Available online at www.sciencedirect.com

SciVerse ScienceDirect

Journal of Pragmatics 47 (2013) 75–92

journal of PRAGMATICS

www.elsevier.com/locate/pragma

Teacher self-talk: Interactional resource for managing instruction and eliciting empathy

Joan Kelly Hall *, Tetyana Smotrova

Department of Applied Linguistics, The Pennsylvania State University, USA

Received 5 July 2012; received in revised form 11 November 2012; accepted 28 November 2012

Abstract

This study reveals the significant role of teacher self-talk in managing classroom interaction during unplanned moments of instruction and in building affective teacher–student relationships. We examined 24 hours of video-recordings collected from nine university level courses: three upper level ESL courses; one undergraduate linguistics course; a split-level undergraduate/graduate course and four graduate courses, all broadly related to the topic of applied linguistics. Drawing on conversation analytic methods, we present a detailed analysis of five examples of teacher self-talk. Findings suggest that the practice of teacher self-talk, accomplished via specific prosodic cues, eye gaze direction, and body positioning, plays a significant role in managing the moments when aspects of the pedagogical task need to be monitored or adjusted. By making the students aware of the teacher's predicament, self-talk helps to maintain the instructional space while trouble is being resolved by keeping students' focus on the instructional task. Moreover, teacher self-talk acts as an affordance for eliciting self-initiated empathetic responses from students. The findings confirm the importance of examining how unplanned classroom moments are accomplished in talk-in-interaction, and reveal how practices like self-talk, which may appear on the surface be slight or unimportant, in fact make significant contributions to teaching.
© 2012 Elsevier B.V. All rights reserved.

Keywords: Classroom interaction; Self-talk; Empathy; Participation framework; Conversation analysis

1. Introduction

Teaching is a complex and challenging pursuit. In their interactions with students, teachers must manage multiple activities and goals simultaneously. At the very least, they must coordinate their actions in ways that maintain order as they instruct, ensure that students are attending to the instructional task, and encourage student participation. Balancing these multiple tasks at the same time can be a challenge even when classroom interaction proceeds smoothly. However, teachers and researchers know by experience that instruction rarely unfolds as a sequence of pre-planned steps. There are always moments that constitute ''departure from classroom normativity'' and yet are ''interactionally complex'' and consequential to the advancement of the instructional agenda (Hellermann and Pekarek Doehler, 2010:42).

By and large, however, the investigatory focus of much research on classroom discourse has focused on official forms of instructional talk disregarding the equally important ''managerial and procedural'' (Cazden, 1988:54) aspects of classroom discourse. A well-researched pattern is the IRF[1] sequence, found to be the most prevalent form of

* Corresponding author at: Department of Applied Linguistics, The Pennsylvania State University, 234 Sparks Building, University Park, PA 16803, USA. Tel.: +1 814 865 4982; fax: +1 814 863 7986.

E-mail address: Jkh11@psu.edu (J.K. Hall).

[1] The IRF is a sequence of three actions: an instructor question or directive; a student response; and a teacher-produced comment on the response or another question or directive.

0378-2166/$ – see front matter © 2012 Elsevier B.V. All rights reserved.
http://dx.doi.org/10.1016/j.pragma.2012.11.017

instructional discourse in all kinds of classrooms (e.g., Barnes, 1992; Cazden, 1988; Hall, 2007; Lee, 2007; Mehan, 1979; Nassaji and Wells, 2000). While there has been a surge of interest in recent years in examining less typical forms of instructional talk constituting large group discussions and small group work (e.g., Markee, 2004; Paoletti and Fele, 2004; Hellermann, 2008; Hellermann and Pekarek Doehler, 2010; Luk, 2004), there remains ''a dearth of detailed description of communication in its less orthodox forms'' in the classroom setting (Edwards and Westgate, 1994:43).

One of the few studies that consider less typical forms of instructional talk is Icbay (2011). Focusing on transitions between classroom activities, the study shows that at such points of ''contextual changes'' (p. 237), without teacher guidance, the students disengaged from the collective activity and, instead, engaged in conversations among themselves, changing their body positionings and gaze orientations as they did. Conversely, when teachers used 'tying signals' (Icbay, 2011:248), i.e. verbal and nonverbal cues that made public the move from one activity to another, students remained engaged in the instructional framework. Our paper also considers atypical moments in classroom interaction, ones where instruction is suspended for teachers to handle an emergent technology related issue. Specifically, we show the significant role that the side-sequence of teacher self-talk plays in managing such moments and keeping students' focus on the instructional task.

In addition to managing instructional aspects of classroom interaction, teachers must attend to the relational aspects of their practices and actions, since, as the research on effective teaching suggests, maintaining empathetic relationships with students enhances student engagement with learning (Cornelius-White, 2007; Nordstrom and Korpelainen, 2012; Roorda et al., 2011). Despite the acknowledged importance of rapport building to student learning, there have been only a few empirical studies looking at how such relationships are accomplished in teacher–student interaction. Nguyen (2007), for example, shows how an ESL teacher's playful use of a wide range of verbal and nonverbal cues during instruction heightened students' enjoyment in their lessons. Similarly, Sullivan (2000) demonstrates how an EFL teacher's use of repartee during vocabulary tasks increased his adult students' engagement in learning and their feelings of mutual support. Encouraging students to share their personal experiences during instruction and responding empathetically to the stories as well as engaging in small talk with students between instructional activities have also been shown to be effective in establishing rapport (e.g., Boxer and Cortes-Conde, 2000; Luk, 2004). Our study adds to this small, but important body of research on the interactional establishment of positive affective teacher–student relationships by revealing another important role of teacher self-talk, that of affordance for eliciting empathetic responses from students.

We discovered the phenomenon of teacher self-talk while viewing video recordings of several university level classrooms collected as part of a larger research project examining practices and actions accomplished in classroom interaction (Penn State CA Research Group, 2010). During the viewings, we noticed that there were times during instruction when the prosodic cues of the instructor's talk changed in that, while still audible, the talk was spoken more softly and with a different rhythm than surrounding talk. Accompanying the talk were changes in the teacher's eye gaze, body positioning and nonverbal gestures. We also observed that these moments occurred when the instructor was confronted with troubles in managing the technological medium being used to facilitate the instructional task.

Our analyses of these moments reveal that the practice of teacher self-talk accomplishes three actions. First, it signals a temporary change in footing, from the ongoing instructional sequence to a side-sequence in which troubles related to the instructional task are dealt with. At the same time, it maintains the instructional space and the participation framework of 'doing instructing' with the students. This is important in that it reveals in micro-analytic details the interactional complexities of maintaining multiple floors while teaching. Finally, and perhaps most significantly, teacher self-talk acts as an affordance for eliciting self-initiated, affiliating or empathetic[2] responses from students. Such opportunities are significant in that they change the dynamics of traditional teacher–student interaction, equalizing the distribution of power and authority for deciding who can speak and when and thus binding the instructors to their co-present students in positive, pro-social ways. Before we provide details on the study and our findings, we briefly review the literature on self-talk.

1.1. Self-talk

The term 'self-talk' has been used in different disciplines to describe aspects of intrapersonal communication where the self is the only target interlocutor. The term gained particular prominence in psychotherapy research such as rational-emotive therapy (e.g., Ellis, 1994, 2004) and cognitive therapy (e.g., Beck, 1995; Butler and Beck, 1995). In these studies self-talk is viewed as a powerful tool for transforming unproductive irrational thinking into desirable rational beliefs.

[2] Note that the term 'empathic' is also used in the literature. It has a longer history of use; however, we have chosen to use empathetic because it is more common.

Properly organized, its use is thought to help individuals overcome depression and anxiety, and, more generally, to reprogram their thoughts in positive ways.

Self-talk has also been the focus of some communication studies (e.g., Vocate, 1994; Wood, 1994). Building upon Mead's (1934, 1982) and Vygotsky's (1978, 1981, 1986) theoretical frameworks, these studies view self-talk as a medium that allows the speaker to step outside the self, cast a more objective, critical look at it, and reconsider one's situation in light of the distanced view. This enhanced self-awareness, in turn, is posited to act as a source of self-regulation.

Self-talk has also been a concern of Vygotskian-based research in the fields of child development (e.g. Diaz and Berk, 1992; Nelson, 1996; Winsler et al., 1997, 2003), and second language (L2) acquisition (e.g., McCafferty, 1992, 1998; Ohta, 2000; Lantolf, 2003; Lantolf and Yañez-Prieto, 2003). Referred to as private speech or self-directed speech in this strand of research, self-talk is considered an important cognitive tool, used by individuals to mediate their actions and learning in new or demanding activities. Findings have shown that private speech is produced when individuals deal with the tasks of problem-solving, memorizing, or internalizing a difficult concept, with its use becoming more frequent as the cognitive demands of the task increase. In terms of content, findings reveal that private speech utterances typically consist of metacomments on one's own actions, and can include exclamations (e.g., 'oops'), hypothetical statements (e.g., 'If I put this here'), self-directives (e.g., 'don't put that one') self-evaluative statements (e.g., 'good') and markers expressing a change of cognitive state (e.g., 'oh'). Additionally, studies of private speech reveal that it is marked by prosodic changes and other verbal and non-verbal features. In Saville-Troike's (1988) and Lantolf and Yañez-Prieto's (2003) studies, for example, speakers' private speech was produced in a lower voice and at a different tempo than the surrounding talk, and as speakers produced it, they gazed away from their interlocutors. Researchers claim that these markers indicate that, while talk may be audible to others, it is directed to the self.

By and large, this body of research has treated self-talk as solely a cognitive resource. Only recently have the social dimensions of publicly produced self-directed talk been investigated. Two studies in particular stand out. Smith (2007) examined the private speech of primary-school children, all L2 speakers of English, who were playing board games that focused on different aspects of learning English. The analysis shows that in some cases, the private speech used by the learners had an interactional dimension in addition to its self-regulatory purpose in that it was oriented to by the co-present others as shared speech. In one case, for example, it was found that a student's softly uttered repetition of the beginning of a sentence made his interlocutors aware of the issue that the speaker was struggling with and was subsequently taken up as a shared problem to be solved. Smith concludes that ''all speech uttered aloud in the presence of another person has the potential to be perceived as an intermental act, even if one's intention is primarily private'' (Smith, 2007:354).

Thorne and Steinbach Kohler (2011) take up the interactional dimensions of learner private speech more directly. In their examinations of small groups of adolescent L2 learners of French, they uncovered at least two contributions of private speech to the joint construction of the activities. First, they found that the apparent self-directed talk served as sanction for realigning the participant framework in that the talk allowed the producers to relevantly disattend from the activity in order to work out a problem at their own pace. Parallel to this they found that the self-directed talk became a resource for maintaining intersubjectivity in that it made apparent the kind of trouble the producer was having with a particular linguistic item or task procedure. This, in turn, served to elicit co-participant problem-solving actions to resolve the difficulty. For example, when one of the speakers in one of the small groups produced a hesitant utterance in a low voice, her interlocutor oriented to this as a word search and provided help in the form of a candidate item. Based on these findings, the authors conclude the following:

> Self-directed talk does not simply emanate from and relate to an individual mind, but is observably tied up with, and has consequences for, the broader organization of social interaction. . . [it is] part of the resources that language learners use to establish and maintain intersubjectivity, display and ascribe current foci of attention, and to organize their individual and collective actions in mutually recognizable ways (p. 88).

1.1.1. The interactional dimensions of self-talk

The study we report here is also concerned with the interactional dimensions of apparent self-directed talk in classrooms but, unlike the studies by Smith (2007) and Thorne and Steinbach Kohler (2011), it focuses on *teacher* discourse not learner discourse. Moreover, the study is concerned with the interactional implications of self-talk rather than its self-regulatory functions and thus, draws heavily on the notion of self-talk put forward by Goffman (1978, 1981). In his 1978 article 'Response Cries', Goffman astutely observed that while there may be a perceived prohibition against talking to oneself in public, the practice is a common occurrence in daily life and is, in fact, a necessary part of the achievement of social life. Social situations in which self-talk occurs include those occasions when the speaker is faced with an unexpected predicament that is evident to others and thus momentarily raises questions about the speaker's competency. According to Goffman, the use of self-talk at these times makes apparent to the recipients who witness the speaker's dilemma that the speaker considers the trouble a fleeting moment and therefore not grounds to question his or her competency. As an example, imagine an individual attempting to pull open a door that requires pushing to open and

that others are witness to this error. At the moment the actor realizes his mistake, he may utter an apparent self-directed remark such as 'yes, of course, push' or 'that won't work.' Such an utterance serves not just to display the speaker's annoyance or embarrassment about the moment. It also makes clear to co-present others that the error was not due to incompetence, but rather, because the speaker was just not paying attention. In so doing, the individual displays to co-present others his/her control and poise. As Goffman notes:

> When we address a remark to ourselves in public, we are likely to be in sudden need of re-establishing ourselves in the eyes and ears of witnesses as honest, competent persons not to be trifled with; and an expression of chagrin, wonderment, anger etc. would seem to help in this – at least establishing what our expectations for ourselves are, even if in this case they can't be sustained (Goffman, 1978:798).

1.1.2. Self-talk and empathy

Goffman (1978) goes on to state that the jointly shared understanding achieved via self-talk is not just about establishing mutually shared knowledge about the event. It is, more importantly, about creating empathetic relationships between the speaker of the self-talk and the recipients. He states:

> To quickly appreciate another's circumstances (it seems) is to be able to place ourselves in them empathetically. Correspondingly, the best assurance another can have that we will understand him is to offer himself to us in a version with which we can identify (p. 798).

Much conversation and discourse analytic literature on the interactional accomplishment of empathy has examined its instantiation in institutional relationships outside of the classroom such as doctor–patient and therapist–client interactions (e.g., Ruusuvuori, 2007; Ruusuvuori and Lindfors, 2009; Wynn and Wynn, 2006). Findings show that, in these interactions, displays of empathy are accomplished by the more powerful or authoritative interlocutors in the relationships, such as doctors, therapists or social workers. Moreover, they typically come in response to troubles-telling stories or first-hand accounts of past experiences shared by the patients or clients of the professionals.

Such displays are usually accomplished via a range of responses, including more extended responses such as affiliating confirmations and acknowledgements (e.g., 'oh dear, that's a problem, isn't it', 'yes, you certainly were not yourself') and more minimal affiliating responses (e.g. 'I see', or 'oh, my') uttered with 'affect intensifiers' (Ochs and Schieffelin, 1989:14), i.e. prosodic and other linguistic features that convey emotional intensity. Through their responses at these moments the professionals depart from their ''affective neutral stance'' (Heritage, 2011:182) and signal to the story-tellers an empathetic comprehension of their emotional circumstances or states. As Heritage notes, such responses are especially effective in creating empathy as they ''advance closer to the lived reality of the feelings the reported events have (or may have) aroused in others'' (p. 176).

For the most part, studies have pointed to the significant role played by personal narratives and reports in eliciting empathetic responses. As far as we can tell, Goffman is the first, and perhaps, only person to suggest a role for self-talk in eliciting empathetic responses. As noted earlier, via self-talk, the speaker makes his/her dilemma public and thereby allows the recipients to understand and appreciate the speaker's emotional predicament. Such understanding, in turn, creates an empathetic relationship between the speaker and the recipients. What Goffman does not discuss, however, are the observable actions by which recipients display their appreciation of the speaker's dilemma in such a way as to create empathetic moments.

Our data show this. More specifically, we show that, in addition to maintaining student attention on the instructional task while the instructor attends to a technological glitch, instructor self-talk can engender a specific type of empathetic student response. In their responses to teacher self-talk, students indicate their awareness of the instructor's dilemma and at the same time help to resolve it.

1.1.3. Self-talk and participation

In addition to the role teacher self-talk plays in eliciting empathy, it is important to consider its role in shaping the forms of teacher and students' interactions since these forms of involvement within the ongoing activity can have important implications for students' learning. This is where Goffman's (1981) notions of footing and participation framework provide a useful theoretical ground.

Every time a teacher calls the class to attention, makes an announcement, or reprimands a student, s/he establishes a particular alignment with the students projecting a certain stance, i.e. footing. In the process of interaction, footing is constantly shifting. ''Expressed in the way we manage the production or reception of an utterance'' (Goffman, 1981:128), these shifts are often marked by changes in prosody and body orientation. Importantly, changes in footing bear all the complexity of real life interaction, where straightforward switching from one footing to another is a very rare phenomenon. Rather, in enacting an interactional relationship ''we are not so much terminating the prior alignment as holding it in

abeyance with the understanding that it will almost immediately be reengaged. . .In truth, in talk it seems routine that, while firmly standing on two feet, we jump up and down on another'' (Goffman, 1981:155).

Goffman (1981) argues further that every utterance of the speaker positions the interlocutors in a certain way, offering them a range of participation statuses. The network of these positions in relation to the speaker's utterance and to the ongoing activity forms a participation framework. Goffman also points out that participation in classroom interaction can be markedly different from the one in ordinary conversations. In a classroom where the teacher speaks from the podium and the students are at a physical distance from her/him, an interaction is one of the ''social arrangements in which a single speaking slot is organizationally central'' (Goffman, 1981:140) with the students' role being more of an audience rather than ''fellow conversationalists'' (Goffman, 1981:138). Goffman acknowledges, however, that participation roles are not prescriptive. Participants can exhibit different orientations to speaker's utterances, which rather than ascribing a particular status, ''opens up an array of structurally different possibilities'' (p. 137). In this sense, hearers are not passive recipients of speakers' actions but are ''active coparticipants'' (Goodwin and Goodwin, 2004:222) who use the multiple semiotic resources afforded by speakers' utterance to continuously reshape their actions. In other words, participation frameworks formed in interaction are not created only by speaker utterances but rather are the joint accomplishment of all the participants.

2. The study

2.1. The data

The data for this study of teacher self-talk are taken from 24 hours of video-recordings of classroom practices (Penn State CA Research Group, 2010). The recordings were collected during the 2010 spring semester from nine different university level courses, all offered at one large public university located in the northeastern region of the United States.[3] One course was a lower-level undergraduate course on the topic of linguistics. Another was a split-level undergraduate/graduate course and four were graduate courses, all broadly related to the topic of applied linguistics offered by one department. Three were upper level ESL courses offered through the intensive language program at the university.

One class period from each of nine courses was video-recorded. In every classroom but one, two cameras were placed in opposite ends of the room in order to capture both the teacher and student actions. The small size of one of the ESL classrooms allowed only for the placement of one camera, which was focused on the teacher. All teachers were experienced and all except one were native speakers of English; the student population of the non-ESL classes was international, containing both native and non-native speakers of English. Students in the ESL courses were all non-native speakers of English.

2.2. The analysis

After several viewings of the entire corpus of recordings, we identified eleven occasions when, during the instructional activity, the instructor seemingly spoke to him or herself, in that the talk was spoken more softly than the surrounding talk and with changed tempo. In most of the instances the instructor also directed his/her gaze away from the class. We noticed, too, that these moments occurred when technological aspects of the pedagogical task needed to be adjusted or in some way attended to in order for instruction to continue. Finally, we noticed that these moments appeared to constitute side-sequences. Jefferson (1972) defines side-sequences as ''occurrences one might feel are not ''part'' of [the ongoing activity] but which appear to be in some sense relevant'' (p. 294). Such moments do not constitute a termination of the ongoing sequence, but, rather, a temporary break, after which the ongoing sequence resumes. We chose these occasions for further analysis, which entailed detailed transcriptions of each using conversation analytic (CA) methods. CA is a methodical tool designed to describe the various linguistic and nonlinguistic resources by which participants produce their behaviors, recognize and respond to those of their interlocutors, and in other way coordinate the joint accomplishment of the unfolding sequence of actions.

2.3. The findings

In what follows, we present five examples of teacher self-talk. The first two reveal changes in the instructor's actions that instantiate a shift in footing from the ongoing activity of instructing to a side sequence involving dealing with a technology-related issue. They also reveal how self-talk serves to maintain student attention on the instructional task. The

[3] A call for participation in the research project went out to all faculty and graduate students of the department who were teaching that semester as well as to all instructors in the ESL program. Nine volunteered to have one class meeting video-recorded. Of these, four were faculty, two were graduate students and three were ESL teachers.

third example is a counter case in that it reveals how in the absence of self-talk during the momentary trouble, students disengage from the participation framework, temporarily reconfiguring the instructional space. The last two examples reveal specific features in teacher self-talk that engender empathetic student responses and the interactional details of these responses.

2.3.1. Self-talk and the maintenance of student attention

Excerpt 1 comes from a graduate seminar on the topic of grants and publications. The room's spatial arrangement is typical of a university classroom, where the teacher's desk and the podium that houses a computer and other technology are located in front of the classroom facing students' desks arranged in rows. The computer is hooked up to a projector that projects onto a large screen located in front of the class. Teachers often use this technology for different instructional purposes. They can upload files to the computer or use the university classroom management system to access readings, power point presentations, videos, and other media they want to use in the class. The podium provides a public, shared focus of attention to which teachers' and students' body positionings, gaze, gesture and talk are oriented constituting what Goffman (1963) refers to as an "ecological huddle" (p. 95).

The classroom's spatial arrangement also projects certain participatory roles, with the teacher as the "speech-maker" (Mchoul, 1978:184) spatially separated from the students and the students as the audience positioned in front of him. The fact that the teacher is located at a considerable distance from the students increases "reliance upon formal language patterns" (Kendon, 1973:41). In fact, the video shows that the students orient to the level of formality and their role as listeners by occupying the back rows of the room, leaving two front rows vacant. These spatially allocated positions translate into differential participation rights as well as stricter rules for the allocation of turns. To wit, the teacher is the only participant with the right to select the next speaker and maintain the instructional floor without being interrupted. We will see how these institutionalized rules for the allocation of turns play out in the ways students in this class participate in the interaction.

In this excerpt, the instructor is dealing with the topic of writing a literature review. He is discussing the structure of an article, a review of four books, which is projected on the screen and that the students were to read for this class. Excerpt 1 occurs right after the instructor finishes discussing the structure of the review of the first book. The side sequence of self-talk begins when the instructor runs into difficulty locating the relevant section of the reading he is to discuss next

Excerpt 1[4]

```
1     T:    [watch what he does here.=he do:es
2           [((gazes at PC screen through line 16))
3     Ss:   [((gaze at screen in front of them throughout the excerpt))
4           (3.0)
5     →     >°oh no this is the first book isn't it°<
6           [(2.0)
7           [((scrolls down the article))
8     →     >°here's the third bo- here's the second book°<
9           (3.0)
10    →     >tch<
11          [(4.5)
12          [((highlights part of the text))
13          ok,
14          so here he's comparing (.)
15          [this book, with the previous one?
16          [((lets the mouse go and gestures through line 18)
17          he does this [consistently every time.
18                       [((shifts gaze to class))
```

The excerpt begins with a directive, "`watch what he does here.`" issued by the teacher to the students to follow his analysis of the author's review. This turn constructional unit (TCU) (Sacks et al., 1974) is latched by an elongated repeat of

[4] Transcription notations can be found in the Appendix.

part of the directive, "he do:es." As he speaks, the teacher is leaning over the podium and using the computer mouse to scroll through the article as he gazes at the screen (lines 1 and 2). This suggests that he is searching for something on the screen in order to complete his turn. The turn completion is delayed, however, for three seconds during which the teacher continues to gaze at the PC screen as he scrolls through the article. The delay suggests incipient trouble.

Unlike in casual conversation, the institutional rights for speaking remain with the instructor, thus no response is expected from the students at this juncture. The recipients display their orientation to these rights and their continued engagement in the activity by remaining silent while monitoring the teachers' actions and maintaining their body positionings forward, toward the front of the class, and their gaze on the screen. They do so despite the fact that the instructor continues to gaze at the screen and not at them (cf. Goodwin, 1980).

After three seconds, the instructor continues his turn, uttering "oh no", thereby confirming that he is experiencing trouble in continuing the ongoing sequence and offers a negative assessment of his situation, stating that the part of the text displayed on the screen is not the one he was looking for (line 5). What is significant is that the entire utterance is produced as self-talk in that it is spoken in a lower voice and at a faster tempo than the surrounding talk. Uttered at this moment and with the changes in loudness and speed, the turn serves to shift footing from the ongoing instructional activity of analyzing the literature review to a side-sequence of action, teacher self-talk, in which a technology-related issue is dealt with.

Another shorter pause ensues during which time the teacher scrolls through the article, appearing to be searching for the relevant section of the reading (lines 6 and 7). He stops scrolling, seeming to locate the pertinent part, but produces another instance of self-talk, also spoken more softly and quickly, "><°here's the third bo- here's the <u>se</u>cond book°<" (line 8), which signals that he still attempting to find the relevant section of the reading. This action serves to continue his hold on the instructional floor as he attempts to deal with the matter. The students continue to orient to this as a side sequence and to the instructor's institutional rights as speaker by remaining silent and gazing at the screen, apparently following the instructor's actions.

This turn is followed by another pause during which the teacher appears to be reading a section of the article that is visible on the screen and thus also to the students, and another moment of self-talk. This comes in the form of a response cry (cf. Goffman, 1978) by which the instructor marks dissatisfaction with his predicament (line 10). Another pause in talk follows during which time the instructor highlights a part of the text. This action is projected on the large screen and so can be viewed by the students as it occurs (lines 11 and 12). It should be noted that although it is the teacher who appears to be doing all of the work to resolve the issue that is made relevant by the side sequence, the students are active participants, maintaining their attention to his actions as displayed by their forward-positioned bodies and eye gazes toward the screen. The students' silence rather than engagement in small group conversations signal their orientation to the side sequence as a temporary break in the ongoing instructional talk rather than its termination.

The highlighting of the text appears to project the resolution of the issue. Indeed, the instructor's use of the marker 'ok' in the next turn (line 13) signals "satisfactory termination" (Jefferson, 1972:317) of the side sequence. The ongoing sequence is resumed in the next turn with a 'so'-prefaced utterance (line 14). In this position, such utterances serve to implement interactional agendas that have for some reason been suspended and whose resumption is anticipated by the participants (Bolden, 2006). The shift in interactional footing back to the ongoing instructional task is also marked by the resumption of the instructor's 'teacher voice', indicated by increased loudness and changed tempo. This is accompanied by a change in the instructor's body movement as he lets the mouse go and begins to gesture (lines 16), and by the end of the excerpt, he has shifted his gaze from the PC screen to the students (line 18). We note, too, that, once closed, the side sequence is not referred to in any subsequent talk, and thus the issue dealt with via self-talk is considered resolved (cf. Jefferson, 1980).

Similar to Excerpt 1, the second excerpt shows how the instructor transitions from the ongoing instructional activity into a side sequence accomplished via self-talk, which serves to inform the students of his difficulties in dealing with technology and at the same time allows the class to sustain a shared focus of attention. Moreover, in this excerpt self-talk is accompanied by more apparent changes in the teacher's body movements than in the previous excerpt. Excerpt 2 also demonstrates more complexity and flexibility in shifting footing from the ongoing sequence of instructing to dealing with technology.

The excerpt comes from a graduate seminar in applied linguistics on the topic of cross-cultural metaphors. This classroom has the same spatial arrangement as in Excerpt 1 with the teacher's podium located at the front and the students sitting in rows facing the teacher. This class, however, has twice as many students as the previously discussed one and several students are seated in the front rows. Thus, the distance between the teacher and his audience is relatively smaller. The excerpt begins as the instructor wraps up the discussion of an example of a manner verb. Moving on to the next example, he experiences difficulties in finding the flash drive with the file that contains the example. He makes his trouble apparent to the students through self-talk.

Excerpt 2[5]

```
1        T:    [and it's not just a red ↑carpet it's a red carpet that's being rolled out.
2              [((moves behind podium, shifts gaze from class to PC screen and back to
3              class, self-positions in front of PC screen))
4              (2.0)
5              °right°?=
6              =so it is marking [manner.
7                                [((shifts gaze to PC screen))
8        Ss:   ((gaze at screen through lines 1-10))
9   →    T     hh u:m=[=>mt- °and I had [another one°<,
10                     [((searches in his pants pockets))
11       Ss:            [((shift gaze to teacher))
12             [(2.0)]
13       T:    [((gazes downward, eyes half closed; furrows brow))
14  →          [>°°m: what happened to it,°°<
15             [((searches in his right pocket; steps backwards))

16             [(1.0)
17             [((pulls a flash drive from the pocket))

18  →    T:    [u: >°which is *actually more interesting °°if I can find it°°*<
19             [((inserts flash drive into PC))

20             [(0.5)
21             [((moves towards PC screen and shifts gaze to it))
22       Ss:   [((shift gaze back to screen))
```

We can see how at the beginning of the excerpt, the instructor maintains the on-going sequence of instructional talk with an explanation of an example in his usual 'teacher voice' (line 1). His body movement, however, signals the beginning of a transition to a new activity. Starting by standing in front of the class facing the students and gazing at them, the teacher gradually moves backwards and towards the podium as he speaks. In doing so, he temporarily shifts his gaze to the PC screen (line 2–3).

Having positioned himself behind the podium, the instructor returns his gaze to the class and delivers a next TCU (line 6). The utterance is prefaced by "so", which marks the turn as initiating closure of the current discussion (Schiffrin, 1987). By the end of the utterance, the instructor has directed his gaze toward the PC screen. The students continue to display their attention to and engagement with the teacher's actions in the ongoing sequence by maintaining their gaze on the large screen (line 8).

The teacher's next turn begins with an outbreath "hh" and an "u:m", which, when uttered at the beginning of a TCU in academic lectures has been shown to indicate that more talk is to come (Rendle-Short, 2004). However, what follows is a shift into a side sequence, initiated by an utterance produced as teacher self-talk. Similar to the self-talk in Excerpt 1, it is produced in a lower voice and at a slightly faster pace than the earlier talk. The content of the utterance indicates that the teacher has another example to share. The accompanying nonverbal actions, in which he first puts his left hand in his left pants pocket and then his right hand in the right pocket, indicate that his trouble is in locating it. The students participate in the side sequence by shifting their gaze from the big screen to the instructor and attending to his trouble (line 11). The teacher makes his struggle even more apparent by gazing downward with his eyes half closed and furrowing his eyebrows as he searches his pockets (line 13). He then makes a comment that identifies his trouble—the inability to locate the example—produced as self-talk (line 14), which is spoken more quickly and even more softly than the self-talk in line 9.

When the instructor pulls the flash drive from his right pocket and inserts it into the computer, it appears that the issue is resolved. Indeed, his utterance on line 18 begins at a louder level "u:" but as he inserts the drive, his speech turns back into self-talk, with his voice becoming softer and creakier sounding and the tempo quicker. As soon as the instructor

[5] Due to the large number of overlaps occurring in lines 14–22, we have inserted spaces between lines 15 and 16, 17 and 18, and 19 and 20 to make it easier to identify which line is synchronized with which.

inserts the flash drive in the computer and positions himself in front of the PC screen, the students, who were attending to his struggles, shift their gaze from the teacher to the big screen (line 22). As in Excerpt 1, although it is the instructor who appears to be doing all of the work involved in the side sequence, the students participate by displaying their orientation to the side sequence as a temporary phenomenon, i.e. maintaining their attention via eye gaze and body positionings rather than becoming disengaged. In fact, this is how they do their share of work towards the ultimate resumption of the ongoing sequence.

In this excerpt, the instructor's production of the side sequence of self-talk while dealing with the trouble appears to be particularly important to maintaining the instructional floor while managing the technology issue. Despite showing numerous signs of bodily disengagement from the class, first shifting gaze toward the PC screen, then gazing downward with his eyes half closed, and furrowing his brows, the instructor's self-talk keeps the students 'tuned in'. In our view, these subtle and flexible changes in the instructor's prosody demonstrate the complexities involved in keeping several circles of ''interaction arrangement'' (Goffman, 1981:155) operating at a time.

2.3.2. Absence of instructor self-talk

The third excerpt is a counter example to the first two in that it reveals how in the absence of self-talk, students disengage from the instructional space as the teacher deals with her dilemma. The excerpt comes from an advanced level ESL grammar classroom whose spatial arrangements are markedly different from those in the previous two excerpts. It is a much smaller classroom with only seven students. The technology is limited to an overhead projector. The teacher's desk and the blackboard are still at the front of the room with students' desks facing them. However, there is just one row of desks arranged along the wall so that the students are able to see each other. The distance between the students and the teacher is considerably smaller than in the previous excerpts. Following Kendon's (1973) observation, closer proximity decreases the level of formality of interaction. Indeed, we will see in the excerpt that the pre-allocation of turns observed in a lecture format is not strictly adhered to in this classroom. Rather, ''permutability,'' that is, ''open-endedness in turn-taking'' is observed (Mchoul, 1978:186) with students having more freedom to self-select as next speakers.

In the larger instructional activity from which this excerpt comes, the instructor is using an overhead projector and several transparencies that small groups of students had filled in earlier to review a grammar point. We will see in the excerpt that, throughout the interaction, the teacher attempts to sustain talk with the students while she looks for the next transparency to be reviewed. However, she has difficulty locating it and so for a few moments, disengages from the students and the instructional space she was trying to maintain. As the instructor disengages from the instructional floor, which happens gradually over several turns, so do the students.

Excerpt 3[6]

```
1     T:     do you think three thousand dollars for a wedding dress is
2            [((removes TR[7]from OHP[8] while gazing at class))
3     SM1:   [u: h  [that's too much
4     Ss:           [( )
5     SF1:   I think it's over   [hhuhh (.) over (uh the)]  [the bride (.) have
6     T:                         [((turns gaze away))]      [((returns gaze))
7     SF1:   to pay the over th- [three thousand]
8     T:                         [more than three thousand why]=
9     SF1:   =[yah more than three thousand dollar I saw-
10    T:      [((moves TR toward desk and holds while gazing at class))
11    SM1:   three (.) thousand dollars?
12    T:     ((places TR on desk while turning gaze downward to desk))
13    SF1:   yah [↑three thousand dollar(.) five thousa:nd ( ) seven
14    T:         [((with gaze down toward desk, flips through TRs))
15    SF1:   thousa:nd=
16    SM2:   =aw:=
```

[6] Due to the large number of overlaps occurring in lines 27–37, we have inserted spaces between lines 27 and 28, 29 and 30, and 36 and 37 to make it easier to identify which line is synchronized with which.

[7] TR = transparency; TRs = transparencies.

[8] OHP = overhead projector.

```
17      SF1:   =I don know I can↑not [imagine but (.) it is real=
18      T:                           [((looks up at SF1 while picking up a TR))
19      Ss:    [((students begin talking to each other))
20      SF2:   =[uh is it a sale (.) a sale ( )]=
21      T:     =on [sale for three thousand]=
22                 [((gazes at TR while facing class))]
23      SF:    =[(na:u:)=
24      T:      =[((turns gaze and body away from students, puts TR back on desk))
25      SF2:     [( ) final sale ( )
26      T      [((begins to flip through TRs))
27      Ss:    [((simultaneous talk gets louder and continues to end of excerpt))

28      SF1:   [it's more expensive]
29             [((looks at teacher, who is facing away from class))]

30             [()
31             [((looks at female student to her right))
32      SM1:   [oh my go:d I don't wanna get married]
33      T:     .hhh
34             ((continues to flip through TRs for 7 seconds))
35 →    T:     [°a::nd ( )°
36             [((flipping through transparencies on desk))

37      SM:    [three thou[sand dollars?
38             [((gazes toward teacher))
39 →    T:                [°>did I lo:se?< °] (.)    [>°I lost somebody's°<
40                         [((turns to face class))]  [((turns back to desk))
41      Ss     [((simultaneous talk subsides))
```

This excerpt begins as the teacher transitions from completing the review of one transparency. The transition is initiated with an open-ended question directed to the cohort of students that launches a discussion of a topic, the cost of a wedding dress, which was used to contextualize the grammar exercises they had just reviewed (line 1). The ensuing talk unfolds as more of a casual conversation where students self-select as next speakers, commenting on the topic and responding to each other's comments (e.g., lines 3, 5). Throughout the discussion, the teacher moves in and out of engagement with the students. In lines 6 and 12, for example, as students talk, the teacher turns her gaze away from them and toward the desk in an apparent attempt to locate the next transparency. She is still orienting her body to the class, however, and thus treats the students as relevantly present while she attends to locating the next transparency. In fact, as we see in line 18, as she picks up a transparency she gazes back to the student who is talking at that time. In line 21, we see that she responds to another student's question while gazing at the transparency. These actions show how at this point, the teacher manages to keep two interaction arrangements running simultaneously. She maintains the instructional space by attending to the students' discussion of the wedding dress prices and reacting to their remarks. At the same time, she attempts to deal with the difficulty of identifying the next transparency from a pile of transparencies.

Although the teacher is still somewhat engaged and makes minor contributions to the ongoing sequence, her partial disengagement and lack of self-talk to make relevant the issue she is dealing with appear to sanction the beginning of student disengagement from the unfolding instructional activity. Earlier in the excerpt, although the teacher has made no attempt at treating the class as a cohort, a relative orderliness in turn-taking is still observed. One-speaker-at-a-time pattern is maintained with the rest of the class attending to the speaker as they direct their gaze and orient their bodies towards her/him. However, we see in line 19 that the students begin to disengage, turning and talking to each other in small groups. Around this time, the instructor realizes that the transparency she picked up is not the one she wants and so, she completely disengages by turning both her gaze and body away from the students and toward the desk and begins to flip through the transparencies (line 24). By doing this, the teacher shifts the footing from instructing to managing the practical aspects of the task. However, she does not make her dilemma public to the students via the insertion of a side-sequence of self-talk.

The students exhibit different orientations to the teacher's apparent disengagement from the ongoing sequence of instruction as well as to their own roles in the newly reconfigured participation framework. At this point, the simultaneous talk among the students, which began when the instructor first gazed away, grows louder (line 27). In one case, a pair of male students on the teacher's right talk to each other in their native language without gazing at the teacher or making any attempt to reengage her. We can see how casual classroom interaction gradually becomes a ''schism'' (Mchoul, 1978:210), an effect when participants initially conversing as a single group split into smaller groups and talk simultaneously. Such permutability in turn-taking can be undesirable in a classroom, hindering the ongoing instructional talk. However, no attempt to repair the situation follows from the teacher, who is preoccupied with finding the necessary transparency.

The three students in front of the overhead projector appear to closely monitor the teacher's actions and make several attempts to reengage her as they continue a discussion on the topic of wedding dress prices thus advancing the ongoing sequence. In fact, one of the female students in the group seems to direct her remark to the teacher (lines 28–29) in that as she utters her comment, she gazes at the instructor rather than the other two students even though the teacher is facing away from the class. No acknowledgement of its receipt comes from the teacher, however, and the student directs her next comment to the student on her right. Simultaneously, the male student of the small group makes a comment about not wanting to get married (line 32). It is unclear whether it is addressed to the teacher but he gazes at the teacher before making it and speaks loudly enough for her to hear. Although the instructor appears to be fully disengaged, she seems to be following the students' conversation as she laughs right after the comment is made (line 33), a token which appears to signal her appreciation of the student's comment (Jefferson, 1979). Her affiliative laughter also suggests that, although at least part of the teacher's attention is occupied elsewhere, she is attempting to forward the progression of the ongoing sequence of instructional talk.

The apparent attempt is short-lived as, immediately following the laughter token, 7 seconds pass during which time the teacher flips through several transparencies as she faces away from the students. This is followed by the first instance of self-talk (line 34), marked by prosodic cues of softer voice and vowel elongation, and produced as the instructor continues to flip through the pile of transparencies. This action launches a side-sequence and in so doing, makes the instructor's difficulty a relevant point of temporary departure from the instructional activity. The male student who has been closely following the teacher's moves, responds but not to the teacher's self-talk. Instead, he makes another comment to further the progression of the official instructional discussion, gazing at the instructor as he does (lines 37–38). His action indicates that he interpreted the teacher's utterance as a rejoinder to his earlier comment, and thus a continuation of the ongoing sequence of talk rather than an opening of a side sequence.

Instead of resuming the ongoing sequence, however, the teacher continues the side sequence by overlapping the student's turn with another instance of self-talk (line 39). Simultaneously, the instructor reorients her body to the students. At least some of them appear to interpret this as a move to reengage in the official instructional activity, and the amount of simultaneous student talk decreases briefly. However, as she continues her self-talk, the teacher reorients her body, gaze and attention back to the desk, fully disengaging once again (line 40).

Up until the first appearance of self-talk, about 20 seconds passes during which the teacher is disengaged from the class and thus treating the students as not relevantly present to her dilemma. To paraphrase Goffman (1978), she is saying to the students, 'These moments are not your concern.' In our view, what we have here is an example of how the absence of a side sequence, here in the form of teacher self-talk, leads to a breaking of shared focus, a dissolution of the ongoing sequence and the reformation of the participation framework. For several seconds while the teacher attempts to resolve her dilemma, students are able to disengage from the instructional space and create small social spaces among themselves.

To summarize, these three excerpts show the importance of self-talk in maintaining a shared focus of attention and keeping students engaged during momentary hitches in the ongoing instructional activity. The self-talk makes students aware of the teachers' current predicament and thereby allows the class to 'stay tuned' as the problem is dealt with. This, in turn, enables the teacher to maintain the instructional floor while the technology-related issue is being resolved. Conversely, the absence of self-talk affords students the opportunity to disengage from the instructional space. The excerpts also show the complex and flexible nature of the shifts in footing constituted by self-talk as well as the importance of the instructors' body movements in such reformations of participation frameworks.

2.3.3. Elicitation of empathetic student response

The final two excerpts show the specific features of teacher self-talk that elicit affiliating student responses. Excerpt 4 is taken from the same graduate seminar as Excerpt 2 and occurs 16 seconds after the end of Excerpt 2. During this time, as the teacher searched for a file on his flash drive, he continuously gazed at the PC screen in silence. As he did, the students attended to the actions by looking at the big screen in front of them.

Excerpt 4[9]

```
27      T:     °h↑ah yeah >here we go.°<
28      Ss     ((gaze at screen throughout excerpt))
29             (4.0)
30             [↓uh
31             [((raises eyebrows))
32             (5.0)
33             °hm°
34             (4.0)
35      Ss:    .hhhh
36      T:     [°yeah well >ori wada minute°<
37      Ss:    [.hhhh
38             (1.0)
39 →    T:     that's the one >°but I< (0.2) can't find the *spa:nish* one tsk°
40             (2.0)
41 →    S1:    you had [them both on there () you had English and Spanish=
42 →    S2:            [that was the Spanish one=
43      T:     =what? I had them both on there?
44             (2.0)
45             where?
46      S1:    [well like the bump up (.) which is-
47             [((points at screen))
48      T:     ↑Oh right right right there it is yeah but
49             ok so you have to see (0.3) right.
50             (0.2)
51             [so you have to see:(.)
52             [((moves from behind podium towards class, shifts gaze to big screen))
53             [um actually this one took me a while to process in English
54             [((shifts gaze to students, positions in front of class))
```

Excerpt 4 begins with an instance of teacher self-talk, which continues the side sequence and signals that although it appears that the instructor has found the necessary file, the dilemma is not yet resolved (line 27). After a fairly lengthy pause, the instructor utters a hesitation marker ("↓uh") accompanied by a raising of his eyebrows (lines 29–31) by which he displays his negative assessment of the situation (Chovil, 1991). These turns and another lengthy pause and hesitation marker uttered as self-talk (lines 32–33) confirm the instructor's continuing trouble. In line 34 he clicks on a file, an action which is projected to the group via the projector screen, and an advertisement of bump-up jeans[10] appears on the screen. The students react with laughter (line 35), signaling their appreciation of the humorous nature of the advertised product. As their laughter refers to an example to be discussed in the temporarily suspended instructional talk, it can be viewed as the students' work towards the resumption of the ongoing sequence. However, the next TCU is produced by the teacher as self-talk (line 36), thus continuing the side-sequence and evidencing that the issue is not yet completely resolved. The students respond again with affiliating tokens of laughter making another move towards the closure of the side sequence.

After a short pause, the teacher acknowledges the students' recognition and appreciation of the humorous ad with "that's the one" (line 39), and then in the next TCU proceeds to make explicit his dilemma. Similar to line 17 in Excerpt 2, this utterance shows the intricacy of shifting footing where its first part is produced in the usual 'teacher voice,' while the second part, speeded up at the beginning, is uttered in a softer, creaky voice. Unlike the earlier three excerpts, however, here, the content of the self-talk is an explicit formulation of the problem, specifically, that the teacher cannot locate the Spanish version of the ad on the flash drive. The students have access to

[9] In this and the subsequent excerpt student affiliative responses are bolded.

[10] Bump-up jeans are designed to make the wearer's backside appear more compact and lifted up.

the contents of the drive since the computer screen attended to by the teacher is being projected on the larger screen. The more explicit formulation of the dilemma via self-talk affords the students the opportunity to shift footing from their role as attentive observers of the teachers' actions to active participants in the side-sequence and contributors to the resolution of the issue. Indeed, after a brief pause, two students take the occasion to do so and respond by directing the teacher to the searched for version of the ad (lines 41–42). The teacher latches the student's turn with a request for clarification. This is uttered in his usual 'teacher voice' (lines 43–45), which indicates his recognition of the students' roles as co-participants in the side-sequence. Student 1, who is sitting in the front row and relatively close to the teacher, follows up with more specific directions, given both verbally and gesturally (lines 46–47). These are accepted by the instructor as new information (with an "Oh," Heritage, 1984) and followed with an emphatic confirmation that the issue is now resolved (line 48). Similar to Excerpt 1, the satisfactory completion of the teacher's preceding actions is signaled with "'ok" (line 49), which closes the current side-sequence. The ongoing instructional activity is then resumed with a so-prefaced TCU uttered in a 'teacher voice.' The teacher's repeat in line 51 serves to ensure that the students' attention is shifted from the now resolved dilemma to the newly resumed instructional activity (Goodwin, 1980). This is accompanied by a shift in the instructor's body positioning as he moves away from the back to the front of the podium and thus closer to the students.

To sum up, in this excerpt, the teacher's explicit formulation of his predicament in the form of self-talk results in the reformation of the participant framework in the side sequence such that students are afforded opportunities to contribute to the resolution of the issue. To paraphrase Goffman, they temporarily put aside the institutional role of student and take on the role of full-fledged collaborators in the resolution of the issue. Their empathetic responses help to bring the side sequence to a closure and resume the ongoing instructional talk.

The last excerpt comes from the same ESL classroom as Excerpt 3. It begins where the other one left off, just as the instructor produces audible self-talk and thus begins a side sequence. As she does so, she temporarily orients her body to the class, and the noise level diminishes (line 40). Simultaneously, the three students sitting in front of the overhead projector shift their attention to the teacher by directing their gaze toward her. This reveals the students' close monitoring of the teacher's body positioning to manage their involvement (Goodwin, 2000; Mondada, 2007). She continues producing self-talk (lines 43 and 45) as she looks through the transparencies, gazing toward the class and then back to the desk. However brief it is, the self-talk makes the instructor's dilemma public—that she cannot find the next transparency up for review. This publicly shared problem results in the reformation of the participant framework, affording students the opportunity to actively participate in its resolution. The teacher's dilemma is now responded to by one student who attempts to help her find the transparency. She does so by pointing and referring to one of the transparencies on the desk (lines 49–50) during which time the teacher looks at the student and then back at the transparencies in the direction the student is pointing. After a three second pause, the student provides additional information (line 53) to the teacher, holding her pointing gesture as she does. The teacher continues to search for the transparency and after four additional seconds, produces self-talk indicating on-going difficulty in finding the appropriate transparency (line 57). In response, the student provides a third bit of information on where to locate the transparency (line 58) to which the instructor responds with an emphatic 'oh,' uttered in an audible 'teacher voice' marking her receipt of the new information (line 59). The next two moves, a verbal ">°°ok here we go°°<" followed by the placing of the found transparency on the overhead projector, serve to close side sequence and transition back to the instructional activity. They also serve to regain the attention of the entire student group. Remember, up until this time, some of the students' attention was occupied elsewhere. The rather lengthy time it takes the instructor to place the transparency on the projector affords the students time to appropriately re-attend to the teacher actions in anticipation of a restart of the ongoing instructional activity (Goodwin, 1980), which they do as shown in line 65. With the students' full attention back on her, the teacher utters an "ok" (line 66) thereby launching a restart of the instructional activity, returning to the topic of wedding dress prices with an open-answer question directed to the students.

Excerpt 5

```
38 →  T:     [°>did I lo:se?< °](.)   [>°I lost somebody's°<
39            [((turns to face class))][((turns back to desk))
40    Ss     [((simultaneous talk subsides; three students shift gaze to T))
41            (.)
42    SM:    wow=
43 →  T:     =[°one,° (1.0)
44             [((faces away from class; looks through TRs))
45 →          [°two,°
46            [((gazes toward class))
47            [(1.0)
48            [((gazes toward desk))
49 →  SF2:    there is a (0.4) [gree (.) green one maybe
```

```
50                                  [((points at TRs and holds gesture through line 56))
51     T:                           [((gazes at SF2 and then back at TR))
52            (3.0)
53 →   SF2    green one or blue
54            [(4.0)
55     T:     [((goes through TRs))
56     Ss:    [((simultaneous talk))
57 →   T:     °°u::h°°
58 →   SF2:   it's above
59     T:     OH
60            (.)
61 →   T:     [>°°ok here we go°°<
62            [((picks up the TR))
63     T:     [(4.0)
64            [((positions TR on OHP))
65     Ss:    [((shift gazes towards T))
66     T:     OK [how much do wedding dresses cost in your countries?
67               [((faces class; moves her gaze around class))
```

In sum, similar to Excerpt 4, this excerpt shows how by explicitly formulating the dilemma in her self-talk, the teacher makes the students aware of the issue she is dealing with. This, in turn, elicits an empathetic response from a student in the form of help that facilitates the resolution of the issue and the resumption of instruction. Moreover, Excerpt 5 suggests that the teacher's body movements play an important role in eliciting an empathetic response from the student since in the two instances in which the teacher formulated the trouble through self-talk, she temporarily reengaged with the students by turning her body to face the class. This importance is confirmed by the other instances in the excerpt when changes in the instructor's body movements were sensitively oriented to by the students, who reacted by shifting their gazes toward the teacher and attending to her. We can also see in the excerpt that the students exhibit different orientations towards the shifts in footing marked by self-talk: while one student provided help and thereby contributed to terminating the side sequence and resuming the ongoing instructional talk, the others continued talking to each other. They thus adopted different levels of engagement and different participation roles.

3. Conclusions and implications

Teaching is indeed a complex activity. It is one of those ''institutional niches'' (Goffman, 1981:155) that require teachers ''to routinely sustain more than one state of talk simultaneously'' (Goffman, 1981), and thus have ''the capacity of a dexterous speaker to jump back and forth, keeping different circles in play'' (Goffman, 1981:156). Their interactional dexterity becomes even more necessary when they are faced with unplanned moments in instructional activity. Our findings reveal the empirical details of one particularly significant resource, teacher self-talk, by which skillfulness in handling the contingencies of classroom interaction is accomplished. In fact, this is the first study to our knowledge that has revealed the specific actions by which the teachers hold onto the instructional floor while dealing with trouble in managing practical aspects of instruction. More generally, our study confirms the importance of examining how unplanned classroom moments are accomplished in talk-in-interaction, and thus, contributes to the view of a classroom not as a predictable sequence of pre-scripted actions but as ''part of a lively discourse-in-interaction that calls for immediate, contingent and communicative acts from the teacher'' (Lee, 2007:202) and, we would add, from the students.

Perhaps most significantly, our findings show the important role self-talk plays in reshaping the traditional teacher–student participant framework and eliciting emphatic responses from students. No matter how brief the moments are, self-talk makes visible the teacher's position as a struggling instructor, and treats students as relevantly present to those moments. It thus gives students a behind-the-scenes glimpse into the challenges that the instructor is dealing with and allows them to imagine the teacher to be more like themselves. In other words, the presence of teacher self-talk when confronted with glitches binds the instructors to their co-present students in positive, pro-social ways. This social bond, as Goffman (1978) suggests, is the first step toward building empathetic relationships between instructors and students.

Furthermore, instead of affiliating acknowledgements such as 'oh my', 'hmm' and so forth, self-talk appears to engender cooperative responses that help in the resolution of the issue. Such responses are likely due to the fact that the

self-talk explicates the issue and thus makes the struggles of the self-talker understandable to co-present others. This, in turn, allows the students to become active co-participants in solving the issue, thereby shifting students' roles from an institutional one with limited participatory rights to conversational partners with equal interactional rights and responsibility for managing the practical aspects of instruction. This shift in roles is significant in that it temporarily levels the power imbalance between teachers and students. Efforts to resolve the issue become a collaborative enterprise, where ''the embodied actions of multiple participants work together to build social action'' (Goodwin and Goodwin, 2004:240). Whether such temporary affiliative moves can contribute to building more pro-social and cooperative relationships in the classroom in the long run is an empirical question for future research.

3.1. Research possibilities

While the data presented here are limited, the preliminary findings are indeed thought provoking, and suggest several interesting directions for future research on teacher self-talk. First, it would be useful to know whether there are different types of self-talk that vary by the type of contingency and whether other forms of teacher talk create side-sequences when such unplanned moments in the ongoing instructional sequence arise. Second, more data are clearly needed to strengthen claims on the connection between self-talk and empathetic responses. Further analyses would allow for the identification of different kinds of empathetic responses as well as connections between different features of self-talk and the types of empathetic responses they elicit. It also seems important to look at the cases where features of self-talk that elicited empathetic responses in our data, would fail to do so in other instances and why.

Additionally, more research would enhance understandings of whether and how the practice of teacher self-talk differs across different kinds of classrooms, and at other levels of education such as K-12. In the classrooms examined here, all the students are adults. Perhaps teacher self-talk is a phenomenon only of classes with this category of students. Our own experiences in the classroom suggest that it is not. How the role of self-talk and the responses it engenders compare across contexts are empirical questions certainly worthy of study. Another promising aspect of self-talk to investigate is its cross-cultural dimension. Specifically, does self-talk occur in non-western school settings? If yes, what are its defining features and what roles does it play?

Finally, it would be worthwhile investigating whether there is a relationship between teacher self-talk and effective teaching. Research on teaching (e.g., Muijs and Reynolds, 2005; Stronge, 2007) indicates that two hallmarks of effective teaching are the ability to garner more time for instruction and to create and maintain affective relationships with students. By keeping students' attention focused on the instructional task during unplanned moments and affording students opportunities to display empathy to them, teacher self-talk appears to be a powerful resource for accomplishing both tasks. Further research will allow us to tease apart the empirical details of this posited relationship.

3.2. Implications for teacher education

The limited scope of the data notwithstanding, in our view, they suggest some interesting implications for teacher education. First, they point to the importance of sensitizing novice teachers to practices that help to sustain the instructional floor and student attention when unexpected problems arise. Beginning teachers are often underprepared when instructional interaction does not flow as planned. These moments can leave them floundering in their attempts to deal with them, which, in turn, can unwittingly allow and perhaps even encourage students to disengage from the instructional framework. Once the contingency is dealt with, novice teachers must then regain students' attention and we know that this is not always easy, particularly in classrooms where student behavior can be problematic. Novice teachers need to understand that teaching requires skillful juggling to keep several interaction arrangements going at a time. It appears that self-talk can be an effective tool serving this purpose. Equipping novice teachers with such a resource may help them more effectively achieve their instructional goals.

Second, novice teachers should be encouraged to afford students the opportunity to display empathy to them. In presenting earlier versions of this study to other groups, individuals have shared that, when beginning to teach, they would not use self-talk when glitches arose as the instructional activity unfolded since they thought it made themselves appear too vulnerable to students. Perhaps they are unwittingly creating social distance between themselves and their students? It would be useful for them to know of various practices for connecting with students in such a way as to build affective relationships rather than create social distance.

Furthermore, the way students showed empathy in our data suggests that when confronted with unforeseen difficulties in the classroom, it is worth treating the students as active co-participants in accomplishment of the dilemma rather than as observers to the unfolding situation. In this way, solving the issue becomes a collaborative activity. In such collaborative environments, the benefits are mutual—the instructional sequence is resumed and the affective dimensions of the teacher–student relationship are enhanced. It is possible, however, to imagine classroom contexts where students would not be motivated to resume the instruction and would be reluctant to provide help, feeling comfortable in their small social

spaces. As Hammersly's (1974) study suggests, students' personal goals such as socializing with their peers can take precedence over instructional ones.

More generally, budding teachers need to be made aware of how their body movement, prosody, and gaze direction contribute to configuring new participation frameworks and maintaining or discontinuing students' involvement with the ongoing classroom activity. Teachers should be aware that their stance is projected and oriented to not exclusively through their verbal utterance but also through such non-verbal features as prosody, eye gaze, body orientation, and other embodied actions. The ways they make use of the multiple semiotic resources (both verbal and non-verbal) available to them are influential to shaping the forms of students' participation in the classroom interaction. They can turn a classroom into either a jointly accomplished enterprise or a lonely pursuit of separate individuals physically sharing a single space.

For sure, teaching is a multifaceted enterprise. So far, much of the research on classroom interaction has been focused on planned instructional interactions such as IRF sequences. The importance of usually overlooked practices such as teacher self-talk corroborates Hymes's (1974) claim that the most consequential cues in language use are often those that are the most subtle or ''slight in scale'' (p. 54). The field would be well served by studies that extend investigatory interests to teaching practices like self-talk that on the surface may appear to be slight or unimportant but in fact make significant contributions to teaching.

Acknowledgements

Earlier versions of this paper were presented by the first author as a plenary at the first annual conference of the Language and Social Interaction Working Group (LANSI) of Teachers College, Columbia University (October 2011) and at the University of Vienna (November 2011) and by both authors at the AAAL 2012 conference in Boston, MA (March 2012), as part of the colloquium ''L2 teaching practices created in classroom talk-in-Interaction.'' We thank our colleagues in the Penn State CA Research Group for their inspired discussions on the phenomenon of teacher self-talk and other teaching practices during data sessions held from 2010 to 2012.

Appendix. CA transcription symbols

[ ]	overlapping talk/action
=	latched talk
(3)	pauses in seconds
(.)	pauses that are less a second
:	lengthened vowel sound, the more colons the longer the sound
°quiet°	talk that is quieter than surrounding talk
°°quiet°°	very quiet talk
>fast<	tempo of talk is faster than surrounding talk
<slow>	tempo of talk is slower than surrounding talk
bo-	abrupt cutoff of sound
?	strongly rising intonation
,	phrase-final intonation
.	falling intonation
↑ ↓	sharp upward or downward pitch
.hhh	laughter
<u>underline</u>	stress
CAPS	very emphatic stress
((*gestures*))	comments on actions and descriptions of nonverbal behaviors
word	uttered with creaky voice
( )	unintelligible
→	highlights point of analysis
T	teacher
SF1	female student 1
SF2	female student 2
SM1	male student 1
SM2	male student 2
Ss	students

References

Barnes, Douglas, 1992. From Communication to Curriculum. Boynton/Cook, Portsmouth, NH.

Beck, Judith S., 1995. Cognitive Therapy: Basics and Beyond. Guilford, New York.

Bolden, Galina, 2006. Little words that matter: discourse markers ''so'' and ''oh'' and the doing of other-attentiveness in social interaction. Journal of Communication 56, 661–688.

Boxer, Diana, Cortes-Conde, Florencia, 2000. Identify and ideology: culture and pragmatics in content-based ESL. In: Hall, J.K., Verplaetse, L. (Eds.), Second and Foreign Language Learning Through Classroom Interaction. Lawrence Erlbaum, Mahwah, NJ, pp. 203–219.

Butler, Andrew, Beck, Aaron, 1995. Cognitive therapy for depression. The Clinical Psychologist 48, 3–5.

Cazden, Courtney, 1988. Classroom Discourse: The Language of Teaching and Learning. Heinemann, Portsmouth, NH.

Chovil, Nicole, 1991. Discourse-oriented facial displays in conversation. Research on Language and Social Interaction 25, 163–194.

Cornelius-White, Jeffrey, 2007. Learner-centered teacher–student relationships are effective: a meta-analysis. Review of Educational Research 77, 113–143.

Diaz, Rafael, Berk, Laura E. (Eds.), 1992. Private Speech: From Social Interaction to Self-Regulation. Lawrence Erlbaum, Hillsdale, NJ.

Edwards, Anthony D., Westgate, David, 1994. Investigating Classroom Talk. The Falmer Press, London, U.K..

Ellis, Albert, 1994. Reason and Emotion in Psychotherapy: Comprehensive Method of Treating Human Disturbances, Revised and Updated. Citadel Press, New York, NY.

Ellis, Albert, 2004. Rational Emotive Behavior Therapy: It Works for Me—It Can Work for You. Prometheus Books, Amherst, NY.

Goffman, Erving, 1963. Behavior in Public Places. Free Press, New York, NY.

Goffman, Erving, 1978. Response cries. Language 54, 787–815.

Goffman, Erving, 1981. Forms of Talk. University of Pennsylvania Press, Philadelphia.

Goodwin, Charles, 1980. Restarts, pauses, and the achievement of a state of mutual gaze at turn-beginning. Sociological Inquiry 50, 272–302.

Goodwin, Charles, 2000. Action and embodiment within situated human interaction. Journal of Pragmatics 32, 1489–1522.

Goodwin, Charles, Goodwin, Marjorie Harness, 2004. Participation. In: Duranti, A. (Ed.), A Companion to Linguistic Anthropology. Basil Blackwell, Oxford, pp. 222–244.

Hall, Joan Kelly, 2007. Redressing the roles of correction and repair in research on SLA. The Modern Language Journal 91, 510–525.

Hammersly, Martin, 1974. The organization of pupil participation. Sociological Review 22, 355–368.

Hellermann, John, 2008. Social Actions for Classroom Language Learning. Multilingual Matters, Clevedon.

Hellermann, John, Pekarek Doehler, Simona, 2010. On the contingent nature of language-learning tasks. Classroom Discourse 1, 25–45.

Heritage, John, 1984. A change-of-state token and aspects of its sequential placement. In: Atkinson, J.M., Heritage, J. (Eds.), Structures of Social Action. Cambridge University Press, Cambridge, UK, pp. 299–345.

Heritage, John, 2011. Territories of knowledge, territories of experience: empathic moments in interaction. In: Stivers, T., Mondada, L., Steensig, J. (Eds.), The Morality of Knowledge in Conversation. Cambridge University Press, Cambridge, pp. 159–183.

Hymes, Dell, 1974. Foundations in Sociolinguistics: An Ethnographic Approach. University of Pennsylvania Press, Philadelphia.

Icbay, Mehmet Ali, 2011. Tying signals: restoring classroom order after transitions. Classroom Discourse 2, 236–250.

Jefferson, Gail, 1972. Side sequences. In: Sudnow, D.N. (Ed.), Studies in Social Interaction. Free Press, New York, NY, pp. 294–333.

Jefferson, Gail, 1979. A technique for inviting laughter and its subsequent acceptance/declination. In: Psathas, G. (Ed.), Everyday Language: Studies in Ethnomethodology. Irvington Publishers, New York, NY, pp. 79–96.

Jefferson, Gail, 1980. On 'trouble-premonitory' response to inquiry. Sociological Inquiry 50, 153–185.

Kendon, Adam, 1973. The role of visible behaviour in the organization of social interaction. In: Cranach, M., Vine, I. (Eds.), Social Communication and Movement. Academic Press, London, pp. 29–74.

Lantolf, James P., 2003. Intrapersonal communication and internalization in the second language classroom. In: Kozulin, A., Gindis, B., Ageyev, V.S., Miller, S.M. (Eds.), Vygotsky's Theory of Education in Cultural Context. Cambridge University Press, Cambridge, pp. 349–370.

Lantolf, James P., Yañez-Prieto, Carmen, 2003. Talking yourself into Spanish: intrapersonal communication and second language learning. Hispania 86, 97–109.

Lee, Yo-An, 2007. Third turn position in teacher talk: contingency and the work of teaching. Journal of Pragmatics 39, 180–206.

Luk, Jasmine, 2004. The dynamics of classroom small talk. Issues in Applied Linguistics 14, 115–132.

Markee, Numa, 2004. Zones of interactional transition in ESL classes. The Modern Language Journal 88, 583–596.

McCafferty, Steven G., 1992. The use of private speech by adult second language learners: a cross-cultural study. The Modern Language Journal 76, 179–189.

McCafferty, Steven G., 1998. Nonverbal expression and L2 private speech. Applied Linguistics 19, 73–96.

Mchoul, Alexander, 1978. The organization of turns at formal talk in the classroom. Language in Society 7, 183–213.

Mead, George H., 1934. Mind, Self, and Society: From the Standpoint of a Social Behaviorist. University of Chicago Press, Chicago.

Mead, George H., 1982. In: D.L. Miller (Ed.), The Individual and the Social Self: Unpublished Work of George Herbert Mead. University of Chicago Press, Chicago.

Mehan, Hugh, 1979. Learning Lessons. Harvard University Press, Cambridge, MA.

Mondada, Lorenza, 2007. Multimodal resources for turn-taking: pointing and the emergence of possible next speakers. Discourse Studies 9, 194–225.

Muijs, Daniel, Reynolds, David, 2005. Effective Teaching: Evidence and Practice, 2nd ed. Sage, London.

Nassaji, Hossein, Wells, Gordon, 2000. What's the use of ''triadic dialogue'': an investigation of teacher–student interaction. Applied Linguistics 21, 376–406.

Nelson, Katherine, 1996. Language in Cognitive Development: The Emergence of the Mediated Mind. Cambridge University Press, New York.

Nguyen, Hahn, 2007. Rapport building in language instruction: a microanalysis of the multiple resources in teacher talk. Language and Education 21, 284–303.

Nordstrom, Katrina, Korpelainen, Paivi, 2012. Creativity and inspiration for problem solving in engineering education. Teaching in Higher Education 16, 439–450.

Ochs, Elinor, Schieffelin, Bambi, 1989. ''Language has a heart'': the pragmatics of affect. Text 9, 7–25.

Ohta, Amy S., 2000. Re-thinking recasts: a learner-centered examination of corrective feedback in the Japanese language classroom. In: Hall, J.K., Verplaetse, L. (Eds.), Second and Foreign Language Learning Through Classroom Interaction. Lawrence Erlbaum, Mahwah, NJ, pp. 47–71.

Paoletti, Isabella, Fele, Giolo, 2004. Order and disorder in the classroom. Pragmatics 14, 69–85.

Penn State CA Research Group, 2010. Practices and Actions in Classroom Talk-in-Interaction. Unpublished raw data.

Rendle-Short, Johanna, 2004. Showing structure: using *um* in the academic seminar. Pragmatics 14, 479–498.

Roorda, Debora, Koomen, Helma, Spilt, Jantine, Oort, Frans, 2011. The influence of affective teacher–student relationships on students' school engagement and achievement: a meta-analytic approach. Review of Educational Research 81, 493–529.

Ruusuvuori, Johanna, 2007. Managing affect: integration of empathy and problem-solving in health care encounters. Discourse Studies 9, 597–622.

Ruusuvuori, Johanna, Lindfors, Pirjo, 2009. Complaining about previous treatment in health care settings. Journal of Pragmatics 41, 2415–2434.

Sacks, Harvey, Schegloff, Emmanuel, Jefferson, Gail, 1974. A simplest systematics for the organization of turn-taking for conversation. Language 50, 696–735.

Saville-Troike, Muriel, 1988. Private speech: evidence for second language learning strategies during the ''silent'' period. Journal of Child Language 15, 567–590.

Schiffrin, Deborah, 1987. Discourse Markers. Cambridge University Press, Cambridge.

Smith, Heather, 2007. The social and private worlds of speech: speech for inter- and intramental activity. The Modern Language Journal 91, 341–356.

Stronge, James, 2007. Qualities of Effective Teachers, 2nd ed. Association for Supervision and Curriculum Development, Alexandria, VA.

Sullivan, Patricia, 2000. Spoken artistry: performance in a foreign language classroom. In: Hall, J.K., Verplaetse, L.S. (Eds.), Second and Foreign Language Learning through Classroom Interaction. Lawrence Erlbaum, Mahwah, NJ, pp. 73–90.

Thorne, Steven L., Steinbach Kohler, Fee, 2011. The social life of self-directed talk: a sequential phenomenon? In: Hall, J.K., Hellermann, J., Doehler, S.P. (Eds.), L2 Interactional Competence and Development. Multilingual Matters, Bristol, U.K., pp. 66–92.

Vocate, Donna R., 1994. Self-talk and inner speech: understanding the uniquely human aspects of intrapersonal communication. In: Vocate, D.R. (Ed.), Intrapersonal Communication: Different Voices, Different Minds. Lawrence Erlbaum, Hillsdale, NJ, pp. 3–31.

Vygotsky, Lev S., 1978. Mind in Society: The Development of Higher Psychological Processes. Harvard University Press, Cambridge, MA.

Vygotsky, Lev S., 1981. The genesis of higher mental functions. In: Wertsch, J.V. (Ed. and Trans.), The Concept of Activity in Soviet Psychology. M.E. Sharpe, Armonk, NY.

Vygotsky, Lev S., 1986. Thought and Language. MIT Press, Cambridge, MA.

Winsler, A., Diaz, Rafael, Montero, Ignacio, 1997. The role of private speech in the transition from collaborative to independent task performance in young children. Early Childhood Research Quarterly 12, 59–79.

Winsler, Adam, de Leon, Jesus, Wallace, Beverly, Carlton, Martha, Willson-Quayle, Angela, 2003. Private speech in preschool children: developmental stability and change, across-task consistency, and relations with classroom behaviour. Journal of Child Language 30, 583–608.

Wood, Julia T., 1994. Engendered identities: shaping voice and mind through gender. In: Vocate, D.R. (Ed.), Intrapersonal Communication: Different Voices, Different Minds. Lawrence Erlbaum, Hillsdale, NJ, pp. 145–167.

Wynn, Rolf, Wynn, Michael, 2006. Empathy as an interactionally achieved phenomenon in psychotherapy: characteristics of some conversational resources. Journal of Pragmatics 38, 1385–1397.