

A Study of the Form and Content of Private Speech Produced by Iranian Adult EFL Learners

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Abstract—This article examines the speech of Persian learners of English while working collaboratively on a picture description task. The main purpose of the study was to analyze the content and form of private speech identified in the interactions of 12 adult EFL learners at two beginner and advanced levels of proficiency. The learners' interactions were tape-recorded during the completion of a picture description task. The results indicated that whisper and loud forms of private speech were used by both advanced and beginner learners, and question/answer and repetition were the two most frequent contents of private speech identified in the transcripts of both groups. Extracts obtained from the interactions of the learners suggest that private speech helped them manage their speech, structure their sentences and get control over the task.

Index Terms—sociocultural theory, form and content of private speech

I. INTRODUCTION

Many researchers agree that private speech is used as a tool to solve problems and control behavior (Winsler, Diaz and Montero, 1997; Winsler et al. 2007). Several studies have indicated that some children are more attentive and perform better than their less talkative agemates when they are involved in challenging tasks (Berk and Spuhl, 1995; Winsler, Diaz and Montero, 1997). For instance, Winsler et al. (2007) found that children producing more private speech had less behavior problems and had better social skills. Fernyhough and Fradley (2005) also reported that private speech is more strongly related to future than concurrent task performance. Saville-Troike's (1988) data, collected from children with Chinese, Korean and Japanese L1 backgrounds, showed that most of these children produced private speech in whisper, employing different strategies such as repetition, producing new language forms and rehearsal. It was also found that the quantity and quality of private speech are influenced by the difficulty of the learning task as well as children's level of cognitive development and their social orientation and learning style. Broner and Tarone (2001) also provided evidence of private speech in the form of language play. They examined the relationship between two forms of language play (i.e., *ludic* language play and language play as *rehearsal*) in private speech and second language acquisition (SLA) in the interaction of the learners. They found that language play as rehearsal has the function of internalization and ludic language play has an amusement function. The data revealed that with increase in proficiency, ludic language play would increase; however, language play for rehearsal would decrease. Most of the studies revealed that private speech has a positive impact on performing the task and having better social skills in children.

Private speech is not evident just in children acquiring L1; some SLA studies have supported its existence in adult learners. Research has shown that adult learners revert back to private speech when they are faced with challenging cognitive tasks. For example, Ahmed (1994a) summarized the findings of John-Steiner's (1992) study and reported that adult L2 learners also use private speech when they are involved in performing difficult and unfamiliar tasks. Also, an earlier study by Frawley and Lantolf (1985 cited in McCafferty, 1994a) confirmed the existence of private speech among adult learners.

Although the study of private speech in children has received considerable attention, little is known about the adult learners' use of private speech in EFL context. The present study is an attempt to examine the form and content of private speech used by Iranian adult EFL learners during a picture description task.

II. BACKGROUND OF THE STUDY

A. Theoretical Framework

Recently, many SLA studies have been inspired by the sociocultural theory of mind. From sociocultural perspective, all higher mental functions of human occur through interaction in society (Lantolf and Thorne, 2006); in other words, they happen in cultural context. The primacy of social interaction in human development was originally emphasized by Vygotsky (1978, p.57) who claimed that "every function in the child's cultural development appears twice: first, on the social level and later, on the individual level; first, between people (interpsychological) and then inside the child

(intrapyschological).” According to the sociocultural theory cognitive development of a person is a socially mediated process in which language plays a major part (Lantolf and Appel, 1994).

Within this framework, speech has two functions: communicative and self-oriented. The overt, self-oriented speech, as Roebuck (2000) pointed out, is referred to as private speech which differs from communicative speech in form. According to Vygotsky (1986), private speech is a kind of speech which is addressed to oneself (self-directed) although it is sometimes spoken aloud, as opposed to external speech, which is intended to address other people and provides a social function. Lantolf (2000) elaborates more on the concept by stating that via private speech ‘we ask ourselves questions, answer these questions, tell ourselves to interrupt a particular activity, tell ourselves we are wrong or that we cannot do something, and that we have completed a task’ (p.15). He continues defining it as the ‘speech that has social origins in the speech of others but that takes on a private or cognitive function’. As the person develops cognitively, private speech becomes subvocal and eventually develops into inner speech. Private speech, as evidenced in Wertsch’s (1985) studies, generally consists of elliptical utterances which are not completely syntactic. Utterances such as *wait, what? next, no, I can’t* are instances of private speech addressed to the self.

Diaz (1992) argues that private speech which is addressed to self is for the purpose of *self-regulation* not for communication. Lantolf and Thorne (2006) also contend that “[t]he primary way in which we use language to regulate our mental functioning is through *private speech*” (p. 202). Smith (1996, cited in Donato 2000) also operationally defines private speech as “a verbal attempt to gain self-regulation during problem-solving tasks” (p. 31). Roebuck (2000) explains that when learners encounter cognitively difficult tasks, they often externalize their inner thought as speech in order to gain control of their mental activity in the task.

According to Lantolf and Thorne (2006), regulation is a form of mediation; when children are involved in the social activities and interaction with others, they acquire a capacity to regulate their own behavior which was previously regulated by others. They also noted that through the process of development, children pass through the three stages of object- regulation, other regulation and self regulation, which is the last stage of developmental process possible through internalization. Ahmed (1994b) also describes regulation as being a process in which the natural and elementary mental functions are replaced by higher mental functions.

B. Studies Conducted on the Form and Content of Private Speech

Many studies indicated that adult private speech can occur in different forms in different contexts (Brooks, Donato and McGlone, 1997; Buckwalter, 2001; DiCamilla and Anton, 2004; Donato, 1994; Ohta, 2001; Platt and Brooks, 1994; Villamill and De Guerrero, 1996). Some of these studies reported the use of private speech in loud and whisper forms (Brooks, Donato and McGlone, 1997; DiCamilla and Anton, 2004; Donato, 1994; Platt and Brooks, 1994).

Smith (1996, cited in Donato, 2000) investigated the use of private speech in a teacher-fronted ESL grammar class. He examined high intermediate ESL students and collected data during a grammar lesson on gerunds and infinitives and found instances of private speech in one learner having problem in understanding the teacher’s grammatical explanation. He argued that, theoretically, private speech can be mistaken for the social speech since both interlocutors’ goal is to create coherent discourse. He also found that the learner expressed his confusion through the use of private speech in the forms of hesitation, repetition and incomprehensible utterances. Some functions of private speech were also reported as need for assistance, students’ orientation toward task and externalization of one’s own thinking process.

Buckwalter (2001) investigated the social and cognitive behavior of 58 freshman and sophomore students of Spanish of Texas University. He particularly focused on the repair pattern among the learners. The students were asked to work through the six types of teacher-created speaking activities. Evidence of private speech as affective marker (oh!) self-directed question (‘how do you say’), evaluative expressions (‘no, wait’ and ‘I mean’) and repetitions of L2 word to match the lexical item in their memory was found in the data. Learners’ use of private speech was a sign of cognitive processing, and it was also found that self initiated self response was a reflection of self-regulatory behavior of the learners. He also concluded that private speech is used for self regulation and for gaining control over the task.

Similar findings were reported by Platt and Brooks (1994) who studied the interactions of ESL and FL (Spanish and Swahili) learners while performing a task collaboratively. Evidence of monologue and self-regulated speech in the loud and whisper forms were reported.

Anton and DiCamilla (1999) studied the collaborative interactions of five dyads of adult beginner learners of Spanish performing a writing task in a foreign language classroom. Evidence of private speech was found in the data as a tool for directing their thinking when dealing with a difficult task. The private speech took such forms as self-addressed directives (‘wait’), repetition and use of modal verbs (‘can’) and self evaluation. DiCamilla and Anton (2004) investigated the occurrence of private speech in collaborative interactions of 14 dyads of Spanish learners at beginning, intermediate and advanced levels of proficiency during a collaborative writing task. Their findings showed that the learners used private speech during interaction in the form of repetition in L1 to retrieve knowledge of language form. The use of private speech helped the learners focus on the task and distance themselves from the problems they faced and gain control over the task. Self-addressed questions and evaluative expressions were also evident in the data. Different forms of loud, whisper, mumbling, vague pronunciation, ellipses were also identified in the data; however, the abbreviated forms were more frequently produced. Examples of whisper and elliptical forms of private speech are presented in the episode from DiCamilla and Anton (2004). In Line 6, Bob repeated the word ‘en Tijuana’ in whisper.

In Line 10, Bob and Brie agreed on the verb 'iremos' and Bob immediately whispered 'what'd that be', an elliptical form of the word 'that', because the partner did not know the reference of 'that'.

Excerpt 1

- 1 Brie: *¿Qu é ciudad?*
- 2 Bob: *Tijuana?*
- 3 Brie: *Si.*
- 4 Bob: *Vamos a, vamos a Tijuana.* Ah. (Yawn). *En, en Tijuana . . . queremos,*
ah . . . que . . . en Tijuana we want to
- 5 Brie: go to the ocean? (laugh)
- 6 Bob: **0en Tijuana0** Well, I guess we'll use *futuro* there, we will go.
- 7 Brie: ah . . . ahm
- 8 Bob: *Iremos?* Is that *futuro*?
- 9 Brie: **00Tijuana iremos00, s í**
- 10 Bob: Ah . . . *iremos a . . . 00What'd that be?00 . . sur, iremos al sur?*
- 11 Brie: Ahm . . .
- 12 Bob: *Al sur?*

Brooks, Donato and McGlone (1997) studied features of discourse among 3 pairs of intermediate university learners of Spanish performing five information gap activities. They found that the learners used private speech during their interactions in the form of whispering to plan and control their language and actions. Private speech was constructed in the L1 and can develop in the direction of target language. Examples of self-talk, like sub-vocalized target language words, counting out numbers, affective reactions (Oh goodness, Damn, this is hard) or openings and closing of episodes (Let's see here..., Okay..., Now what?) were identified in the data both in L1 and L2.

Although some studies confirmed the existence of private speech in L2 learners, very few studies have focused on identifying and describing its instances and manifestations in foreign language context (Anton and DiCamilla, 1999; Buckwalter, 2001; Platt and Brooks, 1994). As McCafferty (1998) claimed, there may be cross cultural differences among the learners in the use of private speech and its form and content. With this in mind, there is an urgent need for a study exploring the phenomenon of private speech in EFL context. EFL learners generally share the same mother tongue (L1) and they may provide data in which private speech may be externalized in a different way. The present study is, therefore, an attempt to explore the use of private speech in EFL learners' interaction during collaborative task completion. To shed light on the phenomenon, the study will be guided by the following research questions:

1. What are the forms of private speech produced by beginner and advanced EFL learners when completing a task collaboratively?
2. What are the contents of the private speech produced by beginner and advanced EFL learners when completing a task collaboratively?

III. METHOD OF THE STUDY

A. Participants

The participants of the study included twelve female students within the age range of 20 to 28 (average = 25.41). These students were studying English at two proficiency levels of advanced and beginner in two institutes of Afarinesh and Beynolmelal, located in Sari, Iran. The participants' proficiency level was assessed through a placement test conducted by the professional institute manager. The advanced group consisted of six students (3 pairs) and the beginner group was composed of six students (3 pairs). After making arrangements (for time and space) with the managers of the two institutes, the participants were informed of the general purpose of the study. They were asked to come to the institute half an hour earlier than their regular class time. Following that, we gained the participants' permission for video- and audio- recording their conversation in the institute.

B. Materials

A picture description task was used to collect the data for the current study. This task was chosen because the linguistic demand necessary for narration was appropriate for both advanced and beginner learners. The task was performed by dyads of learners one at a time. The set of pictures in this task depicted a story about a man setting a time for his vacation. For example, in one picture, the man considers Orlando as his destination on a map; in the other picture, he is packing his suitcase and watering the flowers in his house (see Appendix).

C. Procedure

Six pairs of learners in the two groups completed the task separately in six sessions. The total time spent by the advanced group was 83 min (ranging from 19 to 44 min) and by the beginner group was 53 min (ranging from 16 to 20 min). At the start of each session, one of the researchers gave brief explanation about the task before the learners worked together with to complete the task and produce a story line. The participants were asked to write a composition collaboratively about the pictures as detailed as possible and make a story. To reduce the students' anxiety, there was no time limit for the participants to finish the task. To analyze samples of private speech, it was necessary to access the

participants' facial expressions and gestures. To this end, a video camera was located in front of the pairs so that their gestures could be captured in due time. All conversations during task completion were audio-taped and then transcribed. Due to the difficulty involved in detailed analysis and coding, at first, the two researchers separately coded 10% of the data and the disagreements were resolved. The transcripts were then coded by one of the researchers. The coding and categorization of the data were based on the coding systems provided in the following section.

D. Data Analysis and Coding

1. Coding the form of private speech

According to Diaz, et al. (1992), the form of private speech refers to the "prosodic and structural aspects of private speech such as loudness, intonation, and other relevant acoustic variations, as well as possible violations of syntax or deletions that could have potential functional significance" (cited in Winsler, et.al. 2005, p.14). In other words, the form of private speech can relate to loudness (whisper or loud) and abbreviated or complete forms. Following previous studies, we selected three commonly studied forms of private speech for analysis: *whisper*, *loud*, and *abbreviated* forms. Whisper refers to those utterances which are in a low tone of voice addressed to the self (Villamil and De Guerrero, 1996). Excerpt 2 adopted from DiCamilla and Anton (2004) illustrates the whisper form of the private speech marked with ^{ooo}:

Excerpt 2

- 1 Ray: So we could say. . . . Why don't we say, like, uh, Tina . . .
- 2 Tina: We just learned . . . We just learned that the word 'to go'.
- 3 Ray: ^{ooo}To go. To^{ooo} vamos?
- 4 Tina: No. The's' word.

In this excerpt, Ray begins searching for the Spanish equivalent privately and utters in a barely audible whisper to himself the English infinitive form of the verb, "to go" (Line 3). Then, he comes up with the Spanish verb "vamos?" ('We go') and proposes it loudly to his partner.

Loud speech refers to those utterances which are self-directed but in a loud tone of voice. They lack social purposes (Villamil and De Guerrero, 1996). The following excerpt illustrates an instance of loud form of private speech marked with ^{oo}:

Excerpt 3

- 1 Ray: **00Arrive, arrive, arrive, arrive, arrive00** To arrive is, I think it's like, *arrivar*?
- 2 Tina: Or how about 'leave', 'leave'?
- 3 Ray: *Des* . . . **No. That's *despu é*.** 'Leave' . . . is um . . .

In this example (adopted from Dicamila and Anton, 2004), Tina asks about the word 'leave' and Ray answers her by saying the first syllable of the word *Despu é* (*des*), saying "No". He then continues to self-correct her utterance by saying "That's *despu é*" (Line 6) and all these forms are uttered in a social tone of voice.

The abbreviated utterances are those utterances with structural or formal deletion (Diaz, 1992). In Line 3 of excerpt 2, the utterance 'des' is an example of the abbreviated form of private speech.

2. Coding the content of private speech

Content refers to the referential features of the utterance (Diaz, 1992). Exclamations (*oh!*) and evaluative statements (*good, it's easy*) are examples of the content of private speech. There were several coding systems such as Copeland (1979), Diaz et al. (1992), Kraft and Berk (1998) and Rubin and Dyck (1980); the most comprehensive one is the coding system introduced by Copeland (1979) and Diaz et al. (1992) which places each private speech utterance into one of the following 10 mutually exclusive and exhaustive categories, based on the speech content of children (both cited in Winsler, et.al. 2005),:

TABLE 1.
CONTENT OF PRIVATE SPEECH (ADOPTED FROM WINSLER, ET.AL. 2005)

- | |
|---|
| <ol style="list-style-type: none"> 1. Exclamations: Typically one-word expressions of affect or expletives (e.g., "Oh!" "Oops!"). 2. Non-words: Sound effects, wordplay, humming, (e.g., "Hmmm" "Vroom"—explosion noises). 3. Descriptions of the self: Statements about the child's state or behavior (e.g., "I'm looking for blue" "I found a fish" "I'm hungry"). 4. Descriptions of the environment/task: Statements about the child's surroundings or the task (e.g., "They're the same color," "A blue one," "It's hot in here"). 5. Evaluative or motivational statements: Statements about the child's ability, performance, or motivation; self-reinforcement or deprecation; evaluation of the task (e.g., "I did it!" "I'm good at this," "Good," "This is easy"). 6. Plans/hypothetical reasoning: Planning or future-oriented statements; if-then constructions (e.g., "I need a purple one," "I'll do this first," "If I put this here..."). 7. Commands to the self: Explicit instructions to the self with imperative verb (e.g., "Pick them up!" "Don't put that one!" "Get one more"). 8. Questions/answers: Questions addressed to the self or clear answers to one's own questions (e.g., "Which one should I put next?" "This one." "Where's the blue?" "Is that right?" "Yes."). 9. Transitional statements: Reflective utterances which had to do with ending one activity and starting another; (e.g., "So," "Then," "Next," "OK"). 10. Other: Any utterance that could not be placed in one of the above categories. |
|---|

It is to be noted that the analysis in this study was not limited to these ten categories and other categories of content such as '*repetition*', introduced by Kraft and Berk (1998), emerged from the data; therefore they were also included in the analysis of the content of private speech.

IV. RESULTS

A. Form of Private Speech

The first research question addressed the form of private speech. Three forms were identified in the present data: *whisper*, *loud* and *abbreviated* private speech. As mentioned in the previous section, the loud form refers to those utterances which are self-directed but in a loud tone of voice. Whisper refers to those self-directed utterances which are in a low tone of voice and abbreviated utterances are grammatically incomplete sentences which could be uttered either in loud or abbreviated forms. To further illustrate these three categories of form, four excerpts (4, 5, 6 and 7) extracted from the transcripts of Pair 4 belonging to the beginner group are presented below.

Excerpt 4: Loud abbreviated form

- 1 N: key mikhay beri? [*When do you want to go?*]
- 2 F: I **pl-**, barnamerizi, schedule. I gonna schedule for trip.

In excerpt 4, N and F are trying to form a sentence about choosing a time for trip. When N asks about the time, F utters the first syllable of the word '*plan*' (*pl*). Based on the coding system, the initial letters of *plan* (*pl-*) can be considered as a loud abbreviated form.

Excerpt 5: Whisper abbreviated form

- 1 F: she decided to travel to
- 2 N: travel, vacation
- 3 F: Orlando
- 4 N: vasayelesho jam kard [*Packing*]
- 5 F: **shhee...**
- 6 N: baste bandi kardan, jam kardan [*Packing*]
- 7 F: I don't know
- 8 N: baste bandi chi mishe [*How do you say baste bandi kardan?*]

In this excerpt, they are searching for the English equivalent of '*vasayel jam kardan*' [*packing*]. N asks a question about the English verb form of '*jam kardan*' and F just utters '*shhee*', which is barely audible for N and make her pose the question again and this time F expresses her lack of knowledge by saying '*I don't know*'.

Excerpt 6: Whisper form

- 1 N: vasayel jam kardan? [*packing?*]
- 2 F: man bayad jam konam. °**Chamedun**° Chamedun chi mishe?
[*I have to pack*] [Suitcase] [*how do you say 'chamedun'?*]

In excerpt 6, F begins searching for the English equivalent privately and she whispers '*chamedune*' to herself. Then addressing her partner, she loudly questions about the word '*chamedune*'.

Excerpt 7: Loud form

- 1 N: what is it?
- 2 F: car, no golf
- 3 N: no, vasayel chi mishe? [*how do you say 'vasayel'?*]
- 4 F: **vasayel** [*things*] [**asking herself**]
- 5 N: vasayel, clothes, aval bayad rabtesh bedin? [*first we should match them*]

In Excerpt 7, they are searching for the English equivalent of '*vasayel*' when N asks about the meaning of this word, F repeats the word loudly by herself and begins searching her lexicon, but she just shows this silent process by uttering the word (*vasayel*) loudly.

Table 2 displays the number of private speech produced by the two groups of participants in the categorized forms.

TABLE 2.
FORM OF PRIVATE SPEECH PRODUCED BY THE LEARNERS

Groups		Whisper	Loud	Loud abbreviated	Whisper abbreviated
Advanced	Pair1	17	14	3	0
	Pair2	7	2	0	1
	Pair3	3	8	1	0
Total		27	24	4	1
Beginner	Pair4	4	25	4	0
	Pair5	7	2	2	0
	Pair6	11	6	0	1
Total		22	33	6	1
Total number of forms by both groups		49	57	10	2

As it can be seen from the table, the learners produced more loud forms of private speech (57) than whisper (49), and the number of whisper abbreviated forms (2) is considerably less than the loud abbreviated (10) and loud (57) and whisper forms (49). The table clearly shows that the advanced learners produced the same number of loud and whisper forms in total (whisper forms=28 and loud forms=28), the beginners; however, produced more loud forms (n=39) compared to whisper (n=23).

B. Content of Private Speech

The second research question dealt with the content of private speech produced by the participants of the study. The content of private speech refers to the “referential aspects of the utterance, that is, what the child is talking about” (Diaz, 1992, p. 67). The contents identified in the data included questions/answers, non-words, repetition, evaluative, exclamation, description of the task, transitional and order to self. The following examples from the transcription of the data illustrate the content of private speech produced in the collaborative interaction of the participants of the study.

Excerpt 8: Repetition

- 1 S: name
- 2 M: che esmi? [*what name?*]
- 3 S: Mary
- 4 S: she is very think, she think **she's trip, safaresh kheili**
- 5 M: khatereangiz [*Memorable*]
- 6 S: yes

In the example above, S is searching for a word to describe the trip, and she says ‘*she's trip*’ and continues repeating the Persian equivalent of ‘her trip’ (*safaresh kheili*). It seems that repeating this utterance helps her focus on the task and structure her intended sentence.

Excerpt 9: Question/answer

- 1 S: khob dige, alan plan mikone az 20om ta 23vom. [*Now she plans to go from 20th to 23rd*]
- 2 E: ino nabayad dige begam? [*We shouldn't say this?*]
- 3 S: [nods her head]
- 4 E: and they, **barnamerizi kardan?**[*To plan?*] **Plan**, they planned for 20 to 23
- 5 S: in August
- 6 E: in, I don't know
- 7 S: on August

In the above excerpt, E poses a question in Persian ‘*barnamerizi kardan?* [*Plan*]’ and she immediately answers her own question and utters ‘*plan*’. Finally, she verbalizes the complete sentence loudly. It seems that by posing the question and answering it, E is trying to self-regulate her behavior.

Excerpt 10: Exclamation

- 1 E: and because they decided, do you think this place is good?
- 2 M: no I don't know
- 3 E: I think because there are very good beach and
- 4 M: **oh** yes near the sea, and
- 5 M: near Florida
- 6 E: yes

Excerpt 10 is an example of exclamation. The learners are trying to describe the city of ‘Florida’. When E talks about the beach in this city, M seems to understand why the man in the picture chose Florida for his trip and shows this realization by uttering ‘*oh*’.

Excerpt 11: Transitional

- 1 F: I have to get all of the things that I need, I need it, I need to?
- 2 N: my need
- 3 F: I need dige. **Ok** .bad chi mishe? [*what happens next?*]
- 4 N: and I go with my car

In the above example, the learners are trying to produce a correct sentence pattern. After externalizing the sentence, F says ‘*Ok*’. This forms her private speech because she is not addressing her partner and therefore it is non-communicative. Besides, she immediately asks another question from her partner loudly. She uses ‘*Ok*’ to confirm her previous sentence and to self-manage her speech.

Excerpt 12: Evaluative

- 1 F: badesh chi? [*what after that?*]
- 2 N: khali mikone. [*unpack things*]
- 3 F: I put, putting. **Sakht shod**, [*it got difficult*] vasilehamono? [*our things*]
- 4 N: vasile nemidunam chi mishe. [*I don't know how to say vasilehamono*]
- 5 F: things mishe chiz miza [*things are stuff*]
- 6 N: get things and get to hotel

In excerpt 12, N seeks the English equivalent of ‘*khali mikone*’, then F tries to produce this sentence in English by expressing ‘I put, put’. Then, she hopelessly says ‘*sakht shod*’ [*it got difficult*], and immediately continues to complete

her sentence. This expression can be considered as an instance of evaluative private speech because N did not accept or refuse F's comment and it seems that F was talking to herself until she asked loudly '*vasilehamono?*[*our things?*]

Excerpt 13: Non-word

- 1 M: ok, she planned
- 2 E: from 22
- 3 M: **uhmm**
- 4 E: it's not important.
- 5 M: in August
- 6 E: so she planned
- 7 M: she planned for travel

Excerpt 13 shows an example of non-word content. In this excerpt, M utters '*umm*' which probably indicates her thinking process and when E says '*it is not important*' she utters '*in August*' to show the outcome of her thinking process.

Excerpt 14: Order to self

- 1 F: first I look the map, I am?. **Benevisam.** I looking the map.
- 2 N: koja beram chi mishe manish? [*Where to go means what?*]
- 3 F: for found trip location, trip location? And
- 4 N: key mikhay beri? [*When do you want to go?*] When

In the first line of excerpt 14, the only example of 'order to self' in our data is presented. F is trying to describe the second picture of the task and utters '*first I look the map*' and then she says to herself '*benevisam*' and continues verbalizing her sentences and writing them on the handout. It can be considered as an 'order to self' because she did not address her partner and in order to manage task difficulty, that is, simultaneous writing and speaking, she utters the word '*benevisam*'.

Excerpt 15: Description of the task

- 1 E: maybe they live in Florida and want to go to Orlando
- 2 M: **What is this? Gulf of Mexico?**
- 3 E: khalije mexic[*Gulf of Mexico*] and I think this part of, place have good weather because
- 4 M: near the sea

In excerpt 15, M asks herself '*what is this?*' referring to a picture in the map that they are describing. The next learner (E) reads from the map '*gulf of Mexico*' to describe the task that they are doing. Since they are referring to the picture in the task, this expression ('*what is this?*') can be considered as an instance of task description. Table 3 presents the content of private speech used by the two groups of advanced and beginner learners.

TABLE 3.
CONTENT OF PRIVATE SPEECH

	advanced			Total number for advanced	beginner			Total number for beginner	Total number
	Pair1	Pair2	Pair3		Pair4	Pair5	Pair6		
Questions/answer	15	3	5	23	13	6	6	25	48
repetition	9	2	4	15	5	3	6	14	27
exclamation	2	1	2	5	6	1	0	7	12
Non-words	4	3	0	7	2	0	2	4	11
transitional	1	1	0	2	5	0	2	7	9
Description of the task	1	0	1	2	0	1	2	3	5
evaluative	2	0	0	2	1	0	0	1	3
Order to self	0	0	0	0	1	0	0	1	1
Total	34	10	12	56	33	11	18	62	116

It can be seen from the table that the question/answer was the most frequent content and produced by the learners in the advanced (N= 23) and beginner (N= 25) levels. Next to this category stands repetition which was employed to a similar extent by both groups (15, 14). The least used content was related to 'order to self' which was used by one beginner learner. Overall, the first two categories, question/answer and repetition were found in all learners' private speech.

V. DISCUSSION

To answer the research questions, the form and content of private speech were identified in the transcripts of the learners. Considering the first research question, the data showed that all three forms of private speech (loud, whisper, abbreviated) were produced by the learners; however, the loud and whisper forms were the most salient forms. These findings were highly compatible with a large body of previous studies such as Brooks, Donato and McGlone (1997), De Guerrero (1994), DiCamilla and Anton (2004), Donato (1994) and Platt and Brooks (1994) who reported that private speech occurred in whisper and loud forms. Similar to the previous studies (Centeno-Cortes and Jimenez-Jimenez, 2004,

cited in Lantolf 2006, DiCamilla and Anton, 2004), instances of incomplete utterances, i.e., abbreviated forms, were also revealed in our study. In our data, the loud forms were the representation of private thinking process. Because as an adult, it seems that the private speech predominantly happens in our minds and in a silent form and when this thinking process is verbalized loudly, it may represent the process of finding solutions to the problems. The whisper form happened when the learners were trying to search their lexicon in order to retrieve a lexical item.

The contents were identified based on the categories proposed by Copeland (1979) Diaz et al. (1992), as cited in Winsler, et.al. (2005). The contents identified in the data were questions/answers, non-words, repetition, evaluative, exclamation, description of the task, transitional and order to self. Similar to the previous studies (DiCamilla and Anton, 2004; McCafferty, 1998; Villamil and De Guerrero, 1996; Platt and Brooks, 1994), the learners in our study also asked questions and provided answers to them through the production of private speech. Platt and Brooks (1994) claimed that the learners use question/answer in order to orient interlocutors in the task. Similarly, Villamil and De Guerrero (1996) found instances of self-addressed questions in the ESL learners' interactions. Another study which reported the occurrence of self-directed question was Buckwalter (2001) who studied the social and cognitive behavior of Spanish learners facing difficult tasks and found that self-initiated self-response was a reflection of self-regulatory behavior of the learners.

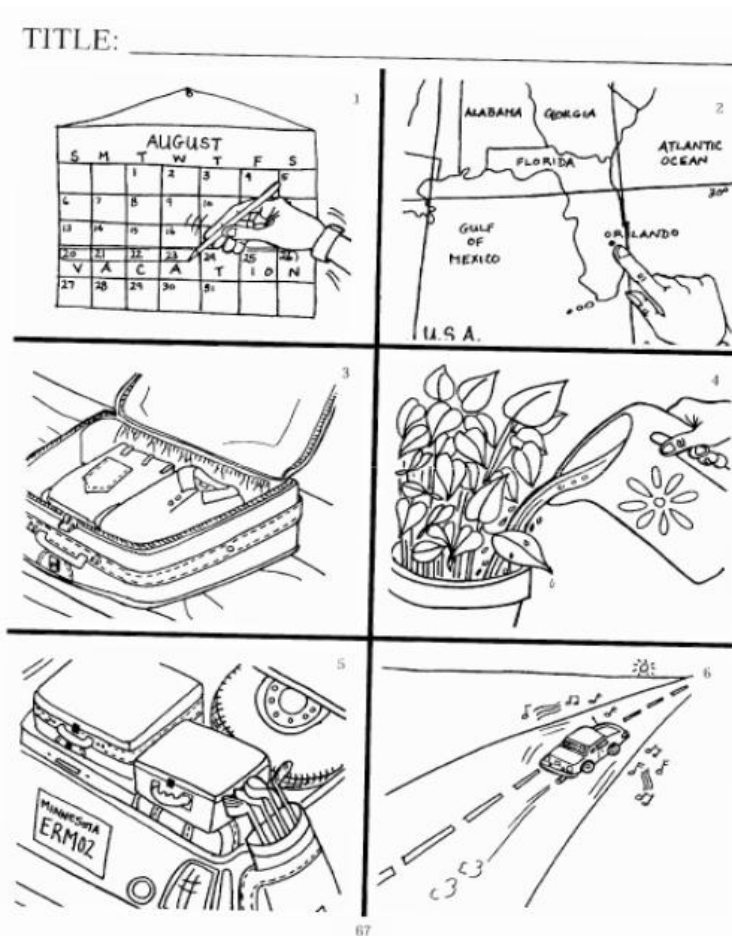
The learners of this study repeated several items in English or Persian. It was observed that in our data, the learners used repetition for the lexical search in their lexicon. The finding is also comparable to DiCamilla and Anton's (2004) findings which indicated that repetition helped learners focus on the task at critical moments. Similarly, in our data, learners used repetition to focus on the task. During writing, the learners repeated the translation of English sentences they had produced to create a new content for their story. This repetition helped them focus their attention on the task at critical moments; for example one learner just repeated the Persian translation of 'look the' (*negah kardan*) in order to get control of the text she was producing. The finding is highly consistent with the finding of Buckwalter (2001), who reported that repetition was used to self-repair incorrect utterances. Similarly, in the current study, the learners employed repetition in order to find the correct equivalent for the intended word. For instance, one learner repeated 'enjoying' several times (*They are enjoying, enjoying, enjoying, enjoyed*) until she reached the correct solution, i.e. the appropriate verb form (*enjoyed*).

Exclamation, or as it is called 'affective marker' in other studies, was also evident in our data. This finding lends support to the findings of Donato (1994) and DiCamilla and Anton (2004), who found a large number of affective markers in their data and reported that affective markers helped learners manage the task and release anxiety. In our data, *Non-words* like (*hmm*) were also used to show perhaps the learners' thinking process both in English and Persian. *Transitional markers* were also employed, although to a small degree, which indicated that the learners managed one of the stages of thinking, writing or performing the task in which they had achieved self-regulation or got the control over their actions. The use of transitional markers was reported in some studies (Anton and DiCamilla, 1999; Brooks, Donato and McGlone, 1997; DiCamilla and Anton, 2004). *Evaluative* and 'description of the task' were used in a few instances of the data. The description of the task was observed when learners read the instruction or when they were trying to explore the pictures. *Order to self* was the least common content used in the interactions of the participants; just one beginner student used it to manage the task, because she was the member responsible for writing and thus overwhelmed with the task.

VI. CONCLUSION

In this study, the form and content of private speech in interactions of EFL learners in two levels of advanced and beginner were investigated. Considering the form of private speech, the loud and whisper forms were used more than the abbreviated form. Question/answer and repetition were the contents dominant in the data. The findings show the frequent occurrence of private speech as a phenomenon in EFL classes where teachers seems to be unaware of this phenomenon. Due to the time limitation, the study involved one session for data collection from the participants. Therefore, it would be interesting to investigate the form and content of private speech when learners work on several tasks during a number of sessions. This study was conducted with adult EFL learners; further research is needed to compare young and adult EFL learners in terms of the function as well as the content and form of private speech.

APPENDIX: PICTURE DESCRIPTION TASK



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