Bilingual practices in the process of initiating and resolving lexical problems in students' collaborative writing sessions

Gunilla Jansson

► To cite this version:

Gunilla Jansson. Bilingual practices in the process of initiating and resolving lexical problems in students' collaborative writing sessions. *International Journal of Bilingualism*, 2007, 11 (2), pp.157-183. hprints-00475203

HAL Id: hprints-00475203

<https://hal-hprints.archives-ouvertes.fr/hprints-00475203>

Submitted on 21 Apr 2010

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Bilingual practices in the process of initiating and resolving lexical problems in students' collaborative writing sessions

Ph D Helena bani-Shoraka
Department of Linguistics
and Philology
Uppsala University
S-751 20 Uppsala
Email: helena.bani-shoraka@ling.fil.uu.se

Ph D Gunilla Jansson
Department of Scandinavian
Languages
Stockholm University
S-106 91 Stockholm
Email: gunilla.jansson@nordiska.su.se

Abstract

This study deals with the sequential organization of language choice and code-switching between Persian as a first language and Swedish as a second language in the process of initiating and resolving a problem of understanding and producing the correct version of a lexical item. The data consist of detailed transcripts of audio tapings of two bilingual students' collaborative writing sessions within the frame of a one-year master's program in computer science in a multilingual setting at a Swedish university. The students, both Persian-speaking, are advanced speakers of Swedish as a second language. For this article, four lexical language-related episodes, where code-switching between Persian and Swedish occurs, are analyzed. The analyzed excerpts in this article are drawn from a corpus of data consisting of language-related episodes identified and transcribed in the audio tapings. We employ a conversation analysis (CA) approach for the analysis of bilingual interaction. This means that the meaning of the code-switching in the interaction is described in terms of both global (the conversational activity at large) and local interactional factors. In the analysis, a close step-by-step analysis of the turn-taking procedures demonstrates how the communicative meaning of the students' bilingual behavior in a lexical episode is determined in its local production in the emerging conversational context and how it can be explicated as part of the following social actions: drawing attention to a problem, seeking alliance when a problem is made explicit and confirming intersubjective understanding when the problem is resolved.

Keywords: bilingual practices, conversation analysis, Swedish as a second language, collaborative writing sessions, language-related episodes, lexical problems, repair organization.

1 Introduction

This article explores bilingual practices and language alternation in word search sequences in collaborative text production. The study is carried out in a multilingual higher-education setting at a Swedish university; the participants are two Persian-speaking students, who are working collaboratively on a written laboratory report in Swedish, the second language (L2) of the students. Before turning to theoretical background and analysis, we will begin by providing a glimpse of how the speakers are involved in interaction focusing on the proper use of academic language. We do so in order to show the reader how the students' interaction is framed by the institutional task of creating an academic text. The excerpt below starts with a two-second pause while David, who is sitting at the keyboard, is busy typing (K=Ken, D=David¹).

(1)

1. (2) (nedskrivning)	1. (2) (typing)
2. K: detta gäller bara för=	2. K: this holds only for=
3. D: =ah det gäller emellertid (.)	3. D: =ah it nevertheless holds (.)
4. <emellerti:d> ((nedskrivning))	4. <nevertheless> (typing)
5. K: \$dus dari in kælæmæro benivisi to\$	5. K: \$you like to write this word\$
6. (hhh)	6. (hhh)

¹ All names of the participants are fictitious.

7. D: e: (.) emellertid **nemduni**
 8. **yæni či:**
 9. K: (h) \$næ: mænzuræm hæmun [dýlik o
 10. D: [°ha:°
 11. K: emeller[tid o [markade- **či bud in**
 12. D: [°he° [°ha°
 13. K: Markoolio:\$ (h[hh)
 14. D: [ha (.)

7. D: e: (.) **you don't know what** nevertheless
 8. **means**
 9. K: (h) \$ **no: I mean those** [similar **and**
 10. D: [°aha:°
 11. K: neverthe[less **and** [promin- **what was it this**
 12. D: [°he° [°ha°
 13. K: **one** Markoolio²:\$ [(h[hh)
 14. D: [aha (.)

The students' attention in this stretch of talk is focused on the fact that they are supposed to produce a text that is "academic", and that academic writing warrants a special kind of vocabulary, one which contrasts to their everyday language. This orientation to issues related to academic literacy is made relevant in the interaction by one of the participants' correction of the phrase "this holds only for" (Sw. "detta gäller bara för"), produced by his fellow student, in the subsequent turn (line 3) to the alternative "it nevertheless holds" (Sw. "det gäller emellertid"). The crucial point here is that the Swedish words problematized by the participants in this excerpt, *emellertid* (Eng. nevertheless) and *dylik* (line 9; Eng. similar, of this kind), all belong to a formal and academic register. One of the items pointed out by K on line 11 (*markade) is an invariant and ungrammatical form of the Swedish adjective *markant* (Eng. prominent, striking). On line 11 K is searching for the correct version of this word ("markade- **či bud in**"; "markade- what was it this one"), which has recently been used by D in a prior context, however not apparent from this excerpt. The stylistic value of these Swedish words is marked in comparison to a more informal everyday vocabulary. At the same time, the conversation reveals a tension around the use of these formal words, as seen in the jocular tone, including laughter and an artificial pronunciation, but also the contrasting of these formal words to a Swedish pop singer with an informal image (Markoolio³, line 13). Another phenomenon in the excerpt above, and one which will be subject to closer examination in this article, is the participants' use of two languages in the process of initiating and resolving a linguistic problem. On line 5, K problematizes D's word choice by commenting on his offered correction in the prior turn, "**dus dari in kælæmæro benivisi to**", "you like to write this word". At the same time he changes the language of interaction from Swedish to Persian. In his answer, D adapts to the language choice in the preceeding turn and checks to clarify whether his co-speaker really has understood the item in question. What we see here is how differential language expertise is brought into focus in a repair sequence and invoked by the speakers in the form of code-switching.

The study introduced in this article is part of a larger project⁴ (Jansson in press) on the role of collaborative writing for students' acquisition of unfamiliar academic writing practices. The research is framed by sociocultural theories (Lave 1993; Lantolf 2000) and seeks to gain further insight into participating in conversational practices in multilingual peer group interaction.

During the last few decades there has been a growing interest in the perspective of bilingualism as socially accomplished. This understanding of conversational code-switching and language alternation as a functional conduct, first originating from Auer (1984), demonstrates that participants manage to express a great deal of pragmatic and expressive meaning by such switches. In recent years there has been an increasing interest in applying conversation analysis (CA) as a tool for uncovering the meaning of code-switching. In most

² Markoolio is a Swedish pop singer using goofy lyrics and rhymes.

³ A large portion of Markoolio's fans are found among young school children. This is also related to a word play going in: the word **markade* (incorrect version of 'markant', Eng. prominent) starts with the same syllable MARK-.

⁴ The project *Collaborative writing and writing development* was funded by grants from The Swedish Research Council.

of these studies the data are based on casual conversation in informal settings (e.g. Jørgensen, 1998; Cromdal 2000, Steensig 2000).

From the late 1990's there has been a remarkable increase in research with an interest in interaction, language learning and participator's perspective in institutional contexts (e.g. Hall & Verplaetse 2000; Markee 2000; Wong 2000; Lantolf 2000; Kurhila 2004; Seedhouse 2004). Adopting a CA-perspective in investigating how individuals learn through participating in institutional practices in classroom activities is a recent research area (Lerner 1995; Masats & Unamuno 2001, Schegloff et al. 2002; Markee 2005; Gardner & Wagner 2004; Kasper 2004; Young & Miller 2004; Mori 2004; for Swedish investigations see Martin 2004 and Gröning 2006). However, to our knowledge, conversation-analytically inspired analyses of bilingual interaction taking place in an educational setting are an academic area still to be explored. A CA approach was adopted by two recent studies of code-switching in an institutional setting (Üstünel & Seedhouse 2005; Slotte-Lüttge 2005). Both studies have a pedagogical focus and bring valuable contributions to the field. Üstünel & Seedhouse depict the relationship between pedagogical focus and language choice in the language teaching/learning environment of English as a foreign language at a Turkish university. Slotte-Lüttge investigates the code-switching of bilingual children in Swedish and Finnish in a monolingual classroom from a second-language perspective. There is one notable difference between these studies and ours. Whereas Üstünel & Seedhouse (2005) and Slotte-Lüttge (2005) have focused on the organization of code-switching in interaction between teacher and student, the present study examines bilingual interaction between classmates acquainted with one another, but with differential language expertise. While the institutional goal of the classroom interaction in Üstünel & Seedhouse (2005) was language teaching/learning in the context of foreign language instruction, the main business of the students in the present study was to account for a scientific experiment in the form of a laboratory report. In this sense, both Slotte-Lüttge's study and ours deal with content-based conversation. However, in our case the students' activities were oriented to completing an institutional task in the form of a scientific text. Furthermore, the linguistic problems encountered during this work were mainly related to written discourse and academic literacy.

Another CA-inspired study is Kasper (2004), who explores informal talk between a beginning learner of German as a foreign language and a native speaker of German. In the metalingual exchanges when the institutional context is invoked, code-switching worked as one device by which the novice requested a target language action format from the language expert. Kasper states that "although the metalingual exchanges stood out for their salient acquisitional potential microanalytical scrutiny is also required for other kinds of interactional conduct in order to assess their capacity for second language learning" (ibid. p. 551).

To conclude, we will briefly consider two studies by Cromdal (2003, 2005), which are closely related to ours. Cromdal explores the mutually oriented work involved in collaborative computer-aided text production taking place in a bilingual 4th grade classroom of an English school in Sweden. The analysis highlights a distinct division of labor between the two languages, in which English is used for the purpose of producing the text proper, whereas Swedish is used for other forms of interaction like e.g. locating sources of troubles, directing activities and explaining linguistic items.

In relation to earlier research, the current study will contribute to our understanding of the sequential organization of bilingual practices in the process of initiating and resolving a language-related problem in an academic writing context. Since the meaning of these practices is embedded in the course of interaction they have to be scrutinized and explained in the actual context in which they occur (cf. Auer 1984; Li Wei 1998; Stroud 1998). In order to find out when code-switching behavior has a signaling value and when it is made relevant by

the participants, a close examination of turn design and organization of participation in conversational activities is needed.

2 Theoretical background

Our interest in this study lies in analyzing the social activities that the participants are engaged in when dealing with lexical problems and in uncovering the effect that a participant's choice of language at a particular point in this process has on subsequent language choices by the same or the other participant. In order to do this, we rely on detailed transcriptions and a sequential analysis of transcribed data as offered by conversation analysis (CA). Under the headings below we will outline some main theoretical strand points for the methods applied in the study: the conversation analytic frame, the code-switching frame, and a CA frame for analyzing bilingual data.

2.1 The CA frame

A fundamental starting point for CA is that every speech event contains a structure and that no feature of talk can be dismissed or regarded as irrelevant. Participants in conversation continually listen and respond to the talk of other participants, thereby displaying their own analyses of what has been said. Conversation, then, as opposed to monologue, offers the analyst a valuable analytical resource (Levinson 1983: 320-21). Utterances in interaction are sequentially organized. The idea of 'sequence' refers to the common experience that 'one thing leads to another' (ten Have 1999: 113). For speakers, this means that any utterance in interaction is considered to have been produced for the place in the progression of the talk where it occurs, especially just after the preceding one, while at the same time it creates a context for its own 'next utterance'. The concept of *adjacency pairs* is the major instrument for the analysis of sequential organization, but a sequence quite often includes more than just two pair-parts. In many cases, an item in third position is added to the two utterances in the adjacency pair, as an acknowledgement or evaluation by the first speaker of the item produced in second position (Tsui 1989).

Another of CA's core ideas rests on the organization of the turn-taking. The basics about conversation are that, most often, there is one and only one person speaking at a time, while speaker change recurs with minimal gap and minimal overlap. This is seen as a continuous contribution of the parties to the conversation, which they accomplish on a turn-by-turn basis. It is also argued that there are several ways in which speaker-change may be organized: the previous one can select a next speaker, a speaker can self-select, or the present speaker can continue speaking. These three options are hierarchically organized: other-selection goes before self-selection, which goes before continuation. As Schegloff (2000) explains, self-selection differs importantly from current speaker selection in that it is optional, whereas current speaker selection creates an attributable silence if the selected speaker chooses not to speak (Schegloff 2000).

The concept of preference, as it is used in CA, refers to structural features of the design of turns associated with particular activities, by which participants can draw conventionalized inferences about the kinds of action a turn is performing. For many adjacency pairs there are alternative second pair parts. This means that an invitation may be answered by an acceptance (preferred action) or a rejection (a dispreferred action). These options are performed in different ways: preferred actions are generally delivered without hesitation or delay at the start of the response turn. Dispreferred responses are generally accompanied by hesitation and delay, and are often prefaced by markers such as "well" or "ah" as well as by positive comments and appreciations. Dispreferred responses are frequently mitigated and accounted for by an explanation or an excuse. Preferred responses are generally affiliative whereas dispreferred responses are disaffiliative (Schegloff 1988: 453).

Repair organization in the conversation analytic sense is not equivalent to "correction" or "error" (Schegloff, Jefferson; Sacks 1977: 363). The phenomena called repair by conversation analysts are attempts at resolving what is being perceived and/or defined as a "problem" or "trouble" in the course of interaction (Duranti & Goodwin 1992: 261). There are organized ways of dealing with various kinds of trouble in the talk-in-interaction, such as problems of (mis)hearing or understanding. A repair sequence starts with a 'trouble source'. It should be clear that any utterance can be turned into a trouble source. The initiative can be taken by the speaker, which is called a 'self-initiated repair', or by others, which is called 'other-initiated repair'. The repair itself can be carried out by the original speaker, 'self-repair', or by the others, 'other-repair'.

2.2 The code-switching frame

Code-switching, as a very common characteristic of bi-/multilingual interaction, is one of many possible features found in bilingual interaction. Therefore, it should be regarded as an umbrella term for a wide variety of language contact phenomena. The term code-switching may be used for both "the action of switching" as well as "the linguistic result" of the switching (Park 2000: 23). However, as Heller argues, code-switching does not occur in all bi- and multilingual speech communities, and even in the communities where it does occur, it does not necessarily occur in every conversation (1988: 9).

Conversational code-switching could be accounted for sociolinguistically on the one hand, and based on contextualization, on the other. A sociolinguistic account means that the communicative meaning of code-switching is (at least in one respect) mediated through culture, and speakers' language choice is understood in symbolic terms. The second, contextualization-based way in which conversational code-switching becomes meaningful may be understood in terms of the language contrast created by the switch. By switching from one variety to another at specific points in the course of talk, speakers exploit this contrast as a signaling device, or to use Gumperz's (1982) terminology, a contextualization cue. Contextualization cues can be realized through prosodic features, paralinguistic features, code choice, and the choice of certain lexical expressions and formula-like expressions such as routine opening and closing phrases. Gumperz means that the contextualization cues do play a role in the conclusion the participants draw from the on-going conversation, and that the efforts to interpret them operate on at least three different levels: the perceptual level, the local sequential level, and the global level. These levels include the participants' expectations or predictions of the continuing conversation (Gumperz 1992: 231).

Both Gal (1979) and Heller (1988) analyze code-switching as operating in a multi-leveled context, which is why the analyst must take these levels into consideration. The same idea of complexity of levels of context has been discussed by Li Wei (1998). He argues that the function of code-switching between English and Cantonese in his studies is purely conversational. On the other hand, there are cases of code-switching where certain aspects of wider context, i.e. knowledge not confined to the interactional episode in which participants are involved, enter into its interpretation. Li Wei stresses that these aspects need to be 'brought about' in specific ways by co-participants, in order to become relevant. Therefore, the conversational-internal functions of code-switching do play an important role in the community, while extra-conversational knowledge may (but need not in each and every case) be 'brought about', and thus become of relevance, as well.

2.3 A CA frame for analyzing bilingual data

Auer (1984) reported one of the very first studies of bilingual interaction with an explicit conversation analytic orientation. He used the theoretical approach of CA to further develop Gumperz's interactional perspectives on code-switching in conversation. The conceptual

apparatus upon which Auer builds his analysis is Gumperz's notion of 'contextualization'. According to Auer, there is within the contextualization theory a framework for analyzing code-switching (1995: 123). From this perspective code-switching is an element in a social matrix of contextualization cues and conventions that are used by speakers to turn the attention of the addressee towards the social and situational context (Milroy & Muysken 1995: 9-10). The cueing value of language alternation may be seen in the light of a general preference for same-language talk. This preference is shared between co-speakers, who act upon it in course of interaction. According to this preference, any turn at talk ties normatively to the language of the preceding turn. Cromdal (2000: 99), therefore, argues that "using the same language as in the adjacently preceding turn is a version of inter-turn tying rules". It is this co-produced order of bilingual conversation that, at the local interactional level, constitutes the interpretive scheme of interaction, and it is against this preference that code-switching attains its signaling value. That is, instances of code-switching may be viewed as violations of this preference, which is why they become noticeable and interpretable. This linguistic contrast, here also referred to as marked linguistic choices, has been called interactional otherness by Gafaranga and Torras (2002). Furthermore, this means that in bilingual interaction where the participants do *not* orient towards the "other-languageness" as relevant for the interaction, the language alternation is not regarded as marked (Cromdal 2005: 332-3).

A number of investigations on bilingual interaction, influenced by Auer's approach, have appeared since the mid-1980s, each contributing to the development and innovation of this approach. It has been clearly demonstrated that bilingual speakers work collaboratively at the meaning of each conversational turn and that code-switching therefore is closely associated with conversational structures. It is therefore possible to argue that code-switching constitutes a linguistic resource available to bilingual speakers. Language choice and code-switching may mark turn-taking, pre-and embedded sequences as well as preference organization parallel to the way in which various kinds of prosodic, phonetic and indeed non-verbal marking contextualize such material in monolingual conversation (Li Wei 1998: 165). It may help the speaker to restart a conversation at the end of an interactive episode, or to change conversational direction. It also helps the participants to keep track of the main 'drift' of the interaction by mapping out complex nested structural patterns in conversation.

And finally, the idea of context is a central issue for researchers working with non-English language and bi-/multilingual data (Moerman 1988). Very often a broader context is advocated in the analysis of different types of conversation, focusing on the need of multidimensional and multi-layered aspects. This involves ethnographic background data and both the global conversational aspects and the local interactional representation of language choice and code-switching in bilingual talk (Auer 1984, Heller 1988, Sebba 1993; Li Wei 1994, Cashman 2001). Language choice and code-switching and their functions are determined by *both* global and local factors: here, global refers to the overall conversational context and local refers to the interactional level of context within the particular stretch of talk. The meaning of language choice and code-switching, then, in its specific context is something collaboratively achieved, or 'brought about' (Li Wei 2002: 167). The very concept of context itself is, then, contextually shaped through a process of collaborative interaction. In this light, a sequential analysis offers access to multiple levels of context for the organization of participants' actions (Schegloff 1992). This view of context and meaning-making in bilingual interaction agrees with our own understanding of communication and context, and the conditions and premises related to it.

3 Data and participants

The data in the present study are drawn from field observations and transcriptions from audio tape recordings of students' conversation during collaborative writing sessions in an institutional setting in a multilingual sector of higher education. The participants (here called Ken and David) are two male students in their 30's, of immigrant background, enrolled in a course which is part of a one-year master's program in computer science at a Swedish university. They were working collaboratively on seven laboratory reports which were written in Swedish and comprised the examination for a course in network simulation. Neither of the participants had any other post-secondary qualifications beyond the three-year engineering program. Their experience of academic writing was therefore very limited. For this study, recordings from collaborative writing sessions on two of these reports (written in the beginning of the course) have been examined. The recordings have a length of approximately eleven and a half hour, which is the total time that the students spent on collaborative work with these two reports. A mini disc recorder was placed on the desk between the participants, who were sitting at the same computer. The writing sessions were surveyed by one of the authors of this article, without intervening in the writing process, however. All writing took place in a computer room with ample space. It was usually the case that David did the writing at the keyboard, while Ken was sitting at his side, assisting him in the work of formulating the report. No written course materials, course literature or dictionaries were used during the writing sessions except for the lab manual. Instead of consulting a dictionary, they used the computer based word searching tool, which gave them access to both a monolingual dictionary corpus in Swedish and a bilingual Swedish-English computer-based dictionary.

Both students are Persian-speaking and have Swedish as their second language. A point of rather great importance for the analysis is that the students constituted a familiar dyad in that they knew each other well from earlier courses. David has Persian as his first language, while Ken is both Kurdish- and Persian-speaking and is functionally bilingual in these languages. Swedish in this context is the learner language and the second language for both of them. The participants use both Swedish and Persian in their common interaction.

Although both students are advanced second-language users, with approximately ten years of residence in Sweden, the interactional pattern in the transcribed talk reveals a certain difference between them with respect to their linguistic knowledge of Swedish. The assessment of the participants' language skills in Swedish is based on their written texts produced during the course and is moreover grounded on their participation in the conversation.

From a sequential point of view the kind of interaction the participants are engaged in can be characterized as informal conversation, since it offers other opportunities for repair and turn-taking compared to for example classroom talk, where the teacher has the right to nominate topics and next speakers. Another circumstance that contributes to shape a more equal power exchange system different from institutional talk is the fact that the students had chosen to work together and that all interaction took place outside class. Furthermore, the collaboration was not arranged by the teacher. At the same time, the conversation is framed by the institutional goal of carrying out a writing task. This institutional context can at any time be made relevant in the conversation by the participants' orientation to the accomplishment of the writing task (cf. Drew & Heritage, 1992). This rather compelling task forces them repeatedly to orient their conversation to their differential linguistic knowledge. Their interactive conduct reveals an orientation from being equals to being a language novice and a language expert. Ken is most often the one who appeals for interpretative help with lexical items and phrases suggested by his co-participant. David, who regularly acts as the more knowledgeable in Swedish, is also the more dominant person in this dyad, which means that he is given the privilege of both defining the meaning of the word and making the final decision about word choices, when they are dealing with lexical problems.

4 Lexical problems

In this study, language-related episodes where focus is on lexical meaning (here called lexical episodes), and in which code-switching between Persian and Swedish occurs, are identified in the corpus of recorded data and transcribed for further analysis according to recent conversation-analytic conventions (Hutchby & Wooffitt 1998). The identification is made according to Swain's (1998) notion of language-related episodes, which include occasions when the students "talk about the language they are producing, question their language use, or other- or self-correct" (Swain 1998 p.70).

For this article, four lexical episodes are selected for a sequential analysis. The analyzed excerpts are drawn from a corpus consisting of language-related episodes identified in transcribed data from the recorded writing sessions. The reasons for focusing on lexical episodes in the analysis of code-switching are twofold. Firstly, they are frequent in the data and constitute the majority of the total number of language-related episodes. Secondly, the lexicon is essential for student mastery of academic language and for their appropriation of field-specific discourses as well. Most of the words in the students' interaction are not specifically related to the area of computer science, which was the field that the students were supposed to write in. On the contrary, these words are found in a range of academic and formal registers that contrast with the participants' everyday language.

Since the goal of the participants' conversation was to produce an academic text, we do not restrict ourselves to problems that emanate from the emergent conversational context. A lexical problem in this study in many cases originates from the unfolding text on the computer screen, produced by the student sitting at the keyboard. It may also be localized in the speech produced by one of the participants, in the process of suggesting alternative words and formulations for the writing. This is why we present entire transcriptions of the word discussions, instead of only bits and parts of the interaction.

5 Specific aims

Since we employ a synthesis of the CA approach and interactional sociolinguistics for the analysis of bilingual interaction, this means that we regard the meaning of the code-switching as determined by both global and local factors, as initially suggested by Auer (1984; 1995). The specific aims of the analysis are twofold:

- *to describe* the sequential organization of Persian and Swedish bilingual interaction in the process of initiating and resolving a lexical problem;
- *to determine* the communicative meaning of language choice and code-switching in this process by a close step-by-step analysis of its local production in the emerging conversational context.

6 Analysis

In the following section, we will demonstrate the communicative and interactional meaning of the students' alternative use of two languages in four lexical episodes by a sequential analysis of the process, from initiation of the lexical problem to its completion. Viewing conversation as practices of talking shaped by social actions, when people are doing things like requesting, correcting, answering etc. (Schegloff 1991, p. 153; Pomerantz & Fehr 1997), we will investigate how the meaning of language choice and code-switching is determined in its local production in the emergent conversational context. From this stance we will demonstrate how

code-switches can be explicated as part of the following activities: *drawing attention to a problem*, *seeking alliance (when a problem is made explicit)* and *confirming intersubjective understanding (when the problem is resolved)*. These activities can be characterized as task-oriented activities used to complete the institutional writing task and form recurrent practices of talking in the students' conversation.

6.1 Drawing attention to a linguistic unit

When a linguistic unit (utterance, word, syllable) is found problematic by a speaker in interaction the initiation of a repair activity is an expected move. In this section, a linguistic unit in written text on the computer screen or in speech produced by one of the speakers is turned to a repairable object in the students' conversation. Turning a linguistic unit to a repairable may sometimes require some degree of negotiating work, when the participant having a problem with some word or formulation must display this in such a way as to also become marked as problematic for the co-speaker. In order to pinpoint a certain problem, both participants' attention must be drawn to the linguistic unit in question.

Below, we will demonstrate how code-switching is used as an additional resource to draw attention to a lexical item and turning it to a repairable object. In some cases a repair activity is delivered by a "try-marker" (cf. Sacks & Schegloff 1979 and Lerner 1996, p. 262) that signals the speaker's uncertainty about a proposed alternative, without however explicitly pointing out the linguistic character of the problem. A try-marker is defined as "a recognitional with an accompanying (questioning) upward intonation contour, followed by a brief pause" (Sack & Schegloff 1979, p. 15). In order to show how the trouble emerges we will start the analysis a few turns before the source of the trouble.

In excerpt 2, D is in command at the keyboard. K is revising by reading sentences aloud from the written text on the screen. K's reading is now and then disrupted by problems he senses with elements in formulations used by D. After K succeeds in involving D in the word discussion, the students turn to Word's dictionary to establish the specific meaning of the word *markant*. After several alternative proposals, they return to the graph which they have been describing in order to make sure that the visual understanding corresponds to the verbal choice.

(2)

1. K: °detta samband syns i grafen°	1. K: °this correlation can be read from the graph°
2. (9) (nedskrivning och datorklick)	2. (9) (typing and click sounds)
3. K: markant↑	3. K: prominent↑
4. (0.5)	4. (0.5)
5. K: mar- markant čie:	5. K: what is pro- prominent
6. (1)	6. (1)
7. D: markant nemiduni yæni či: (.)	7. D: don't you know what prominent means (.)
8. markant yæni:	8. prominent mea:ns
9. (1)	9. (1)
10. D: °injury°	10. D: °like this°
11. (9) (nedskrivning + datorklick)	11. (9) (typing + click sounds)
12. D: mycket tydligt	12. D: quite noticeable
13. (1.5)	13. (1.5)
14. K: påfallande	14. K: striking
15. (2)	15. (2)
16. D: ja tänkte den E markant	16. D: I figured it IS prominent
17. (1)	17. (1)
18. D: kojas	18. D: where is it
19. (1)	19. (1)
20. D: markant nist i:n=	20. D: isn't this one prominent=
21. K: =čera	21. K: =sure
22. D: (XX [X])	22. D: (XX [X])

23. K: [ye brytning dare tuš dige:=
 24. D: =are in æsæn yedæfe bryts
 25. (4)

23. K: [well there is a breaking in it=
 24. D: =yeah it like suddenly breaks
 25. (4)

On line 1 K is reading a sentence in Swedish. He is reading written text from the computer screen in a very low voice, almost mumbling and rehearsing the text to himself. The flow of reading aloud is disrupted by a nine-second pause in line 2. In line 3 K produces a “try-marker” by repeating a word from the written text, the Swedish word *markant*, which corresponds to the English words ‘prominent’ or ‘striking’. The word is pronounced distinctly with a try-marked intonation, signaling that K proposes the word as possibly troublesome. K’s repair work is not completed, which is why in line 5, and after a half-second pause, he proceeds with another attempt. He now repeats the item *markant* used in his prior turn. He interrupts his talk after the first syllable (mar-), whereupon he restarts and reads out the whole word. Both the prosodic features used in the preceeding turn and the self-interruptions demonstrate the speaker’s uncertainty about this word, without however localizing the source of the problem. K thereupon reformulates matters and produces an interrogative in Persian beginning with the question word *če* (Engl. ‘what’), “*če*”, “what does it mean?”.⁵ After a one-second pause, in line 7, he finally receives a response from D: “**don’t you know what prominent means**”. In order to make sure that K is raising a problem about the meaning of the word, D makes a request for clarification, accommodating his language of interaction to the choice of K. After a micropause in the same line, he starts delivering an answer. However, in line 8, he interrupts himself after the phrase “*markant* means”. After a one-second pause in line 9, he guides K “**like this**”, after which he starts typing in line 11. There is no doubt that D has now understood that K is initiating a problem concerning the meaning of the word *markant* and he starts searching for the lexical item in Word’s dictionary (lines 10 and 11). On lines 12-14 the Swedish synonyms have (most probably) appeared on the screen, whereupon D and K read them out aloud.

To summarize, K is the one who announces the problem and initiates the repair, while the actual act of repair completion is carried out by D and performed in collaboration between the participants. We have seen how K makes two repeated efforts to flag a lexical item as problematic. He is, however, not successful in announcing the problem at the first go, since he does not get any response from D. Displaying hesitance and uncertainty by repeats and try-marked intonation is an implicit way of signaling an item as problematic. By reformulating and extending his prior turn to an interrogative utterance in Persian beginning with a question word, K succeeds in drawing D’s attention to the meaning of the lexical unit in question. Here, we see that apart from the repair work, code-switching is used as an additional resource to draw attention to the lexical problem. The switch to Persian creates a contrast to the choice of language in the prior turn, where Swedish was the language used in the process of quoting and revising written text. We also see that, through this interactive work (K being the one inviting a repair and D the one finding a solution), the speakers jointly make their differential language expertise relevant. By initiating a repair, K in effect invites D to participate in solving the problem, the repair work then functioning as an inclusive activity.

The next lexical problem concerns the word *dylik*, corresponding to the English word ‘similar’. The way of staging an item for challenge by isolating it from its original frame, as well as the structure of conversation leading to a solution to the problem, is strikingly similar to the previous example. Excerpt 3 illustrates how a linguistic unit in speech produced by one of the speakers in the process of proposing candidate formulations for the writing (again by D, who is doing the writing at the keyboard) is turned to a repair. The conversation that precedes

⁵ *či* (the spoken pronunciation of *če*) is an interrogative pronoun and *e* (the spoken pronunciation of *ast*) is the 3rd person singular form of a copula verb. The verbatim translation from Persian is “what is”.

the excerpt is carried out in Swedish. The participants are engaged in the process of formulating a sentence concerning the interpretation of a graph. And again, after K manages to involve D in a word discussion, the students return to the graph in question before they actually establish their mutually reached understanding.

(3)

1. K:	e [:	1. K:	e [:
2. D:	[och-	2. D:	[and-
3. (3)		3. (3)	
4. D:	mac mac	4. D:	mac mac
5. (5)		5. (5)	
6. D:	och dylik (.) liknande	6. D:	and similar (.) alike
7. (1)		7. (1)	
8. K:	dylik↑	8. K:	similar↑
9. D:	dylik	9. D:	similar
10. (1)		10. (1)	
11. D:	dylik miduni yæni či: ↑	11. D:	do you know what similar means
12. (2)		12. (2)	
13. K:	°dylik° (.) °nej°	13. K:	°similar° (.) °no°
14. D:	°dylik yæni° (.) [°mm°	14. D:	°such means ° (.) [°mm°
15. K:	[to daštiš ke: (.)	15. K:	[you had it here (.)
16.	tu kar- inja hæ:s	16.	in the work- it is here
17. (0.5)		17. (0.5)	
18. D:	° hæ:s↑°	18. D:	°is it here↑°
19. (0.5)		19. (0.5)	
20. K:	°næ (.) mæn daræm pæs=	20. K:	°no (.) then I have it (.)
21. D:	= (X) biya inaha	21. D:	here you have (X)
22. (1)	(nedskrivning och datorklick)	22. (1)	(typing and click sounds)
23. D:	dylik	23. D:	similar
24. (0.5)		24. (0.5)	
25. D:	such	25. D:	such
26. (1.5)		26. (1.5)	
27. K:	sådåna ja	27. K:	those ones ⁶ yes
28. D:	så dana (.) liknande	28. D:	those ones (.) alike
29. (3)		29. (3)	

The sound stretch, the pause and the cut-off on lines 1-4 indicate that the participants are searching for a word to use in the text. After a 5-second pause, when the typing has stopped, D echoes himself and proposes a candidate, the adjective phrase “och dylik” in Swedish (Engl. ‘and similar [items]’). After a micropause he offers another lexical unit, the synonym “liknande” (Engl. ‘alike’). If one regards the context described above, these suggestions may be alternatives for the writing or perhaps are options read aloud. After a one-second pause K produces a try-marker by repeating the first lexical item suggested by D (*dylik*, ‘similar’) in combination with a rising intonation. K gives in this manner the item the character of something that is possibly troublesome. By using the try-marker he shows indecision either about the accuracy of the word choice or about its meaning. In any case, he signals the problem in an implicit way without addressing the co-speaker by e.g. appealing for assistance or by verbalizing lack of understanding. D answers by repeating the lexical item in question with a falling intonation, thereby treating the turn as unproblematic and simply producing an embedded confirmation (cf. Jefferson 1987), a sequentially coherent next turn. This may be interpreted as if D does not regard K’s repair activity as an appeal for help with the *meaning* of the word but rather as a check of confirmation of the word choice itself. The absence of K’s confirmation indicates that the repairable has not been explicitly located and identified. This,

⁶ The English translation *those ones* corresponds to one single word in Swedish, namely the pronoun *sådåna*.

seemingly, urges D to self-nominate and make a request for clarification (line 11): “*dylik miduni yæni či:*”, “do you know what similar means”⁷. By pinpointing a mutually encountered problem like this, D orients to the differences in their linguistic knowledge. K’s answer is delivered after a two-second pause on line 13. He repeats the word in a low voice, seemingly engaging in a word search by displaying scanning his memory (a form of cognition-in-action) before delivering a negative answer. At this moment the attention of both participants is focused on the lexical item “*dylik*” (‘similar’). The beginning of this lexical search can be seen in lines 14-15.

We have, once again, seen how through their different repair activities the participants orient to one another as the novice versus the expert learner: K by implicit efforts to localize a lexical problem and by inviting the other party’s participation, and D by requesting clarifications to locate the exact nature of the problem. Not only the interrogative on line 11 but also the code-switch contributes to making the problem explicit in that it contrasts to the choice of language in the prior turns.

Another observation made in relation to the two extracts above is that the lexical negotiations and clarifications involve the use of Swedish synonyms rather than translations into Persian (see extract 2, lines 12 and 14 and extract 3, lines 27-28). Also, on one occasion D resorts to an English word, ‘such’, which appears on the screen after a search in the Word dictionary (see extract 3, line 25). This is not surprising, since they have no experience of writing in an academic setting from their home country.

6.2 Seeking alliance when a problem is made explicit

When a problem is identified and made explicit, the participants usually proceed to resolve it. As in the examples of the words *markant* and *dylik*, the solutions to the lexical problems were dealt with rather fast. In the next example, the linguistic nature of the problem is more complex and is not so easily identified by the participants. Consequently the locating of the problem as well as the repair work requires more time in order to be negotiated and agreement to be consolidated in the course of interaction.⁸ Seeking alliance, then, in this joint activity of problem-solving may be part of the process and in this section we will demonstrate how language choice and code-switching contributes to this activity. Let us first look at the way this problem is signaled.

In excerpt 4 we find the students engaged in formulating a sentence, with D at the keyboard. In line 4, K introduces the issue of the spelling “tried out is with ö”. The source of the trouble in this extract originates in the text on the screen (written by D) and concerns the meaning and the spelling of two closely related verbs in Swedish, *prova* (Eng. ‘try, try out’) and *pröva* (Engl. ‘test’), with similar meanings and similar spellings. They are distinguished in writing by the graphemes *o* and *ö*.⁹ Since D does not produce any response, K continues with a second attempt in line 6. He repeats the item *provades* (Eng. ‘tried out’), but is interrupted by D, in line 7, who initiates a new topic concerning the different versions of the lab report. This change of topic is also marked by a code-switch to Persian. After a one-second pause, K produces a response in line 10 and accommodates his language of interaction to the choice by D. The interesting part is found at the end of the same utterance in line 10, where K without any pause or hesitation switches back to Swedish, his previous language of talk. Once again, at the end of line 10, he orients to the spelling problem by repeating the problematic item. And again, there is no response on the part of D. Then, in line 12, K makes

⁷ The verbatim translation: ‘similar you know it means what’.

⁸ This is not unusual in L2 contexts (cf. Markee 2000).

⁹ These graphemes look alike in the written form, the only distinguishing feature being the diacritic signs, but in speech they correspond to two different phonemes.

the fourth and last effort in this repair sequence to include D in the solution to the problem. This time, his utterance is direct in formulation, as well as accommodated to the latest preferred language of D.

(4)

1. D: e:n	1. D: a:
2. (2.5) (nedskrivning och uppläsning)	2. (2.5) (typing and reading aloud)
3. D: <°de vill säga°>	3. D: <°that is°>
4. K: provades e me ö	4. K: tried out is with ö
5. (0.5)	5. (0.5)
6. K: prova[des	6. K: tried[out
7. D: [hær kudumeš behtær bud	7. D: [we will send in the one that is
8. hæmuno mifrestim	8. the best
9. (1)	9. (1)
10. K: inæm xube olik- provades	10. K: this one is good too differen- tested
11. (0.5)	11. (0.5)
12. K: Ö-e ya O-e↑	12. K: is it Ö or is it O↑
13. (0.5)	13. (0.5)
14. D: mm (.h) are doros migi mæn inæm šæk	14. D: mm (.h) yeah you're right I hesitate as well
15. [daræm čon joft-e in kælæmea doroste	15. [because both words are correct
16. K: [°hm°	16. K: [°hm°
17. D: væli=	17. D: but=
18. K: =hičvæx mæn inaro (.) hefz nemikonæm=	18. K: = I never manage to (.) memorize these
19. D: [prö:va	19. D: [prö:va
20. K: [hær væx minevisæ:m (.) bayæ ček konæm	20. K: [every time I write them (.) I have to check
21. [(hhh)	21. [(hhh)
22. D: [are: mænæm hæmin bædbæxti ro	22. D: [yeah I'm stuck with the same misery
23. daræm (.) yekiš transitive yekiš intransitive	23. (.) one of them is transitive and one of them
24. (.) hala æge fæ:gešo tunes[ti befæ:mi sæd	24. is intransitive (.) if you manage to [find out
25. K: [(hhh)	25. K: [(hhh)
26. D: koron bet midæm	26. D: the difference I'll give you 100 kronor
27. (2) (båda skrattar) (nedskrivning)	27. (2) (both laugh) (typing)
28. D: jeddi æsæn xodæmæm næfæ:midæm (.)	28. D: really I haven't even understood it myself
29. prä:va yæni inke try out	29. (.) prä:va means try out
30. (0.5)	30. (0.5)
31. D: mæsæn lebas	31. D: for example cloths
32. (1)	32. (1)
33. K: aha:	33. K: aha:
34. (1.5)	34. (1.5)
35. D: °pro:va° (nedskrivning)	35. D: °try:° (typing)
36. (0.5)	36. (0.5)
37. D: yæni (.) testa	37. D: means (.) test
38. (1)	38. (1)
39. K: °fyfan [viket språk de här°	39. K: °hell [what a language this is°
40. D: [testa-	40. D: [test-
41. D: xé:ili (visslar)	41. D: réally (whistles)
42. (6)	42. (6)
43. D: använda på prov	43. D: use for testing
44. (1)	44. (1)
45. D: använda på prov (.) væli in či bu:d	45. D: use for testing (.) but what was this then
46. (.) prä:va	46. (.) try out
47. (3.5) (nedskrivning)	47. (3.5) (typing)
48. D: utföra prov (.) titta de e kanske bättre pröva	48. D: perform a test (.) look, maybe it's better try out
49. (1)	49. (1)
50. D: försöka (.) utföra prov [på nånting	50. D: try (.) perform a test [on something
51. K: [m (.) mm mm	51. K: [m (.) mm mm
52. D: de e kanske bättre i dehär fallet å skriva pröva	52. D: maybe it's better to write pröva in this case
53. (3)	53. (3)
54. D: mm	54. D: mm

55. (1) (nedskrivning)	55. (1) (typing)
56. D: prövades	56. D: was tried out
57. (3) (nedskrivning)	57. (3) (typing)
58. D: ändra alla provade till prövades (.)	58. D: change all tried to tried out (.)
59. de låter också bättre	59. it also sound better

Contrary to the previous word discussion examples, where the novice v. expert-learner relationship with respect to the participants' different language skills was made relevant (with K pinpointing the problem and soliciting help from D with the solution), here, we see that the participants' activities are oriented to restoring their relationship as equals by seeking an alliance against the difficulties of the Swedish language. In line 14, he delivers a delayed answer pointing out both his own lack of knowledge and the trickiness of this particular issue "**mm (h) yeah you're right I hesitate as well because both words are correct but**". K provides an agreement in line 16 and latches on to D's turn in line 18. The single Swedish word uttered by D in line 19 relates (most probably) to when he enters the word into the Word-dictionary in the computer. What happens now is a brief suspension from the task-orientation observed in the previous excerpts, when both students start elaborating on their personal experiences of earlier writing contexts involving these words.

In line 18 and 20, K initiates a confession about never being able to tell these words apart and that he is forced to check them every time. His utterance ends with laughter in line 21. In line 22, D overlaps K's final laughter and continues the activity of alliance-seeking by now sharing his own experiences "**yeah I'm stuck with the same misery...**". After the micropause in line 23, D makes a claim about a grammatical rule, namely one of the words being transitive and the other intransitive. However, he does this without giving any precise definition of the meaning of the grammatical labels or how exactly to distinguish between them. He finishes his humorous utterance in line 24 by offering K a hundred Kronor if he manages to understand the difference between these labels. K has already started laughing and the topic of lack of understanding (approached with humor) is abandoned after a two-second pause, in line 27. This specific humorous topic dealing with their lack of knowledge can be seen as an alliance-seeking activity, where D deviates from his frequent expert-learner role. D clearly sides with K in constructing their relationship as equals, by at several occasions making a point of their usually prevalent identities *not* being relevant at the moment. In line 15, e.g., in his role as the expert learner, he is authorized to comment upon the correctness of the words. In line 23, he delivers a comment on the grammatical rule. Not knowing the right answers or options makes him equal to K. Another example is found in line 28, where D points to the fact that he usually is the one who knows or understands issues/problems "**really I haven't even understood it myself**". After a micropause at the end of line 28, D starts to read aloud a number of options for the word *pröva* "prö:va **means** try out ... **for example cloths**". K, in line 33, produces a minimal response, whereupon D in lines 35 and 37 continues to give options, now for the word *prova*.

The language this far, except for the Swedish and English words appearing on the screen, is Persian. This makes the utterance of K, in line 39, a complaint (hell what a language this is), a marked choice, contrasting with both the previous context and the previous choice of language for interaction. In line 40, D interrupts himself when reading another option aloud, and agreeing with K in line 41. His response is delivered in Persian, the actual language of interaction, and is reinforced by a whistle. The complaint in line 39, then, solicits a momentary alignment between the speakers against the pitfalls of the Swedish language. We may note that the complaint is produced in the very language that is being complained about. But perhaps even more interesting, is that the agreement, in line 41, is delivered in Persian. What we see here is K violating the local linguistic order, while D, in line 41, restores it.

After having studied the options given for the word *pröva* (line 29), and thereafter the word *prova* (line 35), D returns to the word *pröva* again in lines 45-46. With minimal interference from K, D decides in line 58 to use the word *prövades* in their lab report. Following the process in the word search sequence, it is not clear exactly how D chooses the word *prövades*, or if he (or both) has actually grasped the semantic difference between the words *prova/pröva* by accessing an online dictionary. The last part of this lexical episode will be discussed in the following section.

6.3 Confirming intersubjective understanding

In this last section, we will focus on the final part of the word discussions, namely confirming the intersubjective understanding between the students after they have solved the lexical problem. In the discussion of *prova/pröva* this activity of confirmation is not as clear as in the other three discussions. The final part of the *prova/pröva* discussion, where D has decided the correct choice in Swedish, is initiated in line 48. After the micropause, he changes footing by a switch to Swedish and at the same time suggesting an acceptable option “look, maybe it’s better [to use] try out”. Contrary to the previous lines, in which D was busy searching for options on the screen, he now addresses K directly. D is inviting K to agree with him. After a one-second pause in line 49, with no response from K, D self-nominates in line 50, and reads aloud further alternative meanings of his suggestion. In line 50, K then produces a minimal however positive response. In line 52, D delivers an upgraded version of his suggestion, “maybe it’s better to write *pröva* in this case”, again trying to involve K in the work of confirmation. After a three-second pause, D himself in line 54 provides an approval, in shape of a minimal response. In line 56 he tastes the word *pröva* a last time, and then makes the final decision in lines 58-59, “change all tried to tried out (.) it also sounds better”.

(5)

48. D: utföra prov (.) titta de e kanske bättre pröva	48. D: perform a test (.) look, maybe it’s better try out
49. (1)	49. (1)
50. D: försöka (.) utföra prov [på nånting	50. D: try (.) perform a test [on something
51. K: [m (.) mm mm	51. K: [m (.) mm mm
52. D: de e kanske bättre i de här fallet å skriva pröva	52. D: maybe it’s better to write pröva in this case
53. (3)	53. (3)
54. D: mm	54. D: mm
55. (1) (nedskrivning)	55. (1) (typing)
56. D: prövades	56. D: was tried out
57. (3)	57. (3)
58. D: ändra alla provade till prövades (.)	58. D: change all tried to tried out (.)
59. de låter också bättre	59. it also sounds better

The quick turn-takings found in the other word discussions is lacking here, but we see the same language-choice pattern, contrasting the previous activity, and containing *no* code-switching. This may have several explanations: whereas the other discussions were dealing with quickly solved issues of understanding a lexical item, this problem deals with *producing* a lexical unit. Further, the formulations were then checked against the graphs and lines they were describing. Unlike the rather simple checks of understanding, when it comes to the *prova/pröva* discussion, the students had difficulties in pointing out the linguistic nature of the problem. Were they dealing with the spelling of one word or the semantic differences of two separate words? Did they need to search for the correct word or for the correct version of a single item? While K handles it as a simple question of spelling, D upgrades the nature of the problem to a more complex semantic issue. This is why D, in his role as the expert learner, seems after the alliance-seeking activities to be given the mandate by K to solve the problem.

The work of confirmation is there, but with only minimal participation on the part of K. This is why in this specific study we treat the discussion of *prova/pröva* as slightly deviating from the other word discussion patterns found.

What, then, is the pattern found? We have pointed out how, in this dyad, one of the speakers draws attention to lexical problems, how the speakers in different ways seek alliance when searching for the right answer/option, and finally, in this section, how they confirm the intersubjective understanding mutually reached in interaction. Let us now recall the word *markant*.

(6)

16. D:	ja tänkte den E markant	16. D:	I figured it IS prominent
17. (1)		17. (1)	
18. D:	kojas	18. D:	where is it
19. (1)		19. (1)	
20. D:	markant nist i:n=	20. D:	isn't this one prominent=
21. K:	=čera	21. K:	=sure
22. D:	(XX [X])	22. D:	(XX [X])
23. K:	[ye brytning dare tuš dige:=	23. K:	[well there is a breaking in it=
24. D:	=are in æsæn yedæfe bryts	24. D:	=yeah it like suddenly breaks
25. (4)		25. (4)	

After having received the options for the word *markant* on the screen (lines 12 and 14), D returns to the graph they are describing. In line 16, he invites K to agree with him: “I thought it is prominent”. The language choice of this utterance can at the same time be seen as a marked choice. This is because, except for the single words read aloud, the language of interaction has thus far been Persian. At the same time, it marks a change of topic (a change of footing carried out via the code-switch), i.e. from the activity of reading the options aloud to the activity of studying the graph. From lines 17-19, D is searching for and finding the graph he is referring to. He has already returned to the previous language of interaction, i.e. Persian. In line 20, D upgrades his invitation for confirmation to K by reformulating his request in a way that makes a positive answer relevant, “**isn't this one prominent**”. In line 21 K not only confirms, but also elaborates on his answer in line 23, “**well there is a breaking in it**”. D's turn, in line 24, is latched by latching to the previous turn of K without any intervening silence, confirming the sudden breaking of the line in the graph.

As for the language choice and code-switching patterns found in this short stretch of talk, there are a number of things to be pointed out. The only marked choice of language is found in line 16. The next Swedish word found in the Persian interaction in line 20, is not regarded as a marked choice. The word *markant* is generally referred to in Swedish, and in addition, it does not have any good counterpart in Persian in this context. The words ‘breaking’ and ‘break’ can be seen as task-related and therefore a natural choice here (no markedness). The words may be used to demonstrate that the students have understood both the issue (problem) and the task (academic writing).

The structure of the discussion of the word *dylik* resembles the structure found in the word *markant*. After a one-second pause in line 22, D self-nominates in line 23 and re-establishes the word *dylik*.

(7)

23. D:	dylik	23. D:	similar
24. (0.5)		24. (0.5)	
25. D:	such	25. D:	such
26. (1.5)		26. (1.5)	

27. K: sådana ja
 28. D: så'dana (.) liknande
 29. (3)

27. K: those ones¹⁰ yes
 28. D: those ones(.) alike
 29. (3)

After a 0.5-second pause he reads in line 25 the English equivalent 'such', indicating that they have searched for the meaning of the word in an English dictionary. After a 1.5-second pause, K confirms D's suggestion by giving, in line 26, the Swedish equivalent *sådana*. This is confirmed by D by a repetition of the word, although with the correct pronunciation¹¹, as well as by offering yet another alternative in Swedish. At this point, the speakers seem to have reached a solution and also established their mutual understanding of it. Both examples also demonstrate the practice of intimacy work after having reached a solution. This is performed through a varying number of quick repetitions, overlaps and latched turns. And, in accordance with the ideas of bilingual interaction and unmarked talk, as described in the preference for same-language talk, the final parts of these interactions are generally monolingual.

Let us now study a final word discussion. This specific example deals with the word *successivt* (Eng. 'gradually'), a word that is crucial for the participants' understanding of the simulation context. As the case of the previous words, K reaches out to D for help through several formulations and reformulations. D performs the repair and in the final part of this stretch of talk we find the intimacy work between the speakers in order to consolidate the intersubjective understanding mutually reached.

(8)

1. K: ett försök utfördes på det sättet att man
 2. provade några olika valda värden
 3. (10) (nedskrivning)
 4. K: succes- sivt (.) **yæni**
 5. (2)
 6. K: **či hæ:s** successivt s- e- m- **mænzurēš**
 7. **čie**
 8. (1)
 9. D: successivt **yæni** **hær či to ziad mikoni**
 10. **unæm ziad miše**
 11. (0.5)
 12. D **yæni hey ziad mikone (.) ezafe**
 13. **mikone [miare (XXX)]**
 14. K: [væli intori nabud
 15. (1)
 16. D: ja
 17. (0.5)
 18. D: **hær či to [(.) A mæsæn pæn] bu:d**
 19. K: [næ:
 20. D: **hey in miræft bala (.) xo:b**
 21. K: **are (.) [væli**
 22. D: [bæd in dáh bud ma uno æz (.)
 23. **čiz šuru kærðim ræftim bala (.)**
 24. **hey [miræftim bala (.) hičvæx čiz**
 25. K: [mhm
 26. D: **næbud (.) sabet næbud (.) °mibini:°**
 27. (1)
 28. K: **aha un éno migi (.) antal [linjer**
 29. D: [°aha° (.)
 30. N fægæt successivt miræf bala (.) ælbætte

1. K: an experiment was carried out in such a way
 2. that some different selected values were tested
 3. (10) (typing)
 4. K: gra- dually (.) **means**
 5. (2)
 6. K: **what is gradually g- e- m- what does**
 7. **it mean**
 8. (1)
 9. D: gradually **means the more you increase**
 10. **this one the more that one increases**
 11. (0.5)
 12. D: **it means that it increases all the time (.)**
 13. **it adds [brings (°XXX°)]**
 14. K: [but it wasn't like this
 15. (1)
 16. D: yes
 17. (0.5)
 18. D: **the more you [(.) if A for example was five**
 19. K: [no:
 20. D: **this one increased all the time (.) oke:y**
 21. K: **yes (.) [but-**
 22. D: [it was 10 we started out from (.)
 23. **with this what-do-you-say and went up (.)**
 24. **it increased all the[time (.) it was never**
 25. K: [mhm
 26. D: **like (.) it wasn't fixed (.) °you see°**
 27. (1)
 28. K: **aha you mean that N (.) number of [lines**
 29. D: [°aha° (.)
 30. (.) N increased only successively (.) A of

¹⁰ The English translation *those ones* corresponds to one single word in Swedish, namely the pronoun *sådana*.

¹¹ This is a good example of a subtle other-initiated, other-repair. Emphasis should be on the first, instead of the second, syllable of the word.

31.	A æm successivt miræft bala monta:=	31.	course increased successively as well but=
32. K:	=inte i en=	32. K:	=not in one=
33. D:	=inte lika snabbt=	33. D:	=not as fast=
34. K:	=inte i en å samma:	34. K:	=not at one and the sa:me
35. (1)		35. (1)	
36. D:	inte i en å samma gång nej=	36. D:	not at one and the same time no=
37. K:	=nej	37. K:	=no

In lines 1 and 2, K is quoting a sentence in Swedish from the written text on the screen. He interrupts himself for ten seconds (line 3), and initiates a repair in line 4 by repeating a word from the written text “succes-sivt” (Eng. ‘grad-ually’), which is then followed by a micropause. The self-interruption demonstrates the speaker’s uncertainty about this word, without however locating the source of the problem. After a micropause, he switches over to Persian and produces the proposition “**yæni**”¹² followed by a two-second pause. (The phrase *yæni* in Persian is in this context ambiguous, since it is not marked as a question by an accompanying questioning prolongation of the final syllable or a rising pitch). It could either be interpreted as a self-interrupted declarative sentence or as a question. By delivering clarifying reformulations with an interrogative in Persian (lines 4 and 6), K makes two repeated efforts to make explicit the fact that he does not grasp the meaning of the word pointed out in the prior turn. At the second go he is successful in his effort to draw D’s attention to the problematic item. There is no doubt that D has now interpreted K’s interrogative as a repair initiation. In lines 9-10, D initiates a repair-completion by starting to elaborate on an explanation of the word, adapting his choice of language to the preceding speaker. A remarkable point here is that D paraphrases the meaning of the Swedish word “successivt” in Persian instead of translating the target item into L2 in order to confirm understanding. However, the answer by D is not satisfactory to K, who interrupts and contradicts the previous speaker in line 14: “**but it wasn’t like that**”.

This line starts an inserted sequence, involving the disagreement between the two students on how exactly the lines in the simulation actually behaved. The entire inserted sequence lasts until line 28, where the misunderstanding/problem is seemingly solved. In line 16, after a one-second pause, D has repositioned, insisting on his own line of argument with a “yes”. The fact that the utterance is delivered in Swedish marks an even stronger distance to the previous turn. The explanations that follow in lines 18, 20, and 22-24 are all elaborated and presented with further details, in order to convince K of the correctness of D’s line of reasoning. In addition to line 14, K produces two additional disagreements: in line 19 (“**no:**”) and in line 21 (“**yes... but-**”). However, in line 22, he finally seems to give in, producing a minimal but positive response (“**mh**”), being convinced by the elaborated explanations of the co-speaker. Having won this verbal exchange in line 26, D makes a final conclusion of his explanation: “**it wasn’t what-do-you-say (.) fixed (.) you see**”. The final “**you see**” effectively invites K to deliver a confirmation, which he does in line 28. Even though the answer in line 28 is delayed by a one-second pause, it is affirmative: “**aha**”. K actively demonstrates that he has understood and accepted D’s explanation by expanding on his answer “**you mean that N**”. He actually demonstrates his understanding a second time: the first time referring to the abbreviation N in Persian and the second time by code-switching and referring to the meaning of the letter N in Swedish: “number of lines”. With the utterance in lines 28 and 29 the speakers seem to have reached a mutual understanding and agreed that the lexical problem has been solved.¹³

¹² verbatim translation from Persian ‘it means’

¹³ However, the question of whether K has understood the meaning of the word *successivt* remains open. With the insertion sequence initiated by K in line 14, the discussion has revolved around the behavior of the lines in

In the lines that follow (30-37) we have the final intimacy work, where the speakers, having solved the disagreement, engage in confirming the intersubjective knowledge co-operatively achieved by latches, repetitions and jointly constructed turn constructional units (cf. Lerner 1996). In line 30 and 31, D elaborates on K's approval/confirmation in line 28, not only through the abbreviation of the letter N, but also by extending the content of the discussion to the line A. By doing this, he also relates back to the original source of the problem, i.e. the word *successivt*. D, then, makes sure that they have established a common understanding of the solution.

Except for the word *successivt* and two separate occasions in line 16 and 28, the conversation has thus far been carried out in Persian. The closing part of the sequence, i.e. the intimacy work, is manifested by a change of footing, together with a switch to Swedish initiated by K in line 32. The use of Swedish by K can be seen, again, as a double confirmation: not only has he understood the explanation by D in the language used this far, by using Swedish he demonstrates that he has understood well enough to elaborate (fill in with small details) on D's explanation in the other language, the L2, thereby contributing to their common task of producing the academic text. The activity of demonstrating alignment is, again, structurally characterized by frequent latches and repetitions.

A remarkable point worth noticing in this excerpt is that D paraphrases the meaning of the Swedish word "successivt" in Persian in the word clarification sequence (see lines 9-13). He does this instead of translating the target item into L2 in order to confirm understanding, which is common for L2 learners in situations like this. This is certainly due to the fact that the word is acquired in a field-specific academic writing context in a Swedish educational setting. The word belongs to the "laboratory language" of the peers, a discourse which is acquired in Swedish, and this is probably why they do not resort to a translation into L1 (see also the discussion in section 6.1).

To sum up, we see that each and every word discussion ends with a confirmation of the intersubjective understanding of the students. The students have to agree in order to proceed with the task of composing a laboratory report. Also, every time the activity of confirmation is initiated it is marked by a code-switch, and the discussion continues in the other language. In the confirmation or intimacy work, order between the speakers is restored once again, i.e. D as the expert learner invites K, the novice learner, to agree with him.

7 Conclusion

In this article we have described the sequential organization of Persian and Swedish bilingual interactions in student talk during collaborative writing sessions in an institutional setting. We have pointed out instances in our bilingual data where language choice and code-switching comprise a marked act and have a communicative meaning in the process of initiating and resolving a problem of understanding and producing a lexical item. According to the preference for same-language talk, any turn ties normatively to the language of the preceding turn. This is why "using the same language as in the adjacently preceding turn is a version of inter-turn tying rules" (Cromdal 2000, p. 99). This mutually established order of bilingual interaction at the local interactional level sets the interpretative frame for the conversation. In the present study we have seen how instances of code-switching may be viewed as violations of this preference, which is why they become noticeable and interpretable. We have singled out three different activities in lexical episodes and analyzed the language choice and code-switching patterns in them. These activities are: drawing attention to a problem, seeking

the computer simulations. It is the behavior of the lines that they have finally agreed upon, and it is unclear to what extent K actually connects that to the meaning of the lexical item *successivt*.

alliance when a problem is made explicit and confirming intersubjective understanding when the problem is resolved.

In drawing attention to the problem, code-switching is an additional resource in initiating repair work and managing requests for clarification on the part of both speakers. In this specific dyad it also contributed to making relevant the roles of the speakers, as the problematizing novice student versus the problem-solving expert-learner student. That is, through the repeated efforts, eventually resulting in a code-switch, on the part of K, D became involved in the word search as the expert-learner. It has been shown in all lexical episodes analyzed in this article how K invites his co-speaker to participate in the repair work by soliciting help with the solution of the problem.

In the alliance-seeking activities in section 6.2, on the other hand, we saw that the students rather quickly pointed out the problem: the choice between the words *prova* and *pröva*. However, they had to negotiate to establish the *nature* of the problem. Was it a question of the spelling of a word or the semantic differences of two words? In the process of jointly establishing this, the students engaged in alliance-seeking activities, specifically set off through a side sequence initiated by D (line 14). Instead of his usual request for clarification (and following explanation) D admits that he does not know the answer. This immediately urges K to align with D, and for a moment (more exactly, until line 28) participate in the interaction as learners now on an equal footing vis-à-vis the Swedish language. In this alliance-seeking activity we see no code-switching whatsoever.

In the confirmation activities, the speakers confirm their mutually reached understandings. We again see the activity of alliance-seeking, this time also carried out by quick turn-takings, latches and overlaps. The language choice for every example of final confirmation work is generally monolingual and corresponds well to the idea of preference for same-language talk. That is, if the use of code-switching marks a contrast, preference for same-language talk avoids any disturbance in the preferred sequential structure of interaction.

A concluding remark to be made on the basis of this study is that there is an order in bilingual interaction, as in all conversation, a point also made by Üstünel & Seedhouse (2005, p.322) in their study of code-switching in L2 classrooms. In the word discussions analyzed in the present article, we have seen that code-switching may have a number of contrastive functions at the local interactional level. At the same time, contrastive language choices at the global conversational level functions to set off different activities, such as the ones demonstrated above. Code-switching and language choice in peer-group work should, therefore, be seen as one among several interactional devices used by the participants to carry out the institutional goal of accounting for a laboratory experiment in the form of a scientific report. In this respect, the participants' use of two languages should be seen as an additional resource in inviting one's co-speaker to participate in the task-oriented practice of linguistic problem-solving (e.g. word search) in the process of producing academic text.

Acknowledgements

Financial support of the Committee for Educational Research of the Swedish Research Council is gratefully acknowledged.

Transcription conventions

The Persian parts of the transcription are given in **boldface** and the Swedish parts in standard format.

:	Extension of preceding sound.
wórd	Emphatic stress
=	An utterance is immediately latched to a previous one, without any intervening silence (latching).
[	Separate left square brackets, one above the other in two successive lines with
[	utterances by different speakers, indicate a point of overlap onset.
(X)	Inaudible word, (XXX) inaudible passage of speech.
(hhh)	Laughter
\$	Smiley voice.
(.)	Micropause
° °	The degree signs indicate that the talk between them is markedly softer or quieter than the adjacent talk.

References

- Auer, P. (1984). *Bilingual Conversation*. Amsterdam: Benjamins.
- Auer, P. (1995). The pragmatics of code-switching: a sequential approach. In: Milroy, L. & Muysken, P. (eds.), *One speaker. Two languages: cross-disciplinary perspectives on code-switching*. Cambridge: Cambridge University Press.
- Auer, P. (ed.) (1998). *Code-switching in Conversation: language, interaction and identity*. London: Routledge.
- Cashman, H. R. (2001). *Doing Being Bilingual. Language Maintenance, Language Shift and Conversational Code-switching in Southwest Detroit*. Unpublished Doctoral Dissertation . Department of Romance Linguistics. University of Michigan.
- Cromdal, J. (2000). *Code-switching for all Practical Purposes: Bilingual organization of children's play*. Doctoral thesis. Linköping Studies in Arts and Science 223.
- Cromdal, J. (2003). The creation and administration of social relations in bilingual group work. In: *Journal of Multilingual & Multicultural Development* 24. Pp. 56-75.
- Cromdal, J. (2005). Bilingual order in collaborative word processing: On creating an English text in Swedish. In: *Journal of Pragmatics* 37. Pp. 329-353.
- Drew, P. & Heritage, J. (eds.) (1992). *Talk at work*. Studies in interactional sociolinguistics 8. Cambridge: Cambridge University Press.
- Duranti, A. & Goodwin, C. (eds.) (1997). *Rethinking context: Language as an interactive phenomenon*. Cambridge University Press.
- Garafanga, J. & Torras, M. C. (2002). Interactional otherness: Towards a redefinition of code-switching. In: *International Journal of Bilingualism* 6. Pp. 1-22.
- Gal, S. (1979) *Language Shift: Social determinants of linguistic change in bilingual Austria*. New York/San Fransisco/London: Academic Press.
- Gardner, R. & Wagner, J. (eds.) (2004). *Second Language Conversations*. London.
- Gumperz, J. J. (1982). *Discourse Strategies*. Cambridge: Cambridge University Press.
- Gumperz, J. J. (1992). Contextualization and understanding. In: Duranti, A. & Goodwin, C. (eds.), *Rethinking context. Language as an interactional phenomenon*. Cambridge: Cambridge University Press.
- Gröning, I. (2006). Språk, interaktion och lärande i mångfaldens skola. [Language, interaction and learning in diverse schools.] Digitala skrifter från nordiska språk. Department of Scandinavian Languages. Uppsala University. Uppsala.
- Hall, J. K. & Verplaetse, L. S. (2000). The development of second and foreign language learning through classroom interaction. In J. K. Hall & L. S. Verplaetse (eds.), *Second and foreign language learning through classroom interaction*. Mahwah, NJ Erlbaum.

- Heller, M. (ed.) (1988). *Codeswitching: Anthropological and Sociolinguistic Perspectives*. Berlin/New York/Amsterdam: Mouton de Gruyter.
- Hutchby, I. & Wooffitt, R. (1998). *Conversation Analysis. Principles, practices and applications*. Poliy Press. Cambridge.
- Jansson, G. (forthcoming). Recontextualisation processes as sense-making practice in student-writers' collaborative dialogue. To appear in *Studies in Higher Education*. Vol 31 no 6.
- Jefferson, G. (1987). On exposed and embedded correction in conversation. In G. Button & R. E. Lee (eds.), *Talk and Social Organization*. Clevedon. Multilingual Matters.
- Jørgensen, J. N. (1998). Children's acquisition of code-switching for power-wielding. In P. Auer (ed.), *Code-switching in conversation. Language, interaction and identity*. London.
- Kasper, G. 2004. Participant orientation in conversation –for-learning. In *Modern Language Journal* 88. Pp. 551-567.
- Kurhila, S. (2004). Clients or Language Learners – Being a Second language Speaker in Institutional Interaction. In R. Gardner & J. Wagner (eds.), *Second Language Conversations*. London.
- Lantolf, J. P. (2000). *Sociocultural theory and second language learning*. Oxford.
- Lave, J. (1993). The practice of learning. In S. Chaiklin & J. Lave (eds.), *Understanding practice. Perspectives on activity and context*. Cambridge.
- Lerner, G. H. (1995). Turn design and the Organization of Participation in Instructional Activities. In *Discourse Processes* 19. Pp. 111-131.
- Lerner, G. H. (1996). On the "semi-permeable" character of grammatical units in conversation: conditional entry into the turn space of another speaker. In E. Ochs, A. Schegloff & S. A. Thompson (eds.), *Interaction and grammar*. Cambridge: Cambridge University Press.
- Levinson, S. (1983). *Pragmatics*. Cambridge: Cambridge University Press.
- Li Wei (1994). *Three Generations, Two Languages, One Family: Language Choice and Language Shift in a Chinese Community in Britain*. Multilingual Matters 104. Clevedon/Philadelphia/Adelaide: WBC Ltd, Bridgend.
- Li Wei (1998). "The 'why' and 'how' questions in the analysis of conversational code-switching". In: Auer, P. (ed.). *Code-switching in Conversation: language, interaction and identity*. London: Routledge.
- Li Wei (2002). "What do you want to say to me? On the conversation analysis approach to bilingual interaction." *Language in Society* 31. Pp.159-180.
- Markee, N. (2000). *Conversation Analysis*. London: Lawrence Erlbaum Associates, Publishers.
- Martin, C. (2004). From other to self. Learning as interactional change. Uppsala Studies in Education 107. Acta Universitatis Uppsaliensis. Uppsala.
- Masats, M. & Unamuno, V. (2001). "Constructing social identities and discourse through repair activities". In: *EUROSLA Yearbook*, vol. 1. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Milroy, L. & Muysken, P. (eds.) (1995). *One speaker, two languages: cross-disciplinary perspectives on code-switching*. Cambridge.
- Moerman, M. (1988). *Talking Culture: Ethnographt and Conversation Analysis*. Philadelphia: University of Pennsylvania Press.
- Mori, J. (2004). Pursuit of Understanding: Rethinking 'Negotiation of Meaning'. In View of Projected Action. In R. Gardner & J. Wagner (eds.), *Second Language Conversations*. London.
- Park, H. S. (2000). *Korean-Swedish code-switching: Theoretical models and linguistic reality*. Skrifter utgivna av institutionen för nordiska språk vid Uppsala universitet 48.

- Pomerantz, A. & Fehr, B. (1997). Conversational analysis: An approach to the study of social action as sense making practices. In T. A. van Dijk (ed.), *Discourse as social interaction. Discourse studies: A multidisciplinary introduction*. Volume 2. London.
- Sacks, H. & Schegloff, E. (1979). Two Preferences in the Organization of Reference to Persons in Conversation and their Interaction. In G. Psathas (ed.), *Everyday Language. Studies in Ethnomethodology*. New York & London.
- Schegloff, E.A. (1991). Conversation analysis and socially shared cognition. In L. B. Resnick, J. M. Levine & S. D. Teasley (eds.), *Perspectives on socially shared cognition*. Washington.
- Schegloff, E.A. (1988). "On an actual virtual servo-mechanism for guessing bad news: A single case conjecture." *Social Problems* 35. Pp. 442-457.
- Schegloff, E.A. (1992). "In another context". In: Duranti, A. & Goodwin, C. (eds.). *Rethinking Context: Language as an interactive phenomenon*. Cambridge: Cambridge University Press. Pp. 193-227.
- Schegloff, E. (2000). When 'others' Initiate Repair. *Applied Linguistics* 21/2. Pp. 205-243.
- Schegloff, E.A.; Jefferson, G. & Sacks, H. (1977). "The preference for self-correction in the organization of repair in conversation". *Language*, vol. 53, no. 2. Pp. 361-382.
- Schegloff, E.A.; Koshik, I.; Jacoby, S. & Olsher, D. (2002). "Conversation Analysis and Applies Linguistics". In: *Annual Review of Applied Linguistics* (2002) 22. Pp. 3-31.
- Sebba, M. (1993). *London Jamaican: Language Systems in Interaction*. London/New York: Longman.
- Seedhouse, P. (2004). *The interactional architecture of the language classroom. A conversationa analysis perspective*. Language learning monograph 54. Oxford.
- Slotte-Lüttge, A. (2005). *Ja vet inte vad de heter på svenska. Interaktion mellan tvåspråkiga elever och deras lärare i en enspråkig klassrumsdiskurs*. [I don't know how you say that in Swedish. Interaction between bilingual students and their teachers in a monolingual classroom discourse.] Åbo: Åbo Akademi University Press.
- Steensig, J. (2000). Notes on some uses of code-switches and other interactional devices in conversation 801. In A. Holmen & J. N. Jørgensen (eds.), *Det er conversation 801 degil mi? Perspectives on the bilingualism of Turkish-speaking children and adolescents in North Western Europe*. Køge series K7. The Royal Danish School of educational Studies.
- Stroud, C. (1998). Perspectives on cultural variability of discourse and some implications for code-switching. In P. Auer (ed.), *Code-switching in Conversation. Language, interaction and identity*. London.
- Swain, M. (1998). Focus on form through conscious reflection. In C. Doughty & J. Williams (eds.), *Focus on form in Classroom Second Language Acquisition*. Cambridge. Cambridge University Press.
- Ten Have, P. (1999). *Doing Conversation Analysis: a practical guide*. London: Sage Publications.
- Tsui, A.B.M. (1989). Beyond the adjacency pair. In *Language in Society* 18. Pp. 645-564.
- Üstünel, E. & Seedhouse, P. (2005). Why that, in that language, right now? Code-switching and pedagogical focus. *International Journal of Applied Linguistics* 15/3. Pp. 302-321.
- Wong, J. (2000). Delayed next turn repair initiation in native/non-native speaker English conversation. In *Applied Linguistics* 21. Pp. 244-267.
- Young, R. F. & Miller, E. (2004). Learning as Changing Participation: Discourse Roles in ESL Writing Conferences. In *The Modern Language Journal* 88. Pp. 519-535.