The Typology of EFL Teachers' Codeswitching: A Validation Study

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Abstract

The use of L1 in language classroom has been traditionally repressed by applied linguists. However, in recent years, it is believed that switching to L1 can be considered a pedagogical instrument by teachers rather than a heterodox. Consequently, this two-phase study was an attempt to investigate the functions that are fulfilled by EFL teachers through their use of L1. In the first phase (i.e., theoretical phase), a thorough analysis of the available literature on teacher codeswitching was conducted with the aim of developing a typology which would encompass various functions of teachers' L1 use. In the second phase (i.e., empirical phase), in order to test the construct validity of the typology, data was collected from four EFL teachers by videorecording an entire session of their teaching. The instances of codeswitching in their performance were transcribed and coded in the light of the typology. The results of data analysis indicated that the typology has external manifestations in teachers' instances of codeswitching. It was also discovered that, among the selected participants, L1 was mostly used to fulfill pedagogical functions rather than social ones. Implications of the findings are discussed and suggestions for further research are provided.

Keywords: language teacher, codeswitching, construct validation

1. Introduction

As a term originally borrowed from sociolinguistics, codeswitching (CS) refers to "the use of more than one language or code in a single stretch of discourse" (Belz, 2002, p. 61). Sankoff and Poplock (1981) believe that there are three types of CS: in the first type, known as *tag switching*, a short fixed phrase in one language is inserted into an utterance which is entirely in the other language. The second type of CS, called *inter-sentential switching*, happens when speakers switch at clause or sentence boundaries, uttering either of the clauses or sentences in one of the two languages. And, the last type of CS, named *intra-sentential switching*, involves switching within a single clause or sentence boundary and constitutes the greatest syntactic risk and needs that the speaker be fluent in both languages.

In the second language acquisition (SLA) context, CS has turned out to be a complicated issue since the foreign language (FL) is both the means and the end of the classroom communication (Qian, Tian, & Wang, 2009). While in sociolinguistics CS has been described as a skilled performance, in SLA it has been traditionally looked upon as a symptom of error and lack of competence to the extent that the mixture of the first and the second language in the classroom has been considered "heterodox" (Belz, 2002, p. 60). One can look at this argument against classroom CS from both historical and socio-affective perspectives. From the historical viewpoint, some of the most widely used teaching methodologies, such as Direct method and Audiolingualism, have claimed that students' L1 must be suppressed in the classroom for the sake of better language learning (Larsen-Freeman, 2000). This claim is mainly based on two psycholinguistic justifications: the first one originates from an analogy between L1 and L2 learning implying that like children who acquire their first language without the help of any other linguistic code, L2 learners must experience the same situation if they want to be successful. Such an analogy, however, is based on a wrong comparison because L2 learners have an already built linguistic system (which is not possessed by L1 learners) and, therefore, they can use it as an asset throughout their L2 learning process. The second

justification stems from the notion of language compartmentalization which has its roots in contrastive analysis and suggests that L1 and L2 exist as separate systems in bilinguals' brain and that the application of L1 in L2 learning hinders rather than helps the process. But such a claim is no longer supported because, according to the dynamic systems theory (DST), it is nowadays believed that SLA is a dynamic system in which many variables interact with each other and since L1 is part of this system, it is in close interaction with the L2 (Bot, Lowie, & Verspoor, 2005). Consequently, learning an L2 is not a matter of just adding rooms to your house, but rebuilding the entire house from the beginning (Cook, 2001).

From the socio-affective vantage point, the proponents of the exclusive use of the target language believe that it makes the language real for the students and helps them experience unpredictability and develop their in-built language system (Macaro, 2001; Mugla & Seedhouse, 2005). Moreover, it leads to greater motivation on the part of the students because they see the immediate use of the target language to fulfill their needs (Turnbull & Arnet, 2002). It also maximizes the exposure to the target language, especially in the EFL settings where students have little, if any, contact with the FL outside the classroom (Cook, 2001). The studies conducted on teacher CS from such a perspective (e.g., Duff & Polio, 1990) adopted a *virtual position* (Macaro, 2001) according to which the class is like the L2 community and nobody, including the teacher, is supposed to speak in the L1. The outcome of these studies was prescribing some guidelines for minimizing the use of the mother language (ML) in the classroom (Mugla & Seedhouse, 2005).

Fortunately, language teaching profession has outgrown such simplistic views toward the use of L1 in the classroom. On the one hand, it is now stated that the exclusive use of the L1 by itself does not guarantee successful L2 learning. Edstorm (2006), for example, asserts that the excessive use of the target language might play the role of a demotivator as students find it redundant, especially when they are engaged in negotiation of meaning. Furthermore, looking at the matter

from a political perspective, Philipson (1992) claims that the exclusive use of the target language has been a strategy used by western colonizers to exercise and perpetuate linguistic imperialism. On the other hand, language teaching experts believe that the careful use of L1 can be an instrument in the hand of teachers to promote student learning (Atkinson, 1993; Kharma & Hajjaj, 1989; Cook, 2001; Macaro, 2005). In addition, according to Atkinson (1987), we should not ignore the value of the use of L1 in the classroom because it is not only the preferred strategy for students to surmount their obstacles of speaking in the target language, but also a humanistic approach to permit learners express their feelings and an efficient way for saving time. Also, the use of the ML provokes discussion and speculation, develops clarity and flexibility of thinking, facilitates teachers and students' relationships, and increases their awareness of the inevitable interaction between the ML and the FL (Harbord, 1992). Research studies that have scrutinized teacher CS from such a perspective are closer to the *optimal position* which states that L1 has some value in the learning process and should be utilized in the appropriate time and place (Macaro, 2001). These investigations have tended to describe non-judgmentally when and how teachers codeswitch in the classroom, rather than prescribe what they ought to do to reduce the amount of the L1 use.

With respect to language teachers, a quick look at the history of language teaching indicates that CS has been considered a pedagogical instrument in the hand of teachers despite the criticisms that have been traditionally waged against the use of students' L1 in the classroom (Cook, 2001). Teachers have used it as an interactional resource (Mugla & Seedhouse, 2005) and an effective pedagogical tool (Castelotti & Moore, 1997 - as cited in Turnbull & Arnet, 2002) to achieve their desired goals. It seems that the time has come to abandon repressive measures against teachers' use of L1 and instead try to look for its pedagogical implications.

The present study is a partial attempt in this regard; that is, this two phase study aims at, first, identifying a typology of functions that are accomplished by teachers through their use of L1 and then examining the

accuracy of the typology through empirical data. As a result, the following research questions are addressed in this study:

1. What are the main functions achieved by teachers through their use of L1?
2. How these functions can be practically manifested in instances of teacher CS?

1.2 Functions of teacher CS

Functions encompass all the tasks that are accomplished in the classroom through the use of L1. They are different from the reasons, in the sense that, the latter entails the logic behind classroom CS. For instance, a teacher might use L1 to translate a word for students (i.e., function) because s/he believes that the class time is limited and cannot be spent on providing excessive description on a single word (i.e., reason).

Different studies have been conducted to discover the functions of CS in language classrooms. The research done by Duff and Polio (1990) is one of the first attempts. They audio-recorded two sessions of the classes taught by thirteen native teachers of different foreign languages at University of California at Los Angeles (UCLA). The results showed that there was a wide variety among teachers in terms of the amount of time they used L1 ranging from 10 to 100 percent.

In a follow-up study, Polio and Duff (1994) selected six of the classes in their previous data with the highest amount of teacher-student interaction and transcribed the second session of the audiorecordings to find out the occasions in which teacher CS happened. The analysis of the transcripts demonstrated that teachers resorted to students' L1 in order to use administrative vocabulary (e.g., exam, term, quiz, etc.), explain grammatical items, build rapport with students, introduce unknown vocabulary, remedy students' lack of comprehension, and receive instructions from students as to how correctly use English (which was students' L1). A special feature of this study which undermines the generalizability of the findings is that students and teachers did not share the same first language, a phenomenon which is not very common in language teaching contexts across the world.

In another study, Macaro (2001) asked six student teachers of French to discuss some arguments and counter arguments about the use of L1 in the classroom and attend a one day class in which they were taught French in order to experience and reflect upon the exclusive use of the L2. Moreover, they observed experienced French teachers' classroom with a focus on their practices of CS. They then were given six separate French classes to teach over a 14-week period. Their classroom performance was videotaped followed by the transcription of the occasions in which they had codeswitched to English (which was both teachers' and students' L1). The results of the analysis of transcripts showed that CS was mostly utilized for providing the meaning of difficult words, reprimanding students and forcing them to follow the class orders, and giving instructions to the students. This study, however, suffers from some defects in its "ecological validity" (Mullock, 2006, p. 50); that is, since the classes were formed only for research purposes and participant teachers were aware of the focus of the study from the very beginning, their classroom performance might not be as natural as desirable.

Another research was conducted by Rolin-Lonziti & Brownlie (2002) who audiorecorded four French teachers' classroom performance followed by the transcription of those sections where CS had occurred. Analyzing the transcripts revealed that teachers used English for translation (e.g., switching from FL to native language (NL) to make input comprehensible), metalinguistic purposes (e.g., switching from talking in FL to talking about FL in NL), and communicative aims such as managing the classroom and expressing teachers' state of the mind. Also, the highest density of teachers' use of L1 could be observed in the occasions of grammar explanation. A methodological flaw of this study was that the four participant teachers were aware of the aim of the research (i.e., teacher CS) from the very beginning. Therefore, their classroom performance might have been negatively affected by their consciousness leading to less natural teacher talk.

Another attempt for finding the relationship between teachers' language choice (L1 versus L2) and its pedagogical functions was made

by Kim & Katherine (2005). They audiorecorded and then transcribed three sessions of each of the four native teachers of different languages. Once the transcripts were analyzed, it was found that in most of the cases target language was used for accomplishing core goals which aimed at teaching the target language. The first language, on the contrary, was utilized to achieve framework goals whose purpose was setting up and managing classroom activities. More specifically, the target language was usually used in cases which did not need much elaboration, whereas the first language was the most convenient instrument when the teachers needed to provide more explanation (e.g., explaining classroom rules).

In their research on the functions of teacher CS, Mugla & Seedhouse (2005) differentiated between teacher initiated CS and teacher induced CS. The former refers to the situation in which the teacher himself/herself switches to the L1, whereas the latter occurs when teacher uses one language in order to induce learners to speak the other language. Their study involved videorecording an entire session of six EFL teachers' classroom performance in a Turkish university followed by the selection of eight instances of teacher CS for further analysis. The findings indicated that teachers initiated CS when they did not receive any response to their questions from the students, when they wanted to translate an item into L1, when they intended to provide a prompt for L2 use (e.g., providing some grammatical explanation), and when they came across procedural problems and wanted to give clear instructions to students. Moreover, examples of teacher induced CS happened when teachers asked students to translate an item into the L1 and when they gave a prompt for L2 use by, for instance, using L1 to ask students to make a specific type of question in the L2.

In a case study, Edstorm (2006) played the role of both researcher and participant teacher by audiorecording an entire term (24 sessions) of her Spanish class. At the end of the term, she also distributed a questionnaire among students asking them to comment on the functions of the teacher's L1 use. The analysis of the audiorecordings and students' responses showed that she used L1 for explaining grammar, managing classroom, compensating comprehension breakdown, talking about the

cultural aspects of the target community, building rapport and connecting with students, and translating difficult parts. Again, the methodological problem here was that the researcher/teacher was aware of the purpose of the study which might have influenced her classroom practices. Moreover, since the researcher and the teacher was a single person, her procedure for data analysis might have been biased in the sense that she has inadvertently imposed her own ideas on writing and analyzing the journals with the aim of reaching the desired outcomes.

One of the latest studies that investigated the functions of teacher CS was conducted by Qian et al. (2009) who selected two Chinese EFL teachers for this purpose. They videorecorded ten sessions of classes taught by each of the participants and then transcribed the instances of classroom CS verbatim. Using Kim and Elder's (2005) functional language alternation analysis framework, the researchers identified two broad categories of teachers' CS: methodological and social. The former, which was used when teachers were concerned with the effectiveness of instruction, was applied for L1 translation, clarification, highlighting, and efficiency in the case of lack of enough time. Instances of social codeswitching, which was at work when teachers were preoccupied with increasing or decreasing the social distance, included the use of L1 for praise, encouragement, and disapproval of students' behavior. Also, in some cases teachers switched to L1 in order to fulfill a mixture of both methodological and social functions.

Taken together, despite the precious attempts made on the functions of language teacher CS, the available literature has some shortcomings; first, in many of the studies the participants have been aware of the focus of the research, a methodological flaw that threatens both internal and external validity of the findings. Second, there are discrepancies among the findings of available studies which can be attributed to contextual differences (e.g., the use of different languages, various demographic characteristics of the participants, various levels of teaching, etc.). Therefore, there is little consensus among the researchers as to the functions of teacher CS. Finally, all the available studies have had an atomistic view toward CS in the sense that they have focused on the

specific context in which the research has been conducted at the expense of connecting the findings to other ones in other places. As a result, the present research project is a partial attempt to address these challenges by, first, designing a comprehensive typology of teacher CS based on the available literature and, then, examining its validity in an EFL context.

1.3 The study

The present study was conducted in two theoretical and experimental phases. The theoretical phase was mainly concerned with developing a typology which encompasses all the instances of language teacher CS within a comprehensive framework. The experimental phase, on the other hand, focused on testing the validity of this typology in an EFL context with Iranian teachers. In this section, each of these two stages is addressed in detail.

1.4 The theoretical phase

As mentioned above, one of the essential drawbacks of the available studies on teacher CS is their lack of a comprehensive perspective toward its functions. In other words, every single study has been able to touch certain parts of the elephant and make their interpretations accordingly while the biggest picture has been ignored. Therefore, as the beginning stage and in order to answer the first research question, the researchers tried to develop a typology of teacher CS. Efforts were made to come up with a comprehensive classification as much as possible so that the maximum number of imaginable functions would be included in the typology.

To this end, previous studies on teacher CS were scrutinized with the aim of detecting all the functions that various researches had assigned to teacher CS. Throughout the process, care was taken to make a distinction between functions and reasons of CS, another move to compensate the confusion in the available literature. For example, in the study conducted by Mugla and Seedhouse (2005), "lack of response from students' to teachers' questions" was considered a function of teacher CS. Such a category, however, reflects the reason beyond teachers' CS

rather than the function (or role) fulfilled by it. Consequently, in the present typology, attempts were made remove this misleading mixture by distinguishing functions from reasons.

The functions extracted from the literature were divided into two broad categories in the developed typology: pedagogical (or methodological) and social (or affective) functions. The former entails all the instances of teacher CS which intend to fulfill some language-related roles with the purpose of improving target language comprehension. In other words, in this category, the main function of CS is to teach the target language. This category includes Translation, Metalinguistic Uses, and Communicative Uses. Translation is the function through which the teacher provides the L1 equivalent of the target item. Metalinguistic Uses involve functions that deal with the provision of further explanation about the target language forms through students' L1. Finally, Communicative Uses include the functions that teachers resort to in order to move from one stage of teaching to another or to switch the responsibility to students.

The second category (i.e., social functions), in contrast, has to do with those examples of teacher CS which aim at taking students' emotional side into account, building rapport with students, disciplining the classroom, or giving instructions on how to perform different activities. More precisely, this category gives prominence to factors which are not directly related to the target language and are instead mainly concerned with the social and managerial atmosphere in the classroom. It involves two subcategories of Managing the Classroom/Building Rapport with Students and Providing Instructions. The first subcategory entails functions through which the teacher deals with problematic students or reduces the social distance between himself/herself and students. Providing Instructions refer to those functions that are accomplished when the teacher uses L1 to ask different students to do classroom activities or to move from one activity to the next. It is distinct from the Communicative Uses in terms of focus; that is, Communicative Uses include resorting to L1 to solve language-related issues, whereas in Providing Instruction, the L1 is used to fulfill activity

related functions. A complete version of the designed typology along with the definition and examples (when necessary) of each category and subcategory can be found in the following table (Table 1).

Table 1. The typology for functions of language teacher CS

Functions	Subcategory	Branch	Definition
Pedagogical (methodological) functions	Translation	Translation of a word	Giving the equivalent of a word in L1
		Translation of an entire sentence	Providing the L1 meaning of an entire sentence or utterance
	Metalinguistic uses	Comment	Giving some peripheral explanation on L2 forms/culture when the primary focus is on communicative activities
		Contrast	Making a comparison between L1 and L2 forms/culture
		Grammar explanation	Providing grammar explanations when the primary focus is on forms rather than meaning
		Highlighting	Providing some key learning points (e.g., telling students some strategies for better L2 learning)
	Communicative uses	Clarification	Providing more meaning-based explanations by elaborating on L2 utterances in the L1, e.g. a pilot is the person who is responsible for

Functions	Subcategory	Branch	Definition
			driving an airplane
		Checking comprehension	Assessing whether students have comprehended something, e.g. no problem?
		Directives	Asking students whether they can handle some responsibilities, e.g., can you answer the question?
		Marker	Using utterances that demonstrate a change of activities, e.g. ok, now, well
		Reprimand/disapprove	Using utterances that show students have done something wrong, e.g. why did you come late?
	Managing the class/building rapport with students	Giving feedback	Providing positive/negative feedback on students' language based performance, e.g. good, very well, excellent
		Reminder	Using utterances that tap into students' memory, e.g. which page should we cover today?
		Telling jokes/revealing emotions	Sharing the emotional status with students, e.g. I'm glad
	Providing instructions	Giving instructions	Providing necessary guidelines for doing different activities
		Giving prompts	Using utterances that show the quality with which activities must

(Functions column, rotated: Social (affective) functions)

Functions	Subcategory	Branch	Definition
			be accomplished, e.g. quickly, be fast, etc.
		Pointer	Asking students to refer to a specific part of the book, e.g. next page please
		Nominate	Directly addressing one of the students to do an activity, e.g. you please!
		Using administrative vocabulary	Using words that are related to the school administrative issues, e.g. exam, test, quiz

1.5 The experimental phase

In order to answer the second research question and also to put the validity of the developed typology into test, data was gathered from four different classes of EFL teachers with special focus on the instances in which they resorted to L1 (Persian) during their teaching. In this section, the information for the second phase of the study is presented.

1.5.1 Participants

The participants were four EFL teachers (two males and two females) teaching general English courses in a private language institute Kermanshah, one of the western cities in Iran. In order to protect their identity, they will be represented by English alphabet letters A, B, C, and D. They were between 23 to 30 years old with Bachelor of Arts (BA) in English-related majors; that is, teachers A and C held a BA in English translation, whereas teachers B and D had BA in Teaching English as a Foreign Language (TEFL). Using the non-probability sampling technique called purposive sampling (Ary, Jacobs, & Razavieh, 2005), the target participants were selected from among less experienced teachers with roughly the same amount of teaching experience (i.e., between two to four years of pedagogical practice) in order to control the effect of experience on the research outcomes.

The number of students in the participating classes ranged from 5 to 9 with a total of 25. All of them were between 15 to 27 years of age and shared the same native language with that of the teachers, i.e. Persian. They were attending English classes twice a week with each session lasting for 75 minutes. Here again efforts were made to minimize the effect of extraneous variables through selecting intact classes which had as homogeneous students as possible in terms of their native language, age, ethnic background, and proficiency level (i.e., lower intermediate or LI).

According to the pedagogical policy of the language institute, the Interchange series were taught in the classes with the primary focus on developing oral skills (i.e., listening and speaking). Based on the claim made by the head of the institute, Communicative Language Teaching (CLT) was the dominant methodology and the teachers were supposed to base their classroom practices on the basic tenets of this method. This macro objective was the bedrock which derived teachers toward a unified classroom practices despite the existing variations. A summary of teachers' biographical details and the courses they taught are presented in table 2.

Table 2. Teachers' biographical information and their course/lessons specifications

Teacher	Gender	Age	Degree	Major	Experience (in years)	Coursebook taught	Number of students	Students' proficiency level
A	Female	23	BA	English translation	2	Interchange	5	LI
B	Female	30	BA	TEFL	4	Interchange	6	LI
C	Male	28	BA	English translation	4	Interchange	9	LI
D	Male	29	BA	TEFL	3	Interchange	7	LI

1.5.2 Data collection

Data was collected through videorecording an entire session of the participants' classroom teaching. In a meeting with one of the researchers, all four participants received some broad explanation about

the nature of the study and data collection procedure. They were also assured of their freedom to participate in or drop out of the research at any time they would like. Moreover, teachers were reminded of the confidentiality of the information they would provide. At the end of the meeting, their questions about the study were responded by the researcher and a schedule was planned for conducting the videorecording sessions.

At the beginning session of data collection in each classroom, the students were informed of the research project verbally in order to obtain their consent for ethical clearance purposes. They were told that the aim of the study was investigating teachers' classroom behavior and that the camcorder would be zoomed in on teachers. They were encouraged to follow their ordinary classroom performance and do whatever they do in a normal situation.

Several measures were taken to make sure that the reliability and validity of the research findings will not be greatly affected by the use of this data collection approach. First, although participant teachers received some explanation about the nature of data collection procedure and the following interview, they were not explicitly informed about the purpose of the research; that is, they were not told that the focus of the study was on teachers' CS. By so doing, it was hoped that they would not be negatively affected by their conscious attention to the CS phenomenon and their classroom practice would be closer to the natural situation. Second, in order to minimize the effect of the presence of camera on teachers' and students' classroom conduct, , the main video-taping phase started in the third session after having kept the camera off on the tripod in the rear of the class for two sessions. Finally, the videorecording was completed without the presence of any of the researchers so that teachers' and students' classroom performance would not be negatively influenced by the presence of an intruder.

1.5.3 Data analysis

The four videorecorded sessions of teachers' classroom performance were watched with the purpose of identifying those occasions when instances of CS happened in teachers' talk. All passages in which

teachers switched from English (FL) to Persian (ML) were transcribed. Criteria for determining the beginning and the end of the transcripts included either linguistic or behavioral features in teachers' performance. For example, the time a teacher asked for the Persian equivalent of a difficult English word was supposed to constitute the beginning of a transcript. A pause, a repetition of students' utterance, or a switch to a new activity were considered as the indices demonstrating the end of the transcript. Overall, care was taken to include as much contextual clues in the transcribed segments as possible in order to be able to recognize the functions fulfilled by the instances of CS.

Subsequently, all the transcribed passages were coded by one of the researchers following the categories of the typology. Intra-coder reliability was established by recoding the same segments after a lapse of one month with a resultant level of agreement of 93 percent. Those situations in which a new categorization emerged in the second round of coding were reconsidered and a final decision was made by classifying the segments under the category which seemed to describe the function of the CS passage in a better way. In addition, some of the passages which displayed a combination of several functions simultaneously were classified under several categories. For example, in the following excerpt from teacher A's talk, both clarification (a subcategory of Communicative Uses) and grammar explanation (a subcategory of Metalinguistic Uses) are performed in a single utterance:

> T: ((while explaining some grammatical point on the board)) look at irregular verbs. Can you find a pattern for irregular verbs or not? *Mitunid ye ghaede baraye afhale bighaede begid?* [can you state a rule for irregular verbs?]

2. Results and Discussion

The total number of the CS passages which were classified under different categories of the typology was 205. Generally, the use of CS strategies for pedagogical purposes outnumbered that for social functions with a frequency of 175 (83.36%) registered for the former and one of 30 (14.64%) for the latter. Considering the three subcategories of the

pedagogical function, a slight variation could be observed with Communicative Uses registering the highest percentage (27.31%) followed by Translation (24.39%) and Metalinguistic Uses (23.90%). Among the subcategories of the social function, on the contrary, a big difference could be detected, in that, Providing Instructions was the dominant subcategory with a percentage of 27.31% compared to that for Managing the Class (1.95%). The following table (Table 3) provides a schematic representation of the frequency (in both number and percentage) for each of the subcategories of pedagogical and social functions.

Table 3. Frequency of the use of two main categories and their subcategories

| | Pedagogic Functions | | | | Social Functions | | |
	Translation	Metalinguistic Use	Communicative Use	Total	Managing the Class	Providing Instruction	Total
Number	50	49	56	175	4	26	30
Percentage	24.39	23.90	27.31	85.36	1.95	12.68	14.64

The frequency of use across the four participants was calculated first for the main categories (i.e. pedagogical and social functions) and, then, for each of the subcategories of these two broad divisions. As illustrated in Table 3, regarding the total use of CS, a great deal of variation could be observed among the four participants with teacher D's frequency (62.43%) being higher by a large margin in comparison to that of the other three teachers whose frequency ranged from 19.02% for teacher A to 4.39% for teacher B with teacher C's frequency of 14.14% positioned

in between. While the same order could be detected among the four teachers with regard to their frequency of the use of CS to fulfill pedagogical functions, a slight change was observed in the case of social functions, in that, teacher C was placed higher than teacher A with frequencies of 3.41% and 1.46% respectively. Moreover, a comparison across the two main categories reveals a homogeneous pattern as all of teachers utilized CS for pedagogical aims far more than for social purposes. In fact, among none of the participants the frequency of the use of CS for fulfilling social functions exceeded 10 percent and even in one case (teacher B) it was never resorted to.

Table 4. Frequency of the total and the two main categories by each teacher

	Teacher A	Teacher B	Teacher C	Teacher D
TOTAL				
Number	39	9	29	128
Percentages	19.02	4.39	14.14	62.43
PEDAGOGIC FUNCTIONS				
Number	36	9	22	108
Percentages	17.56	4.39	10.73	52.68
SOCIAL FUNCTIONS				
Number	3	0	7	20
Percentages	1.46	0	3.41	9.75

When it comes to the subcategories of the pedagogical function, among the female participants (teachers A and B), the frequency of the use of CS for Translation and Metalinguistic Uses was relatively higher than that for Communicative Uses. However, among the male participants (teachers C and D), the application of CS for Translation and Communicative Uses was more popular than that for Metalinguistic Uses. With regard to the subcategories of the social function, on the other hand, except for the case of teacher B who used none of the functions, all the other three teachers mostly resorted to CS for instructional purposes than for management ones. The following table (Table 5) illustrates the

frequency (in both number and percentage) of the use of CS for fulfilling the subcategories of pedagogical and social functions.

Table 5. Frequency of the use of subcategories by each teacher

	Teacher A	Teacher B	Teacher C	Teacher D
TRANSLATION				
Number	16	5	8	41
Percentages	7.80	2.43	3.90	20
METALINGUISTIC USES				
Number	15	3	5	26
Percentages	7.31	1.46	2.43	12.68
COMMUNICATIVE USES				
Number	5	1	9	41
Percentages	2.43	0.48	4.39	20
MANAGING THE CLASS				
Number	0	0	2	2
Percentages	0	0	0.97	0.97
PROVIDING INSTRUCTION				
Number	3	0	5	18
Percentages	1.46	0	2.43	8.78

Taken together, it could be said that CS was more frequently applied by the four teachers to fulfill pedagogical rather than social functions. Furthermore, a great deal of variation was observed among the four participants regarding both of the main categories with teacher D registering the highest frequency of resort to CS and teacher B the lowest one. On the other hand, among the subcategories of pedagogical function, while Translation was an integral function of CS for all the four participants, Metalinguistic Uses received more attention among female teachers in comparison to male ones who heed more toward Communicative Uses. Furthermore, Providing Instruction was the subcategory of social function which was more frequently achieved by

all the four teachers through CS compared to the other one – Managing the Class.

The wide range of variety in the amount of ML use by the four participants is supported by the literature. Duff and Polio (1990), for example, found that their participant teachers' use of the ML ranged from 0 to 90 percent. Also, Kim and Katherine's (2005) study demonstrated that teachers' resort to the ML varied greatly from one participant to the other. Contextual factors such as students' proficiency level and the possession of a common language by teacher and students can be influential factors in determining how much teachers use the first language in the classroom.

Considering the subcategories of the pedagogical functions, previous studies show that Translation has always been one of the most frequently fulfilled functions through the use of ML (Macaro, 2001; Rolin-Loniziti & Brownlie, 2002; Mugla & Seedhouse, 2005; Edstorm, 2006; Qian et al., 2009). By the same token, in the present study, it had the highest frequency (32.68%). It seems both convenient and time saving to use the L1 in order to provide the meaning of unknown words, especially the abstract ones which are much more difficult to be explained or demonstrated in the target language.

With respect to the Metalinguistic Uses, the results showed that Grammar Explanation and Comment were two of the subclasses with the highest frequency (16.09% and 5.36%, respectively), whereas the third function (i.e., Contrast) had a very low frequency (1.46%) and the last one (i.e., Highlighting) was never accomplished through the use of the ML. Perhaps the language used for grammar explanation is a complicated one and needs elaboration on the part of the teachers. This might be not only rather difficult for nonnative teachers to utilize, but also demanding for students to understand. Consequently, the ML can be applied to fulfill this function which might be considered a type of framework goal (Kim & Katherine, 2005). In fact, in some previous studies (e.g., Rolin-Lonizizti & Brownlie, 2002) the highest density of teachers' use of L1 could be observed in the occasions of grammar explanation. Comment, as the other subclass of Metalinguistic Uses, was almost similar to

Translation with the exception that in this case the teachers usually did not resort to the literal, exact translation of the target words, but provided some extra information. For example, in the following extract, teacher A gave some extended explanation on one of the cultural aspects of the target community to make the concept clear for students:

> T: *Karaoke bar jaeeye ke dusta baham miran va ba misighi ke unja pakhsh mishe avaz mikhunan* [karaoke bar is a place where friends go with each other and sing songs with the music that is played]

In the same vein, among the subclasses of the Communicative Uses, there are two functions (i.e., Clarification with a frequency of 15.12% and Checking Comprehension with one of 10.24%) which are more frequently fulfilled through the use of L1. While the first subclass needed the use of a complex language (which again seems a little complicated for students), the second one was usually achieved through teacher-induced CS; that is, teachers asked students to translate parts of their talk so that they would demonstrate their comprehension. In contrast, the other two subclasses (i.e., Directives and Marker) were among the ones that could easily be accomplished through the use of the TL as they consist of some fixed and widely applied phrases which are more or less familiar to the students.

When it comes to the subclasses of the two subcategories of social functions, the findings indicated that all the participants were mainly obsessed with providing comprehensible instructions. Thereafter, Giving Instruction had the highest frequency (8.78%). As a matter of fact, some of the other functions, including Giving Prompts, Nominate, and Using Administrative Vocabulary, were never accomplished through the use of L1, which might be explained in two ways; first, no occasion rose in the four classrooms which required teachers to use some of these functions, like Giving Prompts and Using Administrative Vocabulary. Second, the other functions could be achieved through less complicated utterances and, therefore, were easily comprehensible by the students and did not require the teacher to use the L1. On the other hand, because of the low

number of students in each classroom little language was used for disciplining or managing the students. Consequently, hardly ever did teachers codeswitch to, for example, reprimand students. Additionally, based on the observation of videorecordings, the classes were more teacher-centered with teachers trying to keep a distance from students leading to their reluctance to build rapport with students through telling jokes or revealing personal emotions.

3. Conclusion

The second phase of the study provides evidence-based support for the developed typology. The categories and subcategories of functions of language teachers' CS were manifested in the collected data. It was demonstrated that the EFL teachers resorted to the L1 to fulfill both pedagogical and social functions. Therefore, it might be claimed that the typology is valid enough to describe functions of teacher CS. The typology can be implemented by language teaching experts to discover the main functions of teacher CS in different contexts. Once these functions have been identified, measures can be taken to find appropriate procedures to utilize the benefits of L1 use in the class (instead of repressing it). By so doing, one might hope that in EFL contexts L1 could be considered a pedagogical tool which can help the development of L2 skills among language learners.

As the first attempt in this regard, the typology must be further explored in various contexts with different groups of teachers and students. There might be some other functions for teacher CS that could be discovered through future studies. Perhaps, students' proficiency level and L1 background could be two influential variables affecting the way teachers resort to L1. It is, therefore, suggested that in future studies the typology must be tested in the light of students' characteristics and teachers' demographic features.

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