Abstract

For many English as a Foreign Language (EFL) teachers, working contingently with language learners' problematic learner contributions in classroom interaction remains a challenge. Drawing on conversation analysis methodology and using sociocultural and situated learning theories, this longitudinal case study traces the progressional changes in one Iranian English language teacher's repairing practices (his orientation to repairable, repair completion type and trajectory) along with the changing impacts of different organizational patterns of repair and interactional awareness on learning opportunities. The data material consists of video recordings of EFL oral classroom interactions (11 lessons) and reflective conversations (seven sessions) between the researcher and the participant teacher at one private language institute in Iran over a period of six months, in two phases. Qualitative results from the first (descriptive) phase indicated that the teacher's provision of repair in meaning-oriented contexts was generally convergent while in form-oriented ones divergent. The qualitative changes revealed the teacher's increasing attention to lexical errors and use of self-repair types, particularly in form-oriented contexts and the teacher's progress in interactional awareness including identification of contexts and repair organization, use of metalanguage and critical self-evaluation. This study makes a contribution to conversation analytic research and our understanding of English teacher professional development.
Keywords: conversation analysis, the organizational pattern of repair practices, context, reflective conversation, other-and self-repair, interactional awareness.

Second language research (SLA) is increasingly investigating student participation and the sequential organization of interaction using the methodological resource of conversation analysis (CA) (Hellermann, 2008, 2009; Pekarek-Doehler, 2010; Reddington, 2018; Seedhouse, 2004; Wong & Waring, 2010). CA studies of L2 classrooms aim to focus on micro details of recorded naturally occurring interaction and to describe organizational features of talk in order to enable researchers to analyze data from an emic and inductive perspective. CA, as an ethnomethodological approach, provides insight into how participants make their orientations and understandings available to each other as they engage in socially situated activities (Kasper, 2004) and communities of practices (Lave & Wenger, 1991). One of the main interactional organizations in CA as one essential characteristic of teacher-student interaction is repair practices. Repair refers to addressing problems in speaking, hearing, or understanding of the talk (Schegloff, Jefferson, & Sacks, 1977). Despite SLA research's interest in uptake in repair as a vehicle for acquisition (Lyster & Ranta, 1997), CA is interested in the sequential organizational nature of the repair. In this regard, repair organization describes how participants engaged in a talk deal with repairable (trouble sources), initiation and completion resulting in four repair trajectories: self-initiated self-repair (SISR), self-initiated other-repair (SIOR), other-initiated self-repair (OISR), and other-initiated other-repair (OIOR) (Schegloff et al., 1977).

Repair, as the umbrella term in an L2 classroom, includes but is not limited to correction of errors or mistakes, clarification requests, comprehension checks, restatements, and the like. Participants in classroom interaction frequently experience episodes of troubles, linguistic or form errors, factual or meaning errors, and errors of speaking, hearing and understanding. Through their interaction, teachers
and students can display their contingency, reflections of prior talk and in doing so, they can reveal understandings of previous problematic turns (Lee, 2007). When such turns occur, and whatever their sources, how teachers phrase their repair practices is crucial because these turns afford learning opportunities, the opportunity for learners to participate and repair their talk.

For many years, researchers and educators have been examining and categorizing repair types as having varied influences on language learning (Lyster, Saito, & Sato, 2012; Nassaji, 2015) without considering the pedagogical purpose of the interactional contexts as in CA studies of classroom repair (Kasper, 1985; Seedhouse, 2004). Classroom interactional contexts refer to different activity types in oral classroom interaction; each context consists of specific pedagogic goals and specific interactive practices. It is this goal-orientedness of contexts that determines the preferences and dispreferences for specific repair organizations (Seedhouse, 2004). Kasper (1985) examined repair in language-centered and content-centered phases of an EFL lesson and found that content-centered phases are close to an informal conversation in which self-repair is more common, and other-repair is prevalent in language-centered phases. Later, Seedhouse (2004) outlined repair organization in terms of (a) participants in the repair, (b) repair trajectories, (c) types of repair, and (d) focus of repair. Likewise, Walsh (2006) identified several contexts and argued that a teacher's use of language (including repair practices) might be context convergent (where pedagogic goals and language use coincide) facilitating learning opportunities, or context divergent (where pedagogic goals and language use do not coincide) hindering learning opportunities.

In sum, the contexts analysis of the repair organizations can be based on Schegloff et al. (1977), Seedhouse (2004), and Walsh's (2006) frameworks. The repair sequences may be analyzed concerning these categories: (a) the repair focus or the repairable; (b) typical repair trajectory; (c) typical participants in the repair; (d) types of repair completion; and (e) context convergence or divergence.
In light of the importance of repair interaction and goal-orientedness of repair organization, it is desirable for researchers to increase teachers' interactional awareness through teacher education programs (Walsh, 2010, 2013). Awareness refers to a more conscious use of language, adjusted to pedagogic goals and noticing the effects of interactive practices including repair practices on learning opportunities (Walsh, 2006). CA studies on teacher education programs can explore interactional awareness through the reflective conversations between teachers and educators, where thoughts and ideas about classroom practices are discussed. (Karim, Mohamed, & Rahman, 2017; Ratminingsih, Artini, & Padmadewi, 2017; Walsh, 2011). In these programs, teachers can be scaffolded by extending a sociocultural view of teacher education according to which professional development occurs through dialogue (Lantolf & Thorne, 2006; Walsh, 2010, 2011; 2013).

It is furthermore relevant, in CA studies of teacher education, to track the progressional changes of teachers and students and learning opportunities with longitudinal data. This can show evidence of change in repair practices by the same participants at different points in time (Brouwer & Wagner, 2004; Cekaite, 2007; Forrester, 2008; Hauser, 2017; Hellermann, 2008, 2009; Pekarek-Doehler, 2010). Markee (2008) proposed a learning behavior tracking methodology to advocate a longitudinal approach to CA-for-SLA. Illustrating how interactional skills can be examined longitudinally, Brouwer and Wagner (2004) argued for the adoption of a developmental perspective in CA studies to overcome the limitation of the clear focus in CA research. Martin and Sahlström (2010) discussed that repair practices are longitudinally observable and comparable by the analysts. In this regard, Young and Miller (2004) studied how a learner increased his participation in repair sequences in writing conferences. Hellermann (2009) analyzed evidence of repair change over time regarding what the participant learners oriented to as repairable, repair initiation and completion.
While studies reviewed above provide useful frameworks for understanding classroom repair, there is a need for more research on repair organization, especially in the context of EFL, to take into account the details of the interaction. This article furthers this line of research by describing the organizational patterns of one EFL teacher's repair practices (the teacher's orientation to repairable, completion, and repair trajectory) at one private language institute, in Iran to see in what ways the teacher's repair practices and organizations are context convergent and divergent (i.e., the repair practices fit with the context). We focused on two classroom contexts including form-oriented and meaning-oriented contexts. The study also traces changes in the teacher's repair practices and interactional awareness over a period of six months along with the changing impacts of different organizational patterns on learners' learning opportunities. Exploring data collected longitudinally from the same class using CA, this research will contribute to the understanding of the longitudinal changes in repair organizations, opportunities for second language (L2) learning in the classroom, and insight into orientations and interactional awareness that teachers and students display through their interactions.

**Method**

This study was designed to provide a detailed description of repair and to trace changes in the participants' enacted orientations. The overall design was a micro-ethnographic longitudinal case study using methods from conversation analysis selected for in-depth analysis of the teacher education program. The case study method, as one kind of ethnographic research, emphasizes the individuality and uniqueness of the participants and the setting (Hammersley, 1994). Given this, we found the qualitative and interpretive methodological paradigm of CA more suitable for our research purpose (Sacks, Schegloff, & Jefferson, 1974). There is a rationale for using the CA framework to study classroom interaction. This rationale is based on and expands Seedhouse (2004), and Walsh's (2006) works on the interactional organization of L2 classrooms that
suggested CA's consideration of context as dynamic and variable (Heritage, 1997).

**Setting and Participants**

The context of the study was teacher-student oral interactions in general English classes at one private language institute in Ghaemshahr, Iran. Most of the classroom interaction was teacher-fronted in which learners were required to complete many meaning-oriented activities such as discussions and critical reading and form-oriented activities such as checking workbook and doing grammatical exercises.

This study took place over six months for two terms in 2016 in the classrooms of one experienced English teacher (four lessons of term one and seven lessons of term two). The teacher (indicated by the pseudonym T), a male master's degree candidate in Teaching of English as a Foreign Language in his early 30s from Iran, had more than ten years of EFL teaching experience. He was chosen purposefully based on his teaching experience and background working with video-recorded teaching. The seven students (in attendance range from three to six depending on the day) (female=3 & male=4) with an age range of 17 to 30 were all Persian L1 speakers. The course taught during the project period was the intermediate level.

**Data collection and Analysis**

The overall data collection and analysis procedure we followed is as follows. The data collection was done in the classroom, the teacher and one of the researchers reflected and acted on what they observed and finally, the understanding emerged through analyzing lessons and reflective conversations (Walsh, 2013). For data collection, a multi-method was used to triangulate data and to enhance understandings of interactional practices through the detailed description and an epic account of the data. We used recordings (both video and audio),
transcripts, reflective conversations/interviews, stimulated recall procedures, and teacher's self-evaluation reports.

The study was conducted in two main phases. The first phase was descriptive in order to explicate a general pattern of repair practices. Data for this phase were collected qualitatively through video and audio-tape recording of classroom interactions (seven hours of four lessons). They were then transcribed according to CA conventions (see the Appendix) and were analyzed descriptively and qualitatively. Informed consent was obtained from all the participants. To establish a rapport with the learners and the teacher, one of the researchers attended the first few classes.

The transcripts were analyzed within the CA framework (Sidnell & Stivers, 2013; ten Have, 2007) and various nonverbal resources were taken into account including gaze, gestures, and body movements as well. First, a line-by-line CA analysis of all repair sequences was done in terms of the organization of turn-taking, sequence organization, and repair organization followed by a multiple analysis. We made similar comparisons, but across lessons for a similar kind of repair taken as an indicator of the learner's improvement in correcting that error (Aljaafreh & Lantolf, 1994).

The repair sequences were analyzed concerning a couple of categories for research questions based on Schegloff et al. (1977), Seedhouse (2004), and Walsh's (2006) frameworks. The main categories and their sub-categories of our analysis are presented in Table 1 as a kind of coding scheme.
Table 1.
*Coding Scheme for Data Analysis*

<table>
<thead>
<tr>
<th>Main category</th>
<th>Sub-categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repair focus</td>
<td>grammatical-lexical-phonological-content error</td>
</tr>
<tr>
<td>Repair trajectory</td>
<td>OIOR-ORSR-OROR-SISR</td>
</tr>
<tr>
<td>Repair completion type</td>
<td>recast (implicit or explicit)</td>
</tr>
<tr>
<td></td>
<td>overt/direct/exposed repair</td>
</tr>
<tr>
<td></td>
<td>covert/indirect/embedded</td>
</tr>
<tr>
<td></td>
<td>delegated repair-peer or collaborative repair</td>
</tr>
<tr>
<td></td>
<td>designedly incomplete utterance</td>
</tr>
<tr>
<td></td>
<td>clueing/prompting repair-steering repair</td>
</tr>
<tr>
<td></td>
<td>clarification request</td>
</tr>
<tr>
<td></td>
<td>confirmation check/you mean + understanding</td>
</tr>
<tr>
<td>Participants in repair</td>
<td>teacher-current student-peer</td>
</tr>
<tr>
<td>Context convergence</td>
<td>convergent-divergent</td>
</tr>
</tbody>
</table>

Based on the findings from the first phase, we pursued with the second main phase of the study, a micro-ethnographic longitudinal case study with the purpose of teacher education to trace the developing awareness of the teacher-participant by considering his use of metalanguage and insights (Donato, 2000; Vygotsky, 1999; Walsh, 2006, 2013; Wells, 1999). In the first part of the second phase, an initial workshop was conducted to train the teacher-participant in the use of the repair framework. In the second part of the study, T participated in stimulated recall procedures via reflective conversations with one of the researchers. They read a whole lesson transcript after they had watched the recorded videos at home, and then they commented on the unfolding interaction. After the workshop, T was asked to do some self-awareness assignments analyzing the recordings and transcripts by completing some questions. The reflective conversations were recorded and transcribed for analysis; they were read in search of any instance of a teacher's awareness expressions to be coded and categorized into several minor themes or observations. The conversations contained semi-structured interviews which added dimension to the data. However, there were
limitations in using these interviews including the dependability of the teacher's useful and accurate information about his actions. Table 2 shows a summary of the data collection procedure discussed earlier.

Table 2.

**Data Collection Procedure**

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Lesson</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T’s consent for phase 2</td>
<td>Oct, 2016</td>
</tr>
<tr>
<td></td>
<td>video-recording of T’s teaching</td>
<td>Oct-Dec, 2016</td>
</tr>
<tr>
<td></td>
<td>viewing tapes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>initial reactions and written observations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>transcribing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>microanalysis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>addition of nonverbal behavior to transcript and microanalysis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>elaborating analysis</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 2</th>
<th>Session/Lesson</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repair Framework training</td>
<td>T-R sessions 1 &amp; 2</td>
<td>Dec &amp; Jan 2016</td>
</tr>
<tr>
<td>Reflective conversation</td>
<td>T-R session 1</td>
<td>Jan, 2016</td>
</tr>
<tr>
<td>Observation including video-recording of teaching</td>
<td>T (lesson 5)</td>
<td>Jan, 2016</td>
</tr>
<tr>
<td>viewing tapes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>initial general observations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>transcribing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>microanalysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflective conversation</td>
<td>T-R session 2</td>
<td>Feb, 2016</td>
</tr>
<tr>
<td>Observation</td>
<td>T (lesson 6)</td>
<td>Feb, 2016</td>
</tr>
<tr>
<td>Reflective conversation</td>
<td>T-R session 3</td>
<td>Feb, 2016</td>
</tr>
<tr>
<td>Reflective conversation</td>
<td>T-R session 4</td>
<td>Feb, 2016</td>
</tr>
<tr>
<td>Observation</td>
<td>T (lesson 7)</td>
<td>Marc, 2016</td>
</tr>
<tr>
<td>Reflective conversation</td>
<td>T-R session 5</td>
<td>Marc, 2016</td>
</tr>
<tr>
<td>Reflective conversation</td>
<td>T-R session 6</td>
<td>Marc, 2016</td>
</tr>
<tr>
<td>Reflective conversation</td>
<td>T-R session 7</td>
<td>Marc, 2016</td>
</tr>
<tr>
<td>Elaborating analysis</td>
<td>Phase 1 &amp; Phase 2</td>
<td>Marc-April, 2016</td>
</tr>
</tbody>
</table>

*Note. R=Researcher, T=Teacher*
To establish validity or trustworthiness, as a criterion often applied to qualitative analyses (Maxwell, 1992; Messick, 1989), we provided high-quality recordings, detailed transcripts, repeated examination of the recordings and transcripts and full qualitative description (Creswell, 2007). As is typical for qualitative studies on classroom interaction, our analysis included specification of analytic categories focusing on structures rather than on variables (operationalized concepts into unambiguous isolatable items) since our observations were naturalistic. Finally, the analytic procedures of CA including the ‘next turn proof procedure’ was taken by the researchers to avoid from imposing motivated analysis (Richards & Seedhouse, 2007). Reliability of CA results means reproducibility and dependability (Waring, 2016) which are also tied to the highly detailed transcripts (Seedhouse, 2005) to ensure that the same data would yield consistent analyses across time and viewers. Moreover, coding was done based on emergent patterns and intera-rater agreement.

Results and Discussion

We first present a general organizational pattern of repair practices. Next, we analyze overall qualitative changes in repair organization in the classroom community of practice as indicated in the extracts chronologically listed. We examine similar contexts for how repair practices used by the participants at different points in time along with the teacher’s awareness changes in the reflective conversations analyzed from interview data.

Note that in drawing from the perspective of learning in sociocultural and situated learning theories, we explore change from peripheral to ‘fuller participation’ (Lave & Wenger, 1991, p. 29) rather than making claims for learners’ linguistic competence in English. Pedagogical contexts that encourage engagement across repair sequences, especially opportunities for self-repair, are considered beneficial to learning.
Phase 1 Results – General organizational patterns

In coming to understand what made the patterns, we considered several categories or dimensions of repair organization that the participants drew upon in their interactions including repair focus, completion, and trajectory.

Repair focus – more attention to phonological and grammatical errors. In form-oriented contexts, T reacted to all types of grammatical errors including errors of syntax, lexis, phonology, and discourse. However, the most frequent type was found to be phonological errors. Grammar errors were the second category; the least frequent ones were vocabulary and discourse errors. A greater value of grammatical errors falls in line with previous studies (Brown, 2016; Mackey, Gass & MacDonough, 2000; Mozaffari & Allami, 2017). In meaning-oriented contexts, both linguistic errors (primarily phonological errors) and content errors were repaired almost equally. Furthermore, incorrect linguistic forms were frequently ignored in this context to create meaningful and genuine conversations unless they prevented the interaction from continuing (Seedhouse, 2004).

Repair completion type – more use of other-repair types. Data analyses revealed a range of divergent and convergent repair completion types which are shown in Table 3. Table 3 shows that when the aim was practicing form, T used other-repair types more predominately than self-repair ones. However, students need opportunities for self-repair or fuller participation based on situated learning theory (Lave & Wenger, 1991, p. 29). Furthermore, T showed a rather strong tendency toward avoiding negative feedback and using vague, implicit repair (Seedhouse, 1997) and you mean plus an understanding repair in a modulated way (Schegloff et al., 1977).

By contrast, he used some repair practices including encouraging peer repair, collaborative, explanation, clueing, prompting and steering repair, more convergently. The teacher addressed both the current and
peer learners, ‘unaddressed others’ (Reddington, 2018), especially through direct repair and clarification request in meaning-oriented contexts. Direct repair, as Walsh (2002, 2006) indicated, tends to be a convergent practice in meaning contexts since it has minimal impact on the discourse. Likewise, clarification request repair initiating prompts implies errors convergently (Atar & Seedhouse, 2018; Lyster & Ranta, 1997).

### Table 3.
**Repair Completion Types**

<table>
<thead>
<tr>
<th>Form-oriented Context</th>
<th>Convergent practices</th>
<th>Divergent practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer, collaborative, clueing, prompting, and steering</td>
<td>Other-repair types more than self-repair types</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Avoiding negative and direct feedback</td>
<td></td>
</tr>
<tr>
<td></td>
<td>You mean plus an understanding repair</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vague repair</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reduced wait time for self-repair</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Meaning-oriented context</th>
<th>Convergent practices</th>
<th>Divergent practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other repairs more than self-repair</td>
<td>Embedded repair more than exposed repair</td>
<td></td>
</tr>
<tr>
<td>Direct repair</td>
<td>Clarification request repair</td>
<td></td>
</tr>
</tbody>
</table>

| |
| Repair trajectory – more use of OISR trajectory. | In form-oriented contexts, no matter what the interactional context was, OIOR occurred more than OISR. The main explanation for this finding appears to be that first, other-correction is the most frequent repair type in expert-learner interactions (Kurhila, 2001). Secondly, completing repair by the student delays the production of the actual repair. Another factor could be the teacher’s teaching experience leading to the use or non-use of delayed correction (OISR) (Rolin-Ianziti, 2010). |
Phase 2 Results – Tracing Changes

Data extract examples. We analyzed the emerged changes within three following dimensions. We discuss the findings relevant to the dimension of the turn-taking system managed by the students and the teacher within each of the other presented categories. We also consider the sequential organization of repair acts that were regularly produced, and how the participants constructed a participation framework.

Change in repair focus – more attention to grammar and lexical errors. The first notable change was T’s more attention to grammar and lexical errors to be different from what was observed in term one where repair focus was on phonological errors. Extract 1 illustrates this change, taken from phase 2 lesson 2.

Extract 1 – (phase 2, lesson 2)

1 T: Do you know the most superstitious people in the world?
2 L1: Indians? or Chinese.
3 …
4 T: yes. I think French people are also superstitious.
5 …
6 L1: yes I think but the super-sti-tious ((cannot pronounce the word))
7 T: super-sti-tious
8 ((mimics L1’s way of pronouncing the word in a funny way))
9 L1: ((laughs)) the noun. What is it?
10 T: superstition.
11 L1: superstitious is a reason for peeshraft. So what is peeshraft?
12 T: advance.
13 L1: for advance of the [(.) French,] =
14 T: [improvement] development.
15 L1: yes development.

In Extract 1, T exhibits increasing attention to lexical errors which were neglected mainly in phase 1. Line 14 is peculiar since T realizes the incorrect use of the word *advance* after hearing L1’s use of the scaffolded word in the sentence; he substitutes it with the words *improvement* and *development* contingently. Such a repair practice, the
orientation to specific repairable, may be considered as evidence of a change in T’s repair practices and interactional awareness.

b. **Change in repair trajectory –more use of OISR.** OIOR is not a characteristic of divergent repair practice but rather is a frequent repair practice in classroom interaction which tends to be convergent in meaning-oriented contexts. However, overuse of this trajectory is divergent in form-oriented ones. The production of OISR, by contrast, requires that a teacher monitors the co-construction of ongoing talk to elicit self-repair. Looking longitudinally, an increase in the frequency of OISR over the T’s two terms of the study was the second change, in particular in form-oriented contexts (see Table 4).

Table 4.

*The frequency of Repair Trajectories in Form-Oriented Contexts*

<table>
<thead>
<tr>
<th></th>
<th>Phase 1</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Lesson 1</td>
<td>Lesson 2</td>
<td>Lesson 3</td>
<td>Lesson 4</td>
</tr>
<tr>
<td>NO of OIOR</td>
<td>18</td>
<td>35</td>
<td>50</td>
<td>42</td>
</tr>
<tr>
<td>NO of OISR</td>
<td>13</td>
<td>10</td>
<td>10</td>
<td>19</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Phase 2</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lesson 1</td>
<td>Lesson 2</td>
<td>Lesson 3</td>
<td>Lesson 4</td>
<td>Lesson 5</td>
<td>Lesson 6</td>
</tr>
<tr>
<td>NO of OIOR</td>
<td>43</td>
<td>38</td>
<td>10</td>
<td>24</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>NO of OISR</td>
<td>36</td>
<td>25</td>
<td>8</td>
<td>20</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>

What can be noted in Table 4 is the gradual increase in self-repair by the learners. This change is similar to findings of change in previous studies (Hellerman, 2009; Martin, 2009). Though this increase in the frequency of self-repair cannot be regarded as a change in linguistic competence, it does indicate an increase in participation opportunities for learners. Extracts 2, 3 and 4 show evidence of such a change. In phase 1, nearly all sequences for grammar checking exercises (form-oriented contexts) contained OIOR trajectory. By contrast, gradually more OISR appeared in phase 2; however, OISR remained to be used judiciously like
when the exercise seemed to be difficult for the students. All sequences below contain learning this logical form: *modals + have + past participle*.

Extract 2 occurred in a form-oriented activity taken from phase 1, lesson 4 in which the teacher is asking about learners’ regrets to elicit the form.

**Extract 2 – (phase 1, lesson 4)**

1. T: Let’s talk about the regrets. Miss Taban.
2. What’s your regret? (.) in your life.
3. L4: hm about-during my high school.
4. T: uhu you have a regret about ( ) what is that exactly? What is it?
5. L4: I wish I-I must studied
6. T: you mean I should have studied.
7. L4: yes I should have studied
8. T: yes yes you are talking about regrets, you say should have pp.
9. ok. And Mrs Esfandiari, how about you?
10. L3: one of-one thing I remember now I think I should-
11. → I shouldn’t have leave study English, =
12. T: uhu you say I shouldn’t have studied English? Or I should have studied English?
13. L3: no no no. *Farsi begam?* (can I say it in Farsi)
14. T: no no in English.
15. L4: *tark kardan*. (to leave)
16. T: in English
17. L4: leaved *bayad migoft* (she should have said)
18. T: uhu I shouldn’t have quit.
19. L3: quit
20. L4: leave *nemishe* (is not correct)?
21. T: no I shouldn’t have quit for example studying English.

In line 5, L4 produces a sentence trying to use the modal verb *must* in the past tense which is given explicit recast by the T in the subsequent line. T initiates on L4’s trouble source and corrects it himself (OIOR) *you mean I should have studied* which is given confirmatory uptake by L4 in the next line. The other correction is mitigated, done with the uncertainty marker ‘You mean’. This other-initiation of repair indicates a ‘possible understanding of prior turn’ (Schegloff et al., 1977, p. 368). The OIOR is
repeated in line 12 in T-L3 interaction. Despite this, it can be seen in next lines, another learner (the very L4) is encouraged to participate in the repair process as a result of L3’s attempt for self-expression and self-repair (line 13), *no no no. Farsi begam?* This peer-completed repair seems to be useful regarding L3’s clarification and consequently T’s other-repair (lines 18 and 21) which is also called collaborative repair (Nassaji & Swain, 2000). The turn-taking organization in Extract 2 seems to illustrate an IRF/E-structure (Mehan, 1979). T produces more of repair acts and appears to use the second person pronoun *you* frequently (see lines 6, 8, and 12).

In contrast to the turn-taking organization in the above Extract from the first phase, in Extracts 3 and 4, taken from the second phase, it can be observed that the repair work resembles more closely repair in ordinary conversation resulting in a more dialogic turn-taking organization as the students participate more fully in the repair interactions. First, take Extract 3 below, taken from lesson 3 in phase 2.

**Extract 3 – (phase 2, lesson 3)**

1. L3: → ((reads)) you feel sick after a big fish dinner.
2. T: it looks delicious, but I shouldn’t eat that much.
3. T: it could have been ha? (L3 nods) it could have been more delicious
4. or it could have looked tasty, but?
5. L3: shouldn’t is, =
6. T: =but I shouldn’t? =
7. L3: (0.1) I should not have eaten that much.
8. T: =eaten that much. Yes.

Extract 3 indicates T’s provision for fuller participation by the student. For example, T produces a turn structure (line 8) called ‘a designedly incomplete utterance’ or DIU (Koshik, 2002). By not supplying the missing *have plus past participle* after *should*, T produces a DIU eliciting self-repair. After a brief pause, the student utters *I should*
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not have eaten that much (line 9), completing the clause by supplying the missing part.

Extract 4 below showcases later occasions of the same grammatical form (the very next lesson, phase 2 lesson 4).

**Extract 4 – (Phase 2, Lesson 4)**

1. T: Saberi, six?
2. ((reads)) Your boss promised to promote you,
3. but it still hasn’t happened.
4. L1: you should have spoke with him. ((gaze to T for confirmation, but T does not look up at him. L1’s gaze away from T to the text))
5. No. you must have spoke.
6. (1.0)
7. T: spoke? ((does not look up at L1 and still gaze down))
8. L1: yes.
10. L1: talked ((nodes))
11. T: ((reads)) promised to promote you, but it still hasn’t happened.
12. So what do you say for the first part? I mean using must, could or might have pp. ((still gaze down))
13. L3: ((raises his hand)) can I say?
14. T: ((nodes to show permission for answer))
15. L3: hmm maybe she- she must have been busy this week,
16. you should ask him. you should ask her
17. T: she might have?
18. L3: she must have. have busy. ((looks down)) have [been] busy.
19. you should ask him-ask her.
20. (2.0)
21. T: still hasn’t. you say that? You?
22. L3: [you should ask]
23. L2: [you should ask her.]
24. L3: you should have been- have been ask
25. T: ok ((smiley voice))
26. L3: no. it’s wrong. could have talked to her.
27. T: you could have talked to? her. yes. it’s a suggestion.

In Extract 4 above, T jointly displays attention to the error. He identifies a problem in the use of the new linguistic form; he sometimes
provides a candidate repair. For example, L1 starts to produce a sentence involving a tense which is not the targeted one *you should hm spoke with him* (line 4); the teacher, therefore, initiates repair in line 8. The teacher repeats the learner’s previous utterance to prompt self-correction *spoke?* with a rising intonation indicating that this specific word is in need of repair. Other examples of prompting in this repair sequence are: *So what do you say for the first part? I mean using must, could or might have pp* (lines 13 and 14), *she might have?* (line 19), *still hasn’t. you say that? You?* (line 23); gestured-repair via gazing down in lines 8 and 14; and extended wait-time (lines 7 and 22). By accompanying repair with gestures, the sources of problematic turns were made more apparent for the student (Allen, 2000; Lazaraton, 2004).

Extract 4, in fact, reflects a change in participation framework and turn management as the teacher shapes his turns to elicit repair from learners through prompting (Radford, 2010). At the same time, the students change from uttering reduced turns to producing complete turns (turn 4, 17 and 20). Here in between, the situational context change more often as the responsibility for repair is reversed back to the T in line 19 and finally back to the students themselves in lines 20, 21, and 24-26.

In sum, in phase 2, students demonstrate fuller participation, unlike the first phase in which problems in understanding and forms are mainly resolved by the Other person (T). The students even sometimes detect problems independently of the teacher, notable as self-initiation with self-correction (Kääntä, 2014), (See, for example, line 28 in Extract 3 above). L3 is here able to detect problems in the ongoing talk correcting the answer: *no. It's wrong. could have talked to her.* Here, T's scaffolding repair can be observed until L3 produces precisely the targeted string of linguistic forms.

c. Change in repair completion type – more other-repair and overt types. Along with the general increase in the frequency of OISR over time, a particular change in repair completion type was noted in T's later
lessons of study. This includes a change from other-repair to self-repair types used when necessary, particularly in form-oriented contexts. Extracts 4 and 5 highlight this change.

The first extract, Extract 5, is taken from phase 1, lesson three where the students are supposed to read some accounts of unusual dreams and share what they think about these accounts in a meaning-oriented activity.

**Extract 5 – (phase 1, lesson 3)**

1. T: guess the story. Mr Asrari? Number one?
2. what is the woman’s problem?
3. L2: *hm she is very stressful, (= ((grammatical error)))
4. T: =yes she is very stressful (= (accepts the response))
5. or she is very stressed out, (= (corrects the error))
6. and (=) hmhm Mr Asrai, what do you think the man is telling her?
7. (2.0)
8. L2: *hmhm take a rest and [go to] yoga.
9. (lexical error: go to yoga (do yoga)))
10. T: [yoga,] or?
11. L2: *because she felt stress (= (grammatical error)), go to the ocean.
12. T: yes

This sequence represents a typical pattern of participation in the organization of repairs, where the T, through an other-initiated other-correction, recasts L2’s grammatical error (*she is very stressful*) in an implicit and even vague way. He accepts the error *yes she is stressful* and immediately corrects it by using, *or he is very stressed out*. This implicit repair seems to lead to the repetition of error relevant to the same structure by the same learner later in line 11 *because she felt stress* (the correct form is feel stressed or feel under stress). The same grammatical error occurred in phase 2 again. The following sequence, Extract 6, is taken from lesson 6, approximately four weeks later after the students had more opportunities for self-repair. The pedagogical focus here was placed more on meaning, fluency, and task completion than on accuracy.
The class had watched a video, and now they were completing a Guess the story exercise.

**Extract 6 – (phase 2, lesson 6)**

1  T: Go to part B. Read these accounts of unusual dreams. What do you think they mean. (page 34). You can use the expressions in the box to express your ideas. ((students are reading the dreams))

2  L3: → I think he or she is a uh uhm is a man who have very stress in his work and can’t do anything right.

3  T: you mean he is stressed out? ((reads the first dream)) uhu. He is in a stressful situation or stressed out. Ok. and cannot concentrate on his work?

4  ... Borhani, what’s your idea about number one?

5  L2: I agree with Mr. Saberi

6  T: what did he say?

7  L2: he said he is stressful I think.

8  T: stressed (. ) out.=  

9  L2: = stressed out. =

10  T: =not stressful. Stressful is used for situation.

11  L2 yes.

12  T: stressed out. ((to L2)) Ok you continue with your notes. ((gaze to L5)) how about you? what do you think?

13  L5: → I think it will happen to someone. For example, he or she should participate in seminar or she or he should have an speech- a speech and he or she can’t memorize his lines or her line or maybe forgot- forget the lines. ((incorrect pronunciation of “memorize”))

14  T: and I mean he or she is- he or she is out stressed?

15  L5: stressed out.

In the subsequent line to L2’s problematic turn (line 8: *a man who have very stress*), despite the meaning-orientedness of the context, T inserts an exposed correction sequence where he corrects the student’s incorrect forms inside a larger meaning sequence *you mean he is stressed*
out? ... He is in a stressful situation or stressed out (lines 10 and 11). This extract shows two things. First, an exposed correction sequence can be inserted within the meaning-and-fluency type of activity (Rylander, 2009; Seedhouse, 2004). We can speculate that the teacher wanted to make sure that the students used correct forms. It also shows how T displays orientation to the completion of grammatical error, an exposed and specific repair type because it was required of the task.

Unlike the previous extract (Extract 5) in which T repair practices and the pedagogic aim do not coincide, in Extract 6, T repairs the grammatically correct form of stressed out explicitly and directly three times in interactions with three different learners (turns 10, 17 and 28) as all of these are necessary for exposure. The two earlier completions led L5 to attempt using the correct form, And I mean he or she is- he or she is out stressed? (line 27). This finding is consistent with those of Schmidt and Frota (1986) and Nassaji and Swain (2000), which suggest that the effect of correction depends on its explicitness.

Another particular relevant change to the repair completion category is an increase in using negative feedback and overt repair, especially when repairing pronunciation errors in form-oriented contexts. Let's compare and contrast an implicit repair from phase 1 with an overt, negative or explicit one in phase 2 in the final two extracts. They illustrate T's further development of repair practices in activities in which the primary focus is on form and accuracy.

Extract 7 – (phase 1, lesson 3)
1  L1: (reads) mental stress caused by things such as relationship problems, financial worries or carrier concerns.
2  (incorrect pronunciation of the words “career” and “concerns” and “worries”))
3  T: financial worries. (corrects the error) “financial” refers to?

Extract 8 – (phase 2, lesson 6)
1  (T stops the CD))
2  T: Borhani, what was the dream?
3 L2: she came back to school and (.) she have a dream.
4 T: yes. yes. she is BACK in high school, =
5 L5: =she has final exam. =
6 T: =uhu. She has a test that she is not prepared for.
7 Milani, what’s the meaning?
8 L4: she didn’t has math exam.
9 T: no no no. what’s the meaning. What does she think.
10 L4: =worried. ((incorrect pronunciation of “worried))
11 T: yes. she is worried. = ((corrects the error)).
12 L4: =worried. ((still incorrect))
13 T: =worried no. she is worried. She is over-whelmed.

and later
14 T: Milani, what’s your idea? About the first one?
15 L4: I think (3.0) he is very worried (.) worried.
16 (pronounces the first “worried” incorrectly and corrects his own error))
17 T: uhu he’s worried? He is a kind of worried person. Anxious.

While in Extract 6 (taken from phase 1, lesson 3) T repairs the pronunciation error of the word worries implicitly, in Extract 7 (taken from phase 2, lesson 6), T uses negative feedback in correcting the same word, worried no. she is worried (line 13). This explicit and harmful repair completion type leads to self-initiated self-repair by the same learner (L4) in line 15 and T's confirmation in the subsequent turn. T's orientation displays an emerging understanding of the need for a correct pronunciation which is a preferred or convergent repair practices in form-oriented contexts (Young & Miller, 2004). The same orientation was observed in data in other lessons, where T specifically repaired pronunciation more explicitly and overtly.

**Tracing changes in interactional awareness.** The results and discussion which follow, in the format of a series of observations, center principally on the data collected from workshop and reflective sessions, T's voices and the descriptive and evaluative comments based on his perceptions and new understanding and the researcher's analyses (T: teacher and R: researcher).
Observations from reflective conversations data:
observation 1: identification of contexts
observation 2: identification of repair organization
observation 3: awareness of context dependency of repair
observation 4: enhancing learning opportunities
observation 5: use of metalanguage
observation 6. conscious interactive decision-making
observation 7: critical self-evaluation

In conversation 1 below, taken from the sixth reflective session, the teacher and the researcher are reading aloud and discuss at length several segments from lesson transcripts.

**Conversation 1 – (Reflective Conversation session 6)**

1. R: now RS6 on page 3. They (students) read the dreams.
2. T: Any ideas? Several students were struggling with the expression “stressed out”
3. R: scaffolding repair?
4. T: yeah later. Can you compare these lines: 173, 186, 188, 196 and 197?
5. R: Different repair types and different learning opportunities,
6. T: your repair work and the aim of this context.
7. R: here is form embedded in meaning context yeah?
8. T: yes.
9. R: I used scaffolding repair, clarification request, explanation repair.
10. T: I tried to teach the difference between stressful and stressed out
11. R: what type of repair is 173?
12. T: recast?
13. R: yes.

The significant points to note from this conversation are, first, T is able to identify the pedagogical context (line 7), *here is form embedded in meaning context* and relate it to his teaching goals, to ‘read’ his environment (van Lier, 2000, p. 11). Second, there is a recognition that the teacher has principal responsibility for making repair practices that are convergent to the context (line 11), *which suits the form context* (Walsh, 2006). Third, he demonstrates his sensitivity to language use via
using a proper metalanguage. As expected, in this study, the teacher’s use of metalanguage progressed after participating in reflective sessions and analyzing the repair framework. This can be evident from line 9 of the above conversation, *and I used scaffolding repair, clarification request, explanation repair*. The teacher seems to believe that these three repair completion types, particularly in the form-oriented context, function well highlighting the metalanguage relevant to the form context. This confirms the teachers’ awareness of scaffolding repair, clarification request, and explanation repair and their functions in a particular type of context. The comments indicate that the teacher can connect his pedagogic goals and use of language and to use appropriate repair talk. This conversation exemplifies how teachers can analyze the positive and negative effects of interactive decisions on learning opportunities (Walsh, 2010).

There is also evidence of critical self-evaluation in T's comments. Consider Conversation 2, for example, in which the focus is on comparison of two repair sequences, one earlier and one later in the second phase of the study.

**Conversation 2 – (Reflective Conversation session 3)**

1. R: please compare and contrast repair in these form contexts in the two sessions.
2. In session 1 of phase 2 with session 3.
3. The grammar point was could, should plus have plus pp.
4. T: (describes the situation) In session 1 after I taught could, should, might have pp, there was a grammar exercise in the book with several situations and they were supposed to change the sentences using the new grammatical point. L3 is reading the exercise: (she reads) *you feel sick after a big fish dinner. It looks delicious*. and she answers: *But I should not eat that much*. Here, I asked her to pay attention to the purpose of exercise which was using could, should have pp but she has not used it; she had used should plus simple form of the verb.
5. R: here you just said *could have been hu*? Please analyze your repair action here.
6. T: I did not ask her to correct herself.
7. No mistake was made just she did not use the new structure.
8. By supplying answers and repair completions, I aimed to ensure that learners succeed and avoid the emotional consequences of failure.
that’s right. now compare and contrast this with another sequence from session 3.

I think it shows my repair practice this time is convergent as I say to her *can you follow this one?* Might have pp. I am giving the student the chance to correct herself.

But in the previous sequence, I did not provide her with the opportunity.

The difference in consequences. Yeah? Here I had several attempts to push her.

L3 is a very active student. I wanted to give time to her so that others be encouraged to answer like her and to be more motivated.

yeah it took longer this time. Step by step you paved the way for self-correction.

The evaluation of the teacher, in Reflective session 3, indicates not only that he can relate his repair practices to his teaching/learning objectives, and he has the metalanguage to verbalize the repair actions taken, but also he can critically evaluate himself by stating that *I did not ask her to correct herself* (line 12) or *I did not provide her with the opportunity* (line 19). Furthermore, he justified, *By supplying answers and repair completions, I aimed to ensure that learners succeed and avoid the emotional consequences of failure* (lines 14 and 15). In this case, he may not try to ensure students’ learning opportunities as much as to deal with the challenges of communication. By contrast, as to another sequence, he stated, *I am giving the student the chance to correct herself* (line 18). That is, his repair practices did coincide with the activity that was going on. The differences in pedagogical focus might have led to the specific repair trajectories T referred to here. One pedagogical conclusion here is that it might be helpful for a teacher to balance the link for other- and self-repair in class.

What is of interest to the above conversation is that the teacher can justify his repair practices taken during the sequence and that he has an evaluative dimension to his comments. Furthermore, T seems to be motivated increasingly to improve his repair practice supported by direct suggestions from the researcher. It suggests that T's understanding has expanded providing learners with opportunity for self-repair. Such orientation can be evidence of a change in participation within a classroom community of practice (Lave & Wenger, 1991). This is an illustrative example of reflective conversations as a discursive process
This demonstrates sociocultural theory's emphasis that learning is a collaborative achievement (Aljaafreh & Lantolf, 1994; Donato, 2000; Vygotsky, 1978; Wertsch, 1985) which can be encouraged through dialogic interaction.

**Conclusion**

Our primary focus was on repair organization, and the attention was paid to small changes in repair organization over time. Through these small changes, we could explore learning as an interactional change in the shift of repair practices across different classroom contexts. The results demonstrate the possibilities of tracking learning through CA methodology (Brouwer & Wagner, 2004; Cekaite, 2007; Hellermann, 2008, 2009; Nguyen, 2008; Pekarek-Doehler, 2010; Young & Miller, 2004).

To summarize the findings from longitudinal observation, we observed a change in the participation framework over time. Although the teacher was still in control of repair initiation over phase two of our observations, the participation of both teacher and students changed in a way that showed two things. First, it indicated mutual co-construction of their roles. There was a progressive change for the learners from other- to self-completed repair and correction. The students were able to move from having peripheral and limited participation in the repair action at the beginning of the study to fuller participation by the end of the second term (Lave & Wenger, 1991). This change, though can be seen not as much in the learning of linguistic forms, was most notable around the real organization for repair. In line with several studies, teachers can use other-initiation of repair by supplying hints, prompts and gestures to foster students' self-repair (Ferreira, More & Mellish, 2007; Lyster & Ranta, 1997; Radford, 2010). As can be seen in Extract 4, the fact that the teacher provided more wait time for self-repair instead of immediately providing other-repair when a learner encounters trouble as he did in Extract 2 might have actually contributed to more instances of
self-repair (Ingram & Elliott, 2016; Manrique & Enfield, 2015; van Lier, 1988).

Second, the participation changes illustrated participants' sensitivity toward context dependency of repair organization. This finding is in line with other studies which have suggested the influence of larger contexts of learning on the quality of classroom discourse (Kasper, 1985; Kinginger, 1995; Seedhouse, 2004; van Lier, 1988). As Kasper and Kim noted, passing up repair serves "to sustain the current line of talk and keep the L2 participants actively engaged " (p. 39) as students are expected to self-repair their problems (Wong & Waring, 2010).

The findings from reflective conversations showed that, to a degree, the teacher's self-evaluations assisted his interactional awareness showing understanding of interactive decision-making (Walsh, 2010). For example, in many instances, especially early on, it was found that the teacher participant was not clear about the objectives of his lessons and variations of repair organization in each context (see Extract 2). Furthermore, he was enabled to explore a range of alternative repair practices for use in his classrooms, in particular, other-repair types such as prompts, hints and withholding answers in order for students to have more self-repair opportunities (see Extract 6). Finally, T learned to use an appropriate metalanguage to facilitate reflection, evaluate interactive actions, immediate reaction and change practices (Walsh, 2006, 2010, and 2013).

The foregoing findings imply that conversation analytic studies of classroom discourse show teachers how recording teaching sessions, analyzing the various interactions involving teacher repair and critiquing and reflecting on them, though time-consuming and challenging, may be effective for explicit understanding of repair. This can be applied appropriately in teacher education as well through reflective conversations between the teacher and a coach to enhance teachers' professional development via conversation extending the sociocultural view of learning (Donato, 2000; Lantolf & Thorne, 2006; Vygotsky, 1978; Wertsch, 1985). We hope that our research contributed to the
understanding of the changes in repair practices and opportunities for L2 learning (Hellerman, 2011; Nguyen, 2008, 2011; Pekarek-Doehler, 2010). Future research on a repair that can further explore new repair organizations and changes for the same teacher and learners on a moment-by-moment basis.

References


Ingram, J., & Elliott, V. (2016) A critical analysis of the role of wait time in classroom interactions and the effects on student and teacher


Appendix
Conversation Analysis Transcription Notations

T: teacher
L1: learner (identified as learner 1)
L: unidentified learner
LL: several learners simultaneously
(.) a short untimed pause
... deleted part
(2.0) timed silence
[ ] overlapping utterances
for- an abrupt cut-off of the prior word
stockholder stress
. falling intonation
↑ rising intonation
→ focus for analysis
, continuing intonation
yea::r prolonging of sound
WORD very emphatic stress or loud speech
°word° quiet speech
↑word raised pitch
↓word lowered pitch
>word< quicker speech
<word> slowed speech
= latch
() inaudible talk
(word) transcriptionist doubt or translation of L1
((gazes)) nonspeech activity or transcriptionist comment
Present shift to L1