Teaching and Learning as a Linguistic Process: Social Interactionist/ Sociocultural Perspectives on the Study of Uptake

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Abstract

In this article, a broader conceptualization of uptake from both social interactionist and Vygotskyan sociocultural perspectives has been presented. The main implications of social interactionist perspective were discussed, and how viewing teaching and learning as a linguistic process can help us have a broader perspective about classroom discourse was examined. In the second part of the paper, the previous literature on uptake was reviewed and also how mainstream SLA treats and examines language and language learning is taken into consideration. In the last part of the article, "revoicing", as a possible alternative for uptake, was presented and its significance in second language classrooms was argued.

Keywords: classroom discourse, uptake, socicultural theory of mind.

Introduction

In his seminal book *Learning Lessons* (1979:6), Mehan pointed out the significance of the study of interaction in the classroom context by stating "because educational facts are constituted in interaction, we need to study interaction in educational contexts... in order to understand the nature of schooling". After more than 25 years, as Wells (2005:1) states, today many people who study classroom learning and teaching agree that "the nature of the interaction that takes place in class is one of the most significant influences on the quality of student learning". Social interactionist perspective examines teaching and learning as a linguistic process. This enables researchers to understand better the discursive conditions of classrooms. As Green (1983:195) argues, a linguistic approach provides a way of (1) systemically exploring evolving instructional activities, (2) capturing recurrent patterns of classroom life, (3) identifying linguistic factors that support and or constraint performance, learning and assessment, and (4) generating and testing hypotheses both within and across

contexts, setting and cases". This approach answers a variety of questions that have not been previously explored in experimental and psychological approaches, and provides new information about previously explored processes.

The linguistic approach to social interaction started when the dissatisfaction with the prevailing methodological tools and theoretical paradigms within educational studies led "the researchers to focus on moment-to-moment interaction in classrooms in order to better understand the constitutive processes that produce students' school success or difficulty" (Mehan, 1998:247). Evertson and Green (1986) state that the publication of *Functions of Language in the Classroom* (Cazden, John, & Hymes, 1972) marks the beginnings of the linguistic approach to the study of the teaching-learning processes. Mehan (1998:246) points out the fact that the study of social interaction in educational settings has its intellectual roots in anthropology, sociology and linguistics.

As Mehan (1998:254) succinctly summarized, studies of social interaction in educational settings have made two significant theoretical moves. On the one hand, they removed social structures from a disembodied external world and relocated them in social interaction. On the other hand, they took cognitive structures out of the mind and relocated them in the interaction. As we discuss in the next section, some constructs, e.g. uptake, and repetition (Duff, 2000), have been studied in the field of second language acquisition without acknowledging their social and cultural aspects. In a similar vein, Swain (2000:110) emphasizes the significance of discourse in the classroom. She argues that "the role of dialogue (social interaction) in mediating the learning of such substantive areas as mathematics, science, and history is generally accepted". However, in the field of second or foreign language learning the mediating role of dialogue appears to be less well understood. She hypothesizes that this might be because of "the notion of language mediating language is more difficult to conceptualize and it is more difficult to be certain of what one is observing empirically".

Sociocultural Theory

Vygotsky's theory of learning differs from his contemporaries due to its emphasis on social, cultural, and contextual influences on cognitive development. The basis of Vygotsky's sociocultural theory is that cognitive development is socially situated and that learning is viewed as a process of internalizing social and cultural values and patterns in a given society. Wertsch (1990) describes sociocultural theory as a developmental, sociocultural approach to mind. Most of Vygotky's works are to understand the human cognition and development. However, as Bruner (1962) states "Vygotsky's conception of development is at the same time a theory of education" (p.V; cf. Wells, 2000).

Primacy of Social Learning

From a Vygotskyan perspective, learning, similar to other higher mental functions, is essentially a social process. As Vygotsky states, the intellectual abilities that make us distinctively human "are a copy from social interaction; all higher mental functions are internalized social relationships" (Vygotsky, 1981:164). In other words, as Stensenko &

Arievitch (1997) argue, "psychological processes emerge first in collective behavior in cooperation with other people, and only subsequently become internalized as the individual's own possessions' (p.161 as cited in Swain & Lapkin, 2000) According to Vygotsky (1978), by participating in collaborative activities with other individuals children expand their thinking processes. An application of Vygotsky's ideas about the origins of higher mental function is that "the classroom is seen as a collaborative community" where students participate in joint activities (Wells, 1999). Joint activity, Wells (1999:61) argues, "requires us to think of the participants, not simply as a collection of individuals, but also as a community that works towards shared goals, the achievement of which depends upon collaboration". In Sociocultural approach, origins of thinking should be traced in collaborative dialogues. Collaborative dialogues enable children to internalize and appropriate things that they could at first only do by with the help of the supportive adults or more knowledgeable peers (Wertsch, 1991). Wells (2000:57) argues that "it is by attempting to make sense with and for others, that we make sense for ourselves". This kind of talk, Wells continues, "involves both the internalization of the meanings created in the intermental forum of discussion and the externalization of those intramental meanings that are constructed in response" (p. 57). To sum up with a few words, as Vygotsky stated, "the individual develops into what he/she is through what he/she produces for others" (1981:162).

Thus far, the basic assumptions of social interactionist and sociocultural approaches to classroom discourse have been summarized. One major implication that emerges from this review is the understanding of classroom discourse as an emergent and dynamic phenomenon (Brooks, 1990; Cazden 2001; Green 1983), which has been shared by both of these perspectives. Also, both of the perspectives discussed acknowledge both cognitive and social aspects of the classroom discourse. In the next part, I will discuss different uses of uptake in first and second language learning literature and argue for a broader understanding of uptake in language classrooms.

Different Meanings of Uptake

Uptake as what is assumed to be learned

Allwright (1984) employs the term uptake to refer to the language items that learners themselves claim to have learned from a particular lesson. He suggests that such self-reported data can provide a means of investigating the relationship between classroom pedagogy and language learning. Characteristic of this approach is the use of a post lesson 'uptake recall chart' on which learners write down all the points that they remember from the lesson. Using Allwright's application of the term uptake, Slimani (1989) suggests that uptake is most valuable with vocabulary learning because learners find it easiest to report the new lexical items that they have learned. Ellis' study (1995) reveals that measures of uptake correlates rather weakly with scores on a translation posttest. Learners in his study could remember only some of the items that they have actually learned based on the translation post-test.

Uptake as what is observed to be picked up

Lyster and Ranta (1997) have introduced the notion of uptake as what is observed to be picked up drawing upon the previous studies on speech act theory (Austin, 1962:117; see also Levinson, 1983; Mey, 1993). Uptake is situated in a focus-on-form (FoF) framework as a part of an error treatment sequence. According to Lyster and Ranta (1997:49), uptake refers to "a student's utterance that immediately follows the teacher's feedback and that constitutes a reaction in some way to the teacher's intention to draw to some aspect of the student's initial utterance. Uptake, according to Lyster (1998) and Lyster and Ranta (1997), follows the sequence of a learner error that leads to teacher feedback, which in turn results in uptake of teacher feedback by the learner. Following example illustrates the sequence:

S1	Yes, I have to to find the answer on on the book also?	learner error- grammatical
T	In the book, yes. Both in the book.	teacher correction- recast
S1	In the book.	learner uptake- repair- repetition

(Panova & Lyster, 2002:586)

Lyster and Ranta (1997) distinguish two types of uptake; (1) uptake that results in repair of the error on which the feedback focused, and (2) uptake that results in an utterance that still needs repair. Panova and Lyster (2002) state that uptake does not occur when either (a) feedback is followed by teacher-initiated topic continuation, thus denying the students an opportunity to respond to feedback; or (b) feedback is followed by student-initiated topic continuation, that is, feedback fails to be verbally acknowledged and perhaps noticed, if noticing is measured by the presence of student response, as in the following examples.

S1	I don't understand wine [win]	phonological error
T	I'm sorry?	clarification request
S1	Wine [win]	needs-repair/same error
S2	Wine [wain]	peer repair
T	Wine? Red wine, white wine	topic continuation

(Panova & Lyster; 2002:585)

Example of a topic continuation by the student:

S1	Yes, I have a picture with the ladies. One have a yellow coat.	learner error- grammatical
T	One has a yellow coat.	teacher feedback- recast
S1	And the other a green	topic continuation

(Revezs, 2002:10)

Ellis, Basturkmen and Loewen (2001) offer a broader definition of uptake. According to them, uptake can occur even when the previous move does not involve corrective feedback. For example, they argue, there are instances in communicative lessons where learners themselves preempt attention to a linguistic feature (e.g., by asking a question), thus eliciting not a teacher feedback move but a teacher response move. In such student initiated FoF, the students still have the opportunity to react, for example, by simply acknowledging the previous move or by attempting to use the feature in focus on their own speech. The following example illustrates an uptake as a part of preemptive FoF.

S1	Excuse me, teacher, what's spoil means?	Pre-emptive FoF
T	Spoil means=	clarification request
S1	=spoil	
T	If you are my child	teacher explanation
S1	Mhm	
Т	and you keep saying give me, give me some sweets, give me some money, give me a football, let me watch TV, and I say yes all the time, yes, I spoil you. I give you too much because you always get what you want.	teacher explanation
S1	ah, ah	
Т	So	

S1	they spoil them, mm, they always get student uptake
	whatever.

(Ellis et al. 2001: 300)

Smith (2005) expands the definition of uptake by removing the restriction of uptake to moves immediately following a feedback move. He argues that sometimes learners may pick up the feedback in other moves. He calls uptake that does not immediately follow the feedback 'delayed uptake'. Considering the nature of his study, he investigates uptake in a computer mediated communication (CMC) environment, delayed uptake appears to be a useful construct. As in the following example, uptake occurs some fifteen turns later in the synchronous online communication.

S1	I have a banjo	
S2	what's is it?	clarification request
S1	i(t) is a kind of guitar	explanation
S2	really?	
S1	traditional guitar	
S2	yesdo you like it?	
	. (14 lines of text)	
S2	so i mean that i wanna exchange the banjo to bongos	student uptake

(Smith, 2005: 47)

Contributions of uptake to SLA

Some researchers (Loewen 2004; Smith, 2005) argue that uptake may contribute to second language acquisition by (1) facilitating noticing and (2) pushing learners to produce more accurate linguistic forms.

Another important aspect of uptake relates to the role of output in L2 learning. According to Smith (2005) uptake constitutes one type of "pushed output" (Swain, 1985, 1995, 2000). Smith

argues that learners need to focus on the syntactic features of the language in use to produce 'pushed output'. This allows learners to "reanalyze and modify their non-target output as they test new hypotheses about the target language" (Lyster, 1998:191). In their experimental study, Nobuyoshi and Ellis (1993) found that learners who produced pushed output constructed more accurate target structures. Similarly, it might be argued that uptake in focus on form L2 classes may offer this same opportunity for learners to produce more accurate output.

However, one should be cautious about drawing a direct relationship between uptake and second language acquisition. As Smith (2005:39) argues, establishing a clear link between the two is difficult because "uptake neither guarantees that a feature will be acquired nor is it always present when a feature is acquired". Lightbown (1998:193) address this issue by highlighting the point that "the fact that a learner does not make an immediate behavioral change cannot be taken as evidence that there is no effect of the focus on form." She further argues that a corrected response from the learner cannot always be evidence for the fact that the more correct or more target-like form has become a part of the learner's interlanguage. Nonetheless, she argues, an uptake by the learner gives some reason to assume that the disparity between learner utterance and target utterance has been noticed which is usually a sign of progress toward acquisition.

Even though, on a theoretical basis, it is generally assumed that uptake can contribute positively to SLA, Smith (2005) presents data that suggest that uptake might have no effect on whether target items were acquired or not. In his study, Smith explored whether a negotiation routine's complexity has any affect on learner uptake and if this uptake affects lexical acquisition in a synchronous computer-mediated environment. Results of his study suggest that the complexity of negotiation routines does not influence learner uptake and that there is no relationship between the degree of uptake (none, unsuccessful, and successful) and the acquisition of target lexical items in a task-based computer-mediated communication context. Based on his data, Smith recommends that classroom teachers adjust their expectations about the connection between learner uptake and acquisition.

Psycholinguistic perspective on language and learning

All of the studies on learner uptake that have been reviewed so far have adopted a psycholinguistic perspective to second language acquisition. From a psycholinguistic perspective language is assumed to be discrete set of linguistic systems external to the learner, and learning is viewed as the process of assimilating the structural components of these systems into preexisting mental systems (Hall & Verplaetse, 2000). Duff (2000) argues that cognitive (psycholinguistic) accounts pertain primarily to individual language learners, and their acquisition and production of language. In other words, they highlight learners' interactions with language, rather than their interactions with other learners. Research from a psycholinguistic perspective examines L2 or FL constructs in codeable, structural discursive terms justifying the study of learner utterances in isolation from both their linguistic and situational context (Ellis, 1987). As we have seen, only the linguistic aspect of uptake has been studied in the SLA research. Based on the previous studies, however, it would not be unfair to say that, social and affective features of uptake have been neglected.

Teacher uptake

Another definition of uptake is the incorporation of student responses by the teacher to validate students' ideas (Collins, 1982). To accomplish this, the teacher includes learners' responses in his/her new questions or statements and builds the discourse based on the contributions of students. This kind of process is viewed as a high level evaluation of student responses because it validates student's ideas and puts them into the play of discussion (Nystrand, 1997). This understanding of uptake mainly has a social function in the classroom. An example of teacher uptake:

		(Nystrand 1997:39
		response into the next question
T	How come the plan is blinding Cyclops?	teacher's incorporation of student's
S1	Blind them	student response
T	What do they have to do to Polyphemus?	teacher's question

(Nystrand, 1997:39)

Nystrand (1997) states that the teacher's use of revoicing (uptake) in classrooms places students on a more equal footing by allowing them the opportunity to evaluate other interpretations or extensions of their utterances. By revoicing a student's utterance the teacher assigns authorship and authority to the student in a manner that encourages the co-construction of ideas and the formation of identities congruent with the culture of collective argumentation. Revoicing of student utterances, therefore, plays social function in many situations. As Wertsch & Toma argue, rather than concentrating on the transmission of information teachers should "take an active stance toward what their students say by questioning and extending their utterances, by *incorporating* them into their own utterances" (1990:13,emphasis added).

Revoicing

O'Connor & Michaels (1993, 1996) discuss a quite similar classroom phenomenon under the concept of revoicing. By revoicing O'Connor & Michaels (1996:71) refer to "a particular type of reuttering (oral or written) of a student's contribution-by another participant in the discussion". The participant who revoices someone else's utterance might be the teacher or it could be any of the students. Revoicing is seen as a social practice (Renshaw & Brown, 1998) and as a means to "encompass [the teacher's goals] for the social organization of the classroom" (O'Connor & Michaels, 1996:86). So, similar to Nystrand's concept of 'uptake' it

serves a social function. However, it also has a linguistic aspect because revoicing might be "uttered more succinctly, loudly, completely, or in a different register, or social language" (O'Connor & Michaels, 1996:71), and some linguistic features, i.e., reformulation, reported speech and so, might emerge as salient characteristics of classroom discourse during revoicing. Therefore, this metaphor helps us have a better understanding of this classroom phenomenon, and can be used as a cover term for the general concept of re-stating someone else utterance to serve both social and linguistic purposes. O'Connor and Michaels (1996) identify two main uses of revoicing. The first function, which they call revoicing formulations, might serve to clarify the content of relevance of a particular utterance, to advance the teacher's discussion agenda, and to rebroadcast the student's utterance to reach a wider audience than the student reached. In a nut shell, this is the academic function of revoicing. In one single revoicing incident, one or more of these purposes might be served. However, most of the time, the teacher is the default participant who is in charge in a revoicing incident, other students may also take over this role from time to time as well.

The second major function of revoicing is to create alignments and oppositions within an argument. O'Connor and Michaels (1996) argue that by reformulating the student utterances, the teacher may position the student with respect to that content, conferring on or attributing that student to a position with regard to the topic under discussion, a position the student may only dimly be aware of. As it is mentioned before, O'Connor and Michaels (1996) list three important linguistic features that usually accompany the revoicing move. These are the reformulation component, the use of indirect speech, and the use of so and other markers of warranted inference. A focus on these three linguistic features might help us achieve our goals as language teachers. When revoiced, either by the teacher or the students, some linguistic structures become more salient. This, in turn, may create situations for the appropriation of linguistic structures because direct attention to the linguistic component of discussion is facilitated with the help of revoicing. This is in line with Donato & Brooks' (2004:191) statement that "the idea that students need to notice salient forms and functions in the input, attend to them and compare them to their language production, and incorporate them in subsequent utterances is fundamental to progress in second language acquisition".

The linguistic function of revoicing might be confused with recasts in second language acquisition research. Recast is defined as "the teacher's correct restatement of a learner's incorrectly formed utterance" (Nicholas, Lightbown & Spada, 2001:720). This definition includes two implications about recasts that differentiate it from revoicing. First, the learner has to make a mistake for recast to occur. Second, it is the teacher who corrects the learner's mistake by restating it in the proper form. For revoicing to occur, by contrast, the learner does not need to make a mistake. Moreover, even though the default participant who revoices the learners' utterances is the teacher, learners' revoicing can serve linguistic purposes as well.

Discussion and Conclusions

As we have mentioned while discussing uptake from a mainstream SLA perspective, reducing uptake into a codeable, decontextualized construct and exploring only linguistic side of uptake do not give the whole picture of this phenomenon and what is going on in the

second or foreign language classrooms. Instead, from a sociocultural theory/ social interactionist framework a broader research perspective which assumes that cognitive and linguistic development is socially situated, and that learning is a process of internalizing social and cultural values and patterns in a given society could be adopted. In other words, a more social and contextualized analysis of uptake should be conducted., and cognitive, linguistic and social aspects of uptake can be studied. Building more on the subject, as Cazden (2001) argues, cognitive and social features of the discourse are inextricable. Therefore, as it is suggested, all aspects of classroom discourse (cognitive, academic, linguistic, social and affective) should be taken into consideration while studying classroom discourse. It should be also noted that the same utterance might serve different functions for different interlocutors in a discussion. As in Ohta's study (2000), someone else, other than the addressee, might be picking up what the teacher is saying.

Revoicing, which is defined as a particular type of reuttering (oral or written) of a student's contribution-by another participant in the discussion might offer a broader perspective about the value and significance of uptake on two levels. First, we can examine how revoicing has been studied previously, and how researchers analyzed the academic and social aspects of revoicing in the classroom discourse. In other words, the study of revoicing might serve as a model for the study of uptake. Second, and more importantly, revoicing might be modified and adopted into the second language learning research. By doing so, we might extend the conceptualization of uptake and add different components to it. For example, in a second or foreign language learning environment we would examine the instances of uptake by both the teacher and learners instead of just focusing on the learner uptake as it has been done in previous research. We might also situate the occurrences of uptake into a social context and investigate what kind of social/ affective functions it serves besides its academic and linguistic uses.

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