive repertoire, and thus has been observed in both older children and adults by Vygotsky and other investigators (Soskin and John 1963; Frawley and Lantolf 1985). When faced with cognitive difficulties, speakers often make external their inner order as speech in an attempt to achieve and maintain control of their mental activity in the task (Appel and Lantolf 1994; John-Steiner 1992; Wertsch 1979). Researchers working within the framework of sociocultural theory have found that this overt, organizing speech for self may differ in form from communicative speech (DiCamilla and Lantolf 1994; Frawley and Lantolf 1985; Lantolf, DiCamilla and Ahmed 1996; McCafferty 1992; Roebuck 1998). Private speech may, for example, appear to be ambiguous, redundant and even ungrammatical as writers and speakers use different linguistic forms in order to help themselves carry out difficult activities.

The Zone of Proximal Development (ZPD) is the psychological construct that encompasses the carrying out of mental functions within and between individuals as well as the transition of a function from the social to the cognitive plane. The ZPD is not a place, but rather co-constructed activity that may include a person acting alone and/or in collaboration with others (McCafferty 2002). In that way, the ZPD identifies those "functions that have not yet fully matured, but are in the process of maturation" (Vygotsky 1978: 86).

In the early stages of learning, a person is able to carry out a task with the help of another person or other outside sources of assistance. Subsequently, the learner is able to work independently, using the same guidance and external resources or tools that were offered earlier. Finally, the learner carries out the task individually with little or no outside help. Importantly, the ZPD transforms the participants of the co-constructed activity and allows for new ways of thinking to develop out of their interaction (McCafferty 2002). Learning is the result of the cognitive restructuring that occurs through the transformative activity that both creates and is created through the ZPD. This psychological mechanism is of extreme importance during the child's early years but does not disappear, even in adulthood. The fact that adults appear to be cognitively more stable is only a reflection of the slow rate of change that adults present (Vygotsky 1981a).

Vygotsky (1978: 90) believed that an essential feature of learning was that it "creates the zone of proximal development . . . [and] awakens a variety of internal developmental processes". Initial mastery of a tool or function in one context provides the basis for subsequent development of the process in another context (Vygotsky 1978). Vygotsky rejected the claim of his day that mastery of a tool in one context would transfer as complete mastery of the tools into a second. However, as Wells (1999: 328) argued, transformation of the activity setting may "open up further possibilities for action". Thus, learners' use of a cognitive tool or skills in an introductory context ought to set in motion subsequent developmental processes that may begin to affect their performance in other, more complex, contexts.

Teaching, from a sociocultural perspective, involves assisting students as they carry out developing mental functions (Gallimore and Tharp 1990). That is to say that the instructor assists the learner in realizing the collaborative and transformative activity that makes up the Zone of Proximal Development by providing him or her with the means and resources (including other learners) that are necessary to create meaning and complete tasks. These same tools will be used consciously and independently by the student, and later on will be internalized for unconscious use in the completed acquisition of the function. For that reason, the investigators in this study have attempted to facilitate the students' use and eventual internalization of a specific linguistic tool. The tool in this case is repetition, a linguistic device that serves both social and communicative ends.

Repetition

Repetition is a feature of both communicative and cognitively oriented speech. It is a pervasive feature of L1 language use and is instrumental in constructing discourse, especially everyday conversation. In fact, Bollinger (1961) suggested that repetition, in a broader context, is the driving force behind all speech. That is, most, if not all, of what we say has been previously transmitted to us by others in some form or another. In Vygotskian terms, then, language that has been internalized is returned to the social plane through speech. Language is transformed in its repeated transition between planes.

In conversation, repetition assists speakers in creating meaning by giving them time to plan subsequent speech, by making speech more intelligible to others, and by acting as a cohesive device (Tannen 1989). Speakers may also use repetition to signal personal involvement or to get or maintain the floor in an interpersonal interaction (ibid.). Importantly, repetition allows speakers to be active listeners in interpersonal interactions.

Vygotsky (1978) argued that private speech is embedded in communicative speech, and studies have revealed that language may reflect the interweaving of both social and private functions (Frawley 1992; DiCamilla and Anton 1997; Roebuck 1998). As a communicative tool, repetition should lend cohesion to the discourse as well as a sense of involvement on the part of the listener. As an instrument of private speech, it should help focus the listener's attention through external means. Attention is one of the most important cognitive functions and is a primary motivator for the use of psychological tools (Vygotsky 1978). Repetition can assist learners by acting as an internal attentional process "imported from the outside" (Vygotsky 1981a: 196).

The cognitive function of repetition has also been documented. Frawley (1992) and Roebuck (1998), working with child speakers and adult writers, respectively, found that people may continue referring to an object or topic

when faced with a difficult cognitive problem. This repetition, also known as focus or externalization, occurs when an item is the target of continuous mental activity on the part of the speaker or writer. It is a semiotic technique that can be used as a kind of scaffolding for the construction or comprehension of information, with the goal of completing the meaning-making activity. Thus, repetition would seem to be a potentially important tool for students' attempting to create and comprehend foreign language discourse. In point of fact, DiCamilla and Anton (1997) found that foreign language students used repetition in both the L1 and L2 to create and maintain intersubjectivity – a shared or co-created perspective on the task – as well as to construct scaffolded assistance in a writing task.

Repetition, of course, has been a part of language teaching prior to the days of audiolingualism. Students were required to memorize words and phrases in order to be able to produce them in appropriate contexts. Murphey (2001) suggested the teaching of repetition as a strategy – if not explicitly a cognitive tool – to facilitate comprehension in a number of different contexts. He argued that instruction in shadowing (or repeating the speech of a conversation partner) ought to impact students' learning and short-term retention as well allow them to "assert some control over the process and content of conversations" (Murphey 2001: 133.) He found that not only does shadowing assist learners in attending to what has been said, it also allows them to interact more fully in the conversation. Thus, even novice learners are able to collaborate in the conversation, which leads to more learning. Importantly, through shadowing, learners model the language of another person, an important step in the transfer of the language from the inter- to the intrapsychological plane and the internalization of the social and linguistic dimensions of language.

The study

Rationale

The motivation of this study is to investigate whether or not students can be taught to use repetition as a strategy for creating cohesive, informed and involved discourse. Repetition is a good candidate for overt instruction because it is characteristic of social interaction and a familiar strategy for everyday cognitive functions (such as facilitating short-term memory). As a social and cognitive tool, repetition ought to assist learners in developing the social functions involved in creating sustained discourse and the mental functioning necessary to successfully carry out the activity of engaged interaction. By first using repetition as a communicative tool, students should begin to master the mediational means of conversation. This tool will ultimately assist them in the cognitive activity associated with comprehending, remembering, planning for and creating second language discourse.

Second language learners are almost sure to have repetition as part of their cognitive and discursive repertoires. However, we know that second language learners are often not able to avail themselves fully of their cognitive tools due to the demands of the L2 tasks. Furthermore, second language students receive little or no overt instruction on how to use strategies for active listening, including repetition (Vandergrift 1997). By working with students to create meaning-making activity and bring forth Zone(s) of Proximal Development, we hope to assist them in overtly and explicitly using tools that may be temporarily outside of their cognitive reach without guidance. By making repetition overt and external, we wish to reawaken students' ability to use language to facilitate their linguistic performance in a specific context. Because of the transformative potential of the ZPD, learners' use of repetition in an initial context may affect their performance in other contexts. Consequently, we will examine the data for evidence that the students have begun to utilize repetition in other, more complex, tasks.

Participants and instruction

The participants in this study were all enrolled in a fourth-semester undergraduate Spanish conversation course, which was taught by one of the authors with the assistance of a graduate teaching assistant. All 16 learners were adult, native speakers of English, and displayed a wide degree of variation with respect to ability in Spanish.

The students were introduced to the concept of repetition in the second week of class through a short, structured activity called *el mentiroso* ('the liar'). In this exercise, learners read a list of implausible statements to a classmate, such as "I am the daughter of a famous actor". In their response, students were asked to repeat part of the statement, replying, for example "Daughter of a famous actor? I don't believe it!" Because the learners had the information before them on a handout, it was not difficult to repeat what had been said. Thus, they were able to practice repeating in a context that was not too cognitively demanding. Following the exercise, the instructor discussed the usefulness of repetition as a conversational strategy, citing the possibility of improving listening, gaining and maintaining focus, creating cohesion, and simply having something to say.

In order to encourage the students to not only engage in repetition but also to take advantage of it in more difficult contexts, they were introduced to another, more challenging activity, the interpersonal or peer interview. First, students watched a videotaped interview between the instructors, who modeled repetition of each other's answers. Students were then paired off to interview each other, using a list of provided questions. Learners were instructed to follow the model provided by the instructors, by repeating part of each other's answers. Although they had the questions in front of them, they did not know how their classmate would respond and so were required

to attend to the answer. After asking the questions, students were required to give a short summary of what their partner had said.

During the next class period, students engaged in a number of activities surrounding a lengthy dialogue that was included in their text. After having read through the script a number of times with differing emphasis each time, students were asked to try and find ways to work repetition into their own lines. Although the language was more complex than the items in the *el mentiroso* activity, students were once again assisted by having the target language in front of them in writing

Tasks

Data from this study come from two sets of classroom tasks. The first set consists of 5 series of oral interviews, in which students were paired off and required to ask 4–5 questions of each other. The questions were related to vocabulary presented in the corresponding text chapter and were similar to questions that learners had previously discussed in class. The first time they carried out the task, they were encouraged to repeat each other's answers, to ask follow-up questions as appropriate, and were required to end with a short summary of what they had learned about the other person.

The second set of tasks consists of 6 series of students' dramatizations. Working in pairs or groups of three, students were required to present 6 different dramatizations over the course of the semester. The first dramatization took place before the students had received overt instruction in repetition, and learners were never instructed to use repetition in these tasks. Learners were paired with a different partner or partners for each one of the dramatizations, which consisted of the students' performance, in groups of two and three, of scripts that they had written themselves. Although learners were told to memorize their scripts, they were not always able to recall all their lines. This obliged them to listen carefully to what each person was saying so that they could respond appropriately. Likewise, students often produced utterances that reflected the content but not the exact form of their scripts. This allowed the instructors to see what type of language they could produce spontaneously.

Both the interviews and the dramatizations were videotaped as part of the class and transcribed verbatim. Also analyzed were the students' scripts for the dramatizations. Analysis of the transcripts and scripts was primarily qualitative in nature, and all instances of repetition were noted, along with their linguistic and conversational context. Quantitative analysis was limited to counting instances of repetition in order to get a sense of general trends in the data, such as an increase in the number of repetitions over time. The qualitative analysis of the data involved examining each instance of repetition with regard to discursive context and determining whether or not repetition had occurred in tasks other than the one with which it had been associated originally.

Analysis

Repetition in the peer interviews

The data show that repetition was a feature of the learners' speech throughout the peer interviews. For example, students often repeated themselves, especially when they were working on a particular grammatical form or lexical item, as in the following excerpt (pauses are signalled by . . . in all excerpts):

1) EE: *No me gusta, uh,*
'I don't like, uh'
ME: *¿No?*
'No?'
EE: *no me gusta las enfermeras, ah, y . . . no, uh, las enfermeras no trabaja . . . , trabajan, rápido, rápido, rápida.*
'I don't like the nurses, ah, and . . . no, uh, the nurses don't work [incorrect form] . . . , work [correct form], fast, fast, [correct form], fast [incorrect form]'.

Like the speakers in DiCamilla and Anton (1997) and the writers in Roebuck (1998), this learner repeats herself as she goes along and ultimately generates the forms she needs. She begins with *no me gusta* 'I don't like', although she is initially unable to say what it is that she doesn't like. She tries again, and this time is able to come up with *las enfermeras* 'the nurses'. She starts her next utterance with a repetition of that item, and goes on to repeat several forms until she generates the ones she wants. Although the process is difficult, the repeated items help keep her focused on what she is saying and provide a link between what she has said and still wants to say.

What is of greater interest to the project at hand is the fact that students were able to incorporate repetition of their partners' speech into their own speech in the peer interviews. That is, learners repeated, either fully or partially, what had been said to them in answer to a question. Repetition occurred in all 5 sets of interviews, with slightly more instances in the third and fourth sets of interviews than in the others. The students' repetitions were realized either as questions or as declarative statements. Some of the interrogative repetitions seemed to be true clarification requests. These repetitions required a response, although, as the excerpt in (2) shows, one may not have been provided:

2) JT: *¿Te gusta, uh, la primavera, o, um, el "vierno"?*
'Do you like, uh, the spring or the "vierno" [incorrect form, could be *invierno* 'winter' or *verano* 'summer']'
GP: *¿La primavera o el verano?*
'Spring or summer?'
JT: *[No response]*

GP: *Uh, la primavera, prefiere, prefiero, la primavera, porque . . . las plantas.*
'Uh, the spring, I prefer [incorrect form], I prefer, the spring, because . . . the plants'

In this episode, GP is initially unable to respond to JT's question, presumably because he does not understand one of the two choices that JT offers as a possible answer. GP repeats and recasts part of JT's question in a request for clarification. The request fails and GP apparently decides to move on, giving an answer based on the only choice he understood. It is not known whether or not this answer is factually correct, only that it is the one answer that will allow the conversation to continue.

In addition to allowing a learner to express a cognitive need to her partner, a repetition for clarification may also assist her in working out the problem for herself. In a different incident, also involving JT, a similar request for clarification is ignored, but EE is able to clear up the ambiguity on her own (3). It is possible that her repetition, directed at JT, ultimately assisted her in solving the problem.

3) JT: *¿Cómo fue?*
'How was it [mispronounced]?'
EE: *¿Cómo? Repita. ¿Cómo fue? Ah, Cómo fue.*
'How? Repeat. How was it? Ah, how was it.'

Other questions appeared to signal involvement and were met with confirming *sí*'s and *no*'s or nods of the head. Finally, some questions could be considered affective in nature, showing surprise or interest, and like the declarative repetitions served as follow-up questions, as can be seen in (4) and (5), and comments, as in (6):

4) MG: *¿Te has quedado alguna vez en el hospital?*
'Did you ever spend the night in the hospital?'
KG: *¿El hospital? Sí, cuando era una niña . . . estuvo.*
'The hospital? Yes, when I was a a young girl . . . I was [incorrect form]'
MG: *¿Estuvo? ¿Dónde?*
'You were [incorrect form]? Where?'

5) GP: *La primera vez nací* [laughs] *pero no es importante . . . Las otras veces fueron operaciones.*
'The first time, I was born [laughs] but that is not important . . . The other times were operations.'
LA: *Operaciones. ¿Qué paso?*
'Operations. What happened?'

6) ND: *Nos hicieron esperar 5 horas.*
'They made us wait 5 hours.'
EB: *¡¿Esperando 5 horas?! ¡Qué terrible!*
'Waiting 5 hours?! That's terrible!'

In (4) MG responds to KG's answer with the affective repetition *¿estuvo?* 'you were'. It is a question that does not need an answer, as indicated by the lack of a pause between the repetition and MG's follow-up question of *¿dónde?* 'where'. (Note that formal *estuvo* was not correct either in the initial input form or as a repetition, since the informal *tú* paradigm already had been used.) Similarly, LA's declarative repetition of *operaciones* 'operations' in (5) leads to a follow-up question on her part. EB uses his repetition of ND in (6) as well as his subsequent remark to insert his opinion on the matter into the conversation. These excerpts are important because they all demonstrate that the learner's repetition was useful in creating longer, more cohesive and, in the case of (6), more involved discourse. Further involvement can be seen in (7), in which ME uses affect and expression to reveal his empathy for his partner, DD, thus establishing intersubjectivity:

7) DD: *Uh, está, estoy, en la ciudad de Guatemala.*
'Uh, I am [incorrect form], I am, in Guatemala City.'
ME: *Ciudad. Solamente en la ciudad.*
'The City. Only in the city. [disappointedly]'
DD: *Sí, porque es-estoy allí por dos días, nada más.*
'Yes, because I-I am there for only two days, no more.'
ME: *Dos días.*
'Two days.'

It is interesting to note that, over time, students produced fewer repetitions that were affective in nature. Rather, they appeared to prefer to repeat declaratively, leaving the interrogative intonation for true requests for information. In addition, learners' repetitions became shorter overall as they progressed through the series of interviews. Because declarative intonation is less marked than interrogative, one could argue that the repetition was becoming briefer and less pronounced. This suggests the beginning of the transition to the intrapsychological plane for these learners. It is possible that students stopped repeating simply because it was an element forced on them which they grew tired of or lost interest in. However, further evidence for internalization can be found in those cases where learners whispered or spoke softly. Speaking softly suggests a private orientation, and all cases of soft speaking involved repetition of declarative statements. The convergence of these three factors – a move towards unmarked intonation, shorter utterance length, and a decrease in volume – are consistent with Vygotsky's claim that private speech becomes abbreviated before its transformation into inner speech. It thus offers evidence that repetition in the second language was beginning to acquire a private or cognitive function for some of these learners, at least in this context.

While all learners used repetition at least once over the course of the 5 interviews, it was clear that repetition was not a strategy embraced equally by all students. In the case of one learner of particularly limited ability in

Spanish, repetition seemed to have been too difficult. In other instances, absence of repetition may have reflected the learners' personal involvement styles or even a lack of interest in the activity at hand (Murphey 2001).

Repetition in other contexts

In order to determine whether or not the (re)introduction of repetition as a cognitive strategy would transform the students' activity in other contexts, we examined the possibility that students would use repetition in contexts other than what had been instructed in class. We discovered that, in fact, students had begun to use repetition in other contexts and, significantly, had begun to plan for the use of repetition in later speech, although it must be remembered that we did not determine the extent to which students did this before introducing the intervention.

The peer interviews were first analyzed for instances of repetition that occurred when the interviewer repeated the interviewee's answer to a question, as was illustrated above. However, we soon found that the learners were able to take advantage of repetition in their role as interviewee as well. In several instances, students repeated the question posed to them in apparent attempts to secure more time in which to generate their answer. Their repetitions used both interrogative and declarative intonation and were frequently followed by unfilled pauses or further private speech. Consider, for example, the following example:

8) SG: *¿Cuándo fue la última vez que comiste en un restaurante?*
'When was the last time you ate in a restaurant?'
ME: *Ah, la última vez. . . . Yo, comí, en – ¿qué fue? . . . Creo que fue . . . McDonald's, la última vez.*
'Ah, the last time. . . . I, ate, in, – what was it? . . . I think it was . . . McDonald's, the last time.'

In the excerpt in (8), ME begins his answer by repeating part of the question declaratively. In doing so, he reframes the topic but seems to have difficulty completing the answer, as indicated by the pauses and false start. The problem lies not with his comprehension of structures and the message posed to him but rather his ability to recall personal, factual information. By repeating the question, he momentarily postpones the need to answer. A similar strategy is employed by EB in (9):

9) EE: *¿Cómo suele ser el tiempo en esta región durante esta estación?*
'What does the weather tend to be like in this region during this season?'
EB: [reads question card] *Um, . . .* [slowly] *el tiempo en esta región durante esta estación es . . . normalmente, y, uh, . . .* [swings chair to look out window] *y . . . un, persona, nunca sa – BE.*

[reads question card] 'Um, . . . [slowly] the weather in this region during this season is . . . normally and, uh, . . . [swings chair to look out window] and . . . a [incorrect form], person, never KNOWS.'

The question in this case is lengthy, but EB has it written down in front of him. He is able to use most of it to begin his answer, but the relatively slow rate of speed with which he recasts the question suggests that he is still not quite ready with an answer. He turns around to look out the window, perhaps hoping for a visual clue to the answer. As it turns out, it was unusually cold and sunny that day. Thus his answer is both correct and amusing and quickly deflates the tension caused by the delay in answering.

The strategic use of repetition exemplified in (8) and (9) is certainly a logical and prudent course of action for these speakers, and it is possible that both ME and EB would have used repetition without prior instruction. However, it is worth noting that at the very least the students seemed to be learning to respond linguistically (as opposed to silently) when faced with a problem and thus were able to sustain their end of the conversation. Additionally, EB's use of repetition in a similar context in a subsequent interview (10) suggests an on-going (re)internalization of repetition as a linguistic tool, evidence that repetition is a strategy being developed as he realizes the activity of the Zone of Proximal Development:

10) JB: *¿Cuál es tu restaurante favorito de Louisville?*
'What is your favorite restaurant in Louisville?'
EB: *Creo que en Louisville, . . .* [softly] *mi restaurante favorita . . . es . . . es . . . hmm, . . .* [louder] *Viet Nam Kitchen.*
'I think in Louisville, . . . [softly] my favorite restaurant is . . . is . . . hmm, . . . [louder] Viet Nam Kitchen.'

In this excerpt, EB again salvages part of a question to assist in his response. This time, however, the recycled question had a decidedly more private sense to it. It was added after he had begun and was uttered in a much softer voice than the rest of his response. This suggests that EB had begun to answer the question without being certain of his answer. When he realized the problem, he momentarily "checked out" of the conversation, as it were. Although he was still speaking in front of his partner, he went back and repeated part of the question as almost a whisper. Several seconds later, he returned to the conversation, providing the answer to her question in a louder, normal voice. The repetition, in this case, is less communicative and more privately oriented.

In addition to its use in peer interviews, repetition was found to have emerged in a completely different set of tasks, the dramatizations. In fact, repetition was used in both the planning phase of the dramatizations and in their actual performance. The dramatizations were based on chapter vocabulary and served as the culminating activity for each unit, which included a number of introductory conversational and interactive activities.

Students were given an entire class period, situated in a computer lab, in which to work with their partner(s) and generate the scripts that would form the basis of their dramatizations. They were encouraged to spend time outside of class, both with their partner(s) and alone in order to practice the scripts. Overall, students' performance showed that the majority of them did in fact prepare well for the presentation of their dramatizations.

Repetition, as was argued earlier, is extremely common in everyday speech, and the students were able to plan these dramatizations far removed from the cognitive pressure of having to perform them or even to engage in spontaneous discussion. Thus, it would be reasonable to expect that some repetition would find itself written into the students' scripts, even prior to instruction in repetition. In fact, that is the case; there are three examples of repetition, all with interrogative intonation, found in the seven scripts for the first dramatization. However, following instruction, instances of scripted repetition increased to an average of fifteen per set of seven to eight scripts for each of the subsequent 5 dramatizations. An example of a scripted repetition is given in (11):

11) GP: *¿Cuándo quieres ir y cuánto tiempo planeas estar allí?*
'When do you want to go and how much time do you plan to be there?'
DE: *¿Cuándo y cuánto tiempo? Dos semanas en marzo.*
'When and for how long? Two weeks in March.'
GP: *¡¿Marzo?! Tú eres muy afortunado.*
'March?! You are very lucky.'

The increase in scripted repetitions reveals the students' heightened awareness that repetition is a useful communicative and cognitive tool. It means that given the time, resources and a bit of cognitive distance, students can become conscious of the value of this important external tool. Interestingly, the overwhelming majority of these scripted repetitions appear to have been planned as cohesive devices. This is consistent with students' conscious awareness of the communicative function of repetition. The majority of the scripted repetitions were realized in some form or another during the dramatizations. This indicates that the learners were able to predict with some degree of accuracy when repetition would be appropriate in the interaction.

Unscripted repetitions occurred during the students' actual realization of the dramatizations. Although these students repeated spontaneously to a lesser degree, we find that their unscripted repetition increased following instruction, with the highest numbers occurring in the last two sets of dramatizations, respectively. Unlike their scripted counterparts, however, unscripted repetitions seem to bear both communicative and cognitive functions. The cognitive function of unscripted repetition is evident in the following excerpt (12b), which departs from the planned dialogue in (12a):

12a) JT: *El especial de hoy es un sándwich de pollo.*
'Today's special is the chicken sándwich.'
JM: *¿De veras? ¿Cuánto cuesta?*
'Really? How much does it cost?'

12b) JT: *El especial de hoy es un sándwich de pollo.*
'Today's special is the chicken sándwich.'
JM: *Hmm. Un sándwich de pollo* . . . [looks at menu] . . . *¿Cuánto cuesta?*
'Hmm. A chicken sándwich . . . [looks at menu] . . . How much?'

JM's repetition in (12b) is predictable from a communicative standpoint. Nonetheless, along with the filled and unfilled pauses, it betrays his momentary lack of cognitive control in the activity. His partner, JT, probably would not have been able to help him out because of his own limited language proficiency. In repeating and refocusing himself, JM uses language for a cognitive purpose, and eventually recovers and proceeds with the dramatization.

In one particularly well-done dramatization, the learners realized five unscripted repetitions, in addition to the seven that they had already written into the script. Furthermore, not only did this pair add repetition, they reordered some of the scripted repetition, heightening the intensity of the resulting interaction. Compare part of the script (13a) to what was actually said in the dramatization (13b):

13a) KG: *Aquí lo tienes: las pechugas de pollo, las patatas, y ensalada. ¡Buen provecho!*
'Here you have it: chicken breast, potatoes, and salad. Bon appetit!'
GP: *¿Bueno provecho? ¿Patatas? Dije chuleta de puerco, no las pechugas de pollo; y papas, no patatas, ensalada de aguacate, no sin aguacate . . . pero tengo prisa. Por eso, lo acepto.*
'Bon appetite? Potatoes? I said pork chops, not chicken breast; and fries, not potatoes, salad with avocado, not without avocado . . . but, I'm in a hurry, I'll take it.'
KG: *Lo siento.*
'I'm sorry.'

13b) GP: *¿Buen provecho? Dije chuletas de puerco.*
'Bon appetite? I said pork chops.'
KG: *¿Chuletas de puerco?*
'Pork chops?'
GP: *Chuletas de puerco y no pechuga de pollo, y papas fritas, no patatas.*
'Pork chops and not chicken breast, and French fries, not potatoes.'
KG: *¿No patatas?*
'Not potatoes?'
GP: *Sí, y ensalada con aguacate, no sin aguacate.*
'Yes, and a salad with avocado, not without avocado.'

KG: *¿Con aguacate?*
'With avocado?'
GP: *Sí, pero tengo prisa.*
'Yes, but I am in a hurry.'

The scripted dramatization in (13a) emulates a real-life encounter in which a waiter mixes up a customer's order. Here, instead of just accepting what he was erroneously served, the speaker (customer) uses repetition to correct what was a listening, processing or memory error on the part of his interlocutor (the waiter). The dramatization as it was realized (13b), however, shows more give and take and increased repetition between the two speakers. That the students who created this dramatization were able to react in such a natural way is evidence that that they had (re)internalized to some degree the social function of repetition in conversation.

Social/interpsychological factors

One of the more satisfying findings of this study was discovering how repetition could be used by weaker students as a way to participate more fully in the peer interviews. For one student, her continued participation through repetition transformed itself from a simple inclusion strategy to one of more active involvement. In this case, JB was initially able to repeat very little of her partners' responses, and none at all if they were very long, but she repeated what she could enthusiastically. Excerpts (14) and (15) are from her second and third interviews, respectively:

14) KC: *Hace sol y fresco.*
'It is sunny and cool.'
JB: *¿Sol y fresco? Bueno. ¿Cómo suele ser el tiempo?*
'Sunny and cool? Good. What is the weather?'

15) ND: *Prefiero viajar en coche.*
'I prefer to travel by car.'
JB: *¿En coche?*
'By car?'
ND: *En coche, sí.*
'By car, yes.'
JB: *Sí. ¿Has viajado recientemente?*
'Yes. Have you traveled recently?'

Her earliest repetitions are characterized by an affective interrogative intonations, followed by *bueno* 'good' or, less frequently, *sí* 'yes'. *Bueno* marks the end of a question/answer pair and allows her to move on to the next assigned question. Thus, although she was not able to ask her own follow-up

questions or comment on their responses, JB was able to create cohesive discourse. By the fourth peer interview, however, JB's repetitions are no longer affective; rather they are declarative and seem more natural. In (16), we see that she ceases to use *bueno* as a marker and instead offers her first comment. Although the softer intonation of the repeated *dos veces* 'twice' may seem trivial, it marks the first time JB appears to reflect on the content of what she has repeated. In the same way, the seemingly inconsequential "hmm", intoned with interest and following the repetition of *muy buena* 'very good' in the same interview, represents the first time she has commented on what she has repeated.

16) EB: *Um. Comí en un restaurante ayer. Creo que dos veces.* [laughs]
'Um. I ate in a a restaurant yesterday. I think twice. [laughs]'
JB: [laughs] *Dos veces* [softer].
'[laughs] Twice [softer].'
EB: *Sí.*
'Yes.'
JB: *¿Cuál es tu restaurante favorito?*
'What is your favorite restaurant?'
[. . .]
EB: *La comida vietnamita es muy buena.*
'Vietnamese food is very good.'
JB: *¿Muy buena? Hmm. ¿Tienes un plato favorito?*
'Very good? Hmm. Do you have a favorite dish?'

Finally, in her fifth and final peer interview, JB asks her first self-generated follow-up question. Like the comment in (16), this question is brief, but it reveals significant development on JB's part. The change in linguistic behavior across her five interviews suggests that JB has begun to feel more comfortable with repetition and in turn has begun to appropriate its communicative value.

17) DE: *Me gusta la película . . . "Liar, Liar".*
'I like the movie . . . "Liar, Liar".'
JB: *¿"Liar, Liar"?* [laughs]
DE: *Sí.*
'Yes.'
JB: *¿Con Jim Carey?*
'With Jim Carey?'
DE: *Sí.*
'Yes.'

Participating in the peer interviews created a space where JB could develop her linguistic, communicative and cognitive skills. One learner in particular, JT, needed a tremendous amount of peer support just to realize the interview

activity. He had great difficulty in speaking, and his utterances were often full of long, unfilled pauses that appeared to make his interlocutors feel uncomfortable. Many students found it difficult to repeat any part of what he had said, and several simply waited until he had finished speaking before offering a half-hearted *¿sí*? and continuing on to other questions. For a few, though, the situation brought forth different types of interaction in which they developed their own means of assistance for him. For example, by engaging in a sort of creative repetition, one sympathetic learner assisted JT by filling in the blanks for him. In the next excerpt (18), EE not only repeats part of JT's answers in the peer interview, she expands on it in a way that she must feel is logical:

18) EE: *¿Ves la television con frecuencia?*
'Do you watch televisión often?'
JT: *Ah, ... , cuando voy a la escuela.*
'Ah . . . . . , when I go to school.'
EE: *Uh, no, uh, no ves televisión con frecuencia pero porque tienes, uh, ¿mucho, mucha trabaja para escuela? ¿Para tus clases y trabajando?*
'Uh, no, uh, you don't watch television often but because you have, uh, much, much [incorrect form] work [incorrect form] for school? For your classes and working?'
JT: *Clases y trabaj- trabajo.*
'Classes and wor-work.'
EE: *Sí, mucho, mucha trabaja.*
'Yes, much, much [incorrect form] work [incorrect form].'

By filling in the blanks for JT, EE creates the appearance that JT has said more than he has and that the interview is proceeding as it should. She even recasts his subsequent comment in an apparent, although misguided, attempt to correct him. We can only speculate as to EE's orientation in this activity. She seems genuinely sympathetic but may also be trying to keep the discourse moving along. What is clear is that she does not shut him out. Rather, EE draws him in with her assistance by asking questions, and he in turn responds. Such interaction, although limited on JT's part, we believe, is critical to his L2 development.

The peer interviews as well as the dramatizations were cognitively challenging, and learners of all proficiency levels relied on the assistance of their classmates to complete the activities in which they were engaged. In the following excerpt (19), taken from a dramatization, KG uses repetition, not to prod her own memory but rather to prod that of her partner.

19) ME: *Este museo es para niños. No somos niños. Deja de tratar de hacernos de ir a la cordera de toros.*
'This museum is for children. We are not children. Stop trying to keep us from going [incorrect phrase] to the bullfight! [mispronounced]'

KG: *¿Sí . . . ?*
'Yes . . . ?'
ME: [grabs newspaper from her]
KG: *La corrida de toros, ¿eh?*
'The bullfight, huh?'
ME: *No tenemos corridas de toros en los Estados Unidos. Esta es la última noche.*
'We don't have bullfights in the United States. This is the last night.'

When ME stops short in the middle of his lines in the above excerpt, KG urges him on with a leading *Sí*. When that fails to engage him, she repeats the topic of their conversation, which also happens to be a prominent phrase in his last and next lines. Amazingly, KG is in sufficient control of herself and her activity that she is able to offer ME this cognitive support in the guise of communicative speech. As can be seen in the example, KG's assistance is helpful to ME, who is able to continue his discourse in a cohesive manner.

Conclusion

The focus of this study was to investigate whether or not students could be taught to use repetition as a cognitive tool in their second language in order to facilitate their interactions with other students. Assuming that repetition was a feature of their L1 linguistic repertoire that would sometimes surface in their L2 speech, we nonetheless tried to make the feature more salient and supported through practice. We found that learners did indeed use repetition in the peer interviews, the context in which most instruction and modeling had occurred. Students, for example, repeated each other's responses for clarification. This at times led to a self-guided resolution of the problem. Learners also used repetition to create cohesive, informed and involved discourse, and, in at least one case, to express empathy with the speaker. Repetition was employed strategically to help plan subsequent discourse, as learners repeated questions posed to them. Importantly, repeated utterances in the peer interviews appeared to become more private, as suggested by their abbreviated and sometimes subvocal nature, suggesting that the (re)learning of repetition as a cognitive tool was taking place. The next step for these learners is to appropriate the tool further, such that it remains available to them in situations of cognitive or communicative distress, becoming a tool of strategic competence.

To better determine the development of repetition as a tool, we chose to examine learners' performance in a context other than the one in which repetition had been modeled. Thus, by considering the students' continued activity of their Zones of Proximal Development, we were able to explore any cognitive restructuring that might have been taking place. The data revealed that repetition permeated the dramatizations following instruction.

First, learners began to script repetition into their productions, evidence of their conscious awareness of its cognitive value. The strongest support that students were (re)learning repetition as a tool in their second language comes from the increase in unscripted repetitions that occurred across the different realizations of the dramatizations. That the unscripted repetitions were principally communicative suggests that it was the primary, social function of the repetition that students were (re)internalizing first.

Importantly, repetition allowed weaker students to nonetheless participate in joint activities. Their engagement, however limited, is crucial to their ultimate appropriation of language through the internalization of linguistically constructed social interaction. Finally, we found that learners were able to use repetition as a cognitive device to help other learners, either because of limited competencies or a momentary deficiency. In this way, repetition becomes a tool for helping learners of all proficiency levels to become involved and cooperative learners, allowing them to shape the activity of the ZPD both individually and collectively.

The findings from this study provide evidence that students can (re)learn to use language as a cognitive tool for their own language use and development. As instructors, we strive to provide students with the means and resources necessary to create the transformative activity of the Zone of Proximal Development so that guided activity may lead to learning. Repetition provides students with a practical and profitable tool for engaging in second language conversation. When used in conjunction with other tools and resources, it proved to be useful to the students in this project. Language learners of higher proficiency are exposed to increasingly more unfamiliar contexts and tasks, and it remains to be seen whether or not the learners in this study would have later been able to use repetition without the same means (familiar vocabulary, known interlocuters) and in different contexts (unscripted as opposed to semi-scripted activity). The long-term linguistic and meaning-making activity on the part of the learners merits further study.

References

Appel, G. and J.P. Lantolf (1994) Speaking as mediation: a study of L1 and L2 text recall tasks. *The Modern Language Journal* 78: 437–52.

Bollinger, D. (1961) Syntactic blends and other matters. *Language* 37: 366–81.

DiCamilla, F. and M. Anton (1997) Repetition in the collaborative discourse of L2 learners: a Vygotskian perspective. *Canadian Modern Language Review* 53: 609–32.

— and J.P. Lantolf (1994) The linguistics analysis of private writing. *Language Sciences* 16: 347–69.

Donato, R. and D. McCormick (1994) A sociocultural perspective on language learning strategies: the role of mediation. *Modern Language Journal* 78: 458–64.

Frawley, W. (1992) The cross-cultural study of private speech. Paper presented at the First Conference for Socio-cultural Research, Symposium of Private Speech and Self-regulation, Madrid.

— and J.P. Lantolf. (1985) Second language discourse: a Vygotskyan perspective. *Applied Linguistics* 6: 19–44.
Gallimore, R. and R. Tharp (1990) Teaching mind in society. In Luis Moll, *Vygotsky and education*. Cambridge University Press. 175–205.
John-Steiner, V. (1992) Private speech among adults. In R.M. Diaz and L.E. Berk, *Private speech: from social interaction to self-regulation*. Hillsdale, NJ: Lawrence Erlbaum. 285–96.
Lantolf, J.P., F. DiCamilla and M. Ahmed (1996) The cognitive function of linguistic performance: tense/aspect use by L1 and L2 speakers. *Language Sciences* 19: 153–65.
McCafferty, S. (1992) The use of private speech by adult second language learners: a cross-cultural study. *The Modern Language Journal* 76: 179–89.
— (2002) Gesture and creating zones of proximal development for second language learning. *The Modern Language Journal* 86: 192–203.
Murphey, T. (2001) Exploring conversational shadowing. *Language Teaching Research* 5: 128–55.
Roebuck, R. (1998) *Reading and recall in L1 and L2: sociocultural approach*. Stamford: Ablex Publishing Co.
Soskin, W. and V. John (1963) The study of spontaneous talk. In G. Barker, *The stream of behavior: explorations of its structure and content*. New York: MIT Press. 228–81.
Tannen, D. (1989) *Talking voices: repetition, dialogue and imagery in conversational discourse*. Cambridge University Press.
Vandergrift, L. (1997) The Cinderella of communication strategies: reception strategies in interactive listening. *Modern Language Journal* 81: 494–505.
Vygotsky, L.S. (1978) *Mind in society: the development of higher mental functions*. Cambridge, MA: Harvard University Press.
— (1981a) The development of higher forms of attention in childhood. In J.V. Wertsch (ed. and trans.), *The concept of activity in Soviet psychology*. Armonk, NY: ME Sharpe, Inc. 189–240.
— (1981b) The genesis of higher mental functions. In J.V. Wertsch (ed. and trans.) *The concept of activity in Soviet psychology*. Armonk, NY: ME Sharpe, Inc. 144–88.
— (1986) *Thought and language* (A. Kozulin, trans.). Cambridge, MA: MIT Press.
Wells, G. (1999) *Dialogic inquiry: toward a sociocultural practice and theory of education*. Cambridge University Press.
Wertsch, J.V. (1979) The regulation of human interaction and the given-new organization of private speech. In G. Ziven, *The development of self-regulation through private speech*. New York: Wiley. 79–98.
— (1985) *Vygotsky and the social formation of mind*. Cambridge, MA: Harvard University Press.

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