

Content and language in children's private speech: Findings from a case study*

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1. Introduction

Children's practices to master the linguistic skills of the language that they are born into have always been a matter of investigation from different perspectives. Being very cautious in using the linguistic elements of the language, they make practices with sounds, words and phrases. Along with the linguistic competence, children have the mastery of communicative competence which deals with the way children learn to use words and sentences appropriately in particular situations and contexts (McTear 1985). This is a process in which the child practice the skills either in a context with other speakers, or when he/she is alone. The first one is called social speech which is "addressed to another person as indicated by either a pronoun reference, a gaze to another person, or other signals of social intent, such as physical contact, argumentation, or conversational turn-taking" (Winsler 1998 cited by Winsler, Fernyhough, McClaren and Way 2005: 2). Applying these spontaneous rules of social speech is crucial for having joint attention between the child and the speech partner. Otherwise, lack of joint attention might be the indicator of the sign of mental disorders such as autism in children. For the second one, Berk (1992) states that if the speech is audible or visible which is used by children to communicate with themselves as they go on their daily activities, it is called private, self directed or personal speech. It is one of the most remarkable characteristics of child speech starting as early as 2 years old.

Although private speech has always been along with the social speech since the beginning of the language, its importance had been neglected until the beginning of the last century. Two eminent psychologists, Piaget in the west and Vygotsky in the east, held research on private speech in early 1900s. Piaget (1926) had defended that private speech – egocentric speech in his terms- had no positive role or effect in normal cognitive development. He stated that the term egocentric is identified with three types of utterances: echolalia which is defined as a repetitive process of sounds and syllables for its own sake; monologs referring to speeches that a child gives apparently for his/her own personal benefit; and collective monologues in which two or more children simultaneously present monologs to one another without paying attention if the others comprehend or respond. In Piaget's terms, this egocentric speech comes from immature minds and exists because children have difficulty in imagining others' perspective. Therefore, much of their private speech serves little communication function (Berk 1994: 78) He also believed that this speech gradually disappears and children become capable of real social interaction.

* This research was supported by a grant to the second author from Çukurova University, the Unit of Scientific Research Projects, Project No: YADİM 2009BAP'.

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Although Piaget and Vygotsky had common points in explaining developmental theory, apart from Piaget, Vygotsky puts emphasis on the link between social experience, speech and leaning. He defended that cognitive growth and language development occurred concurrently with an increasing dependency of one upon the other. According to Vygotsky the features of reality a child is ready to master are within zone of proximal (or potential) development. The child's performance in doing activities and accomplishing tasks on his own and with the help of someone else is not the same. Vygotsky states that zone of proximal development includes the performances in which the child and the adult discuss on the task and the child tries to accomplish with the guidance of the adult. In the same way, when he or she is alone "child incorporates the language of those dialogues into his/her private speech and then uses it to guide independent efforts" (Berk 1994: 79) Therefore, unlike Piaget's view claiming that the private speech had no implication for and leads to social communication eventually, Vygotsky (1962) proposed that early social communication between the adult and the child gives rise to private speech.

In every normally developing child, private speech emerges, peaks and declines, however there are specific claims on the age of children's using private speech by different scholars (Vygotsky 1962; Kohlberg & Yaeger & Hjertholm 1968; Harris 1990 cited by Clark 2005). Vygotsky reported a rise in using private speech in the preschool years and a curvilinear development. Then, Kohlberg et al. found that children show some increase in the use of private speech around the age of four. Frauenglass and Diaz (1985) also found that private speech becomes less audible with age. In spite of these variances in age, children make use of private speech in various situations for various purposes.

The purpose and function of private speech have long been discussed and categorized by a number of researchers. Vygotsky (1962) explained that private speech is not just a release of tension or an expression that accompanies an activity but it is also an important tool of thought in a proper sense, in searching and planning the solution to a problem. Berk (1994) also proved that the central function of the private speech is self-guidance. He stated that children talk to themselves more frequently when working alone on challenging tasks and also when their teachers are not immediately available to help them. In both case, children need to take charge of their own behavior. Wiley (2006) also claims that children speak to themselves as if taking the role of another person, often that of the mother's. Further, Clark (2005) points out that using private speech provides insight into children's language development, their understanding of social and cultural contexts and some insight into their personalities and learning characteristics.

As mentioned earlier, children use private speech in various situations and purposes. Krafft and Berk (1998) found out that private speech was used more often in open-ended tasks in which children set their own goals and define their own behaviour for meeting the goal rather than closed. They proved that open ended tasks and reduced teacher or adult direction facilitated the use of private speech.

As for the content of the private speech, use of rhythmical repetitions, counting, changed and personalized words and culture specific items are witnessed (Clark 2005). There are general comments that private speech tends to have a simple rather than complex use of language. It is also stated that as private speech is egocentric and personal, therefore it does not need to have complex structure. Vygotsky (1962) also stated that egocentric speech develops to become inner speech and the language of egocentric speech gradually becomes more like inner speech with abridged use of the subject yet maintaining the predicate.

The present study aims to categorize functions of the private speech employed by the participant of the study according to Krafft and Berk's categories (1998). This study also aims to shed light on the linguistic properties of private speech.

2. Methodology

This is a case study, investigating the private speech of a 3;1 year old boy, named Kerem. He is the only child of the family and he attends to a kindergarten five days a week. His parents have university degree and come from middle socioeconomic status.

The data were collected and transcribed by the researcher, who is the mother at the same time. The context in which private speech is used is also significant (Clark 2005). Krafft and Berk (1998) proved that in non-teacher directed, open-ended activities, especially make-believe play, children's private speech increased. Therefore, there is not a set task before recording the private speech of the participant. The data were collected in the child's naturalistic setting, inside of the house. He was either set free to play or given a task to accomplish (e.g. painting or tidying the mess, etc.). The researcher was either in the same setting with the child or invisible to him during the recordings. The data were recorded both via a video recorder and notes of the researcher which described the setting and the situation as well.

There have been numerous researchers who studied the content of private speech and created their own coding categories (see Table 1).

Table 1. Functional categories of private speech by different scholars

Scholars	Copeland (1979)	Rubin and Dyck (1980)	Diaz et al. (1992)	Krafft and Berk (1998)
Categories	1. Exclamations	1. Analytic statements	1. Exclamations	1. Affect expression
	2. Nonwords	2. Comments about materials	2. Nonwords	2. Word play and repetition
	3. Description of self	3. Comments about activity	3. Description of the self	3. Fantasy play speech
	4. Description of environment	4. Directions to self	4. Description of the environment/task	4. Describing one's own activity and self guidance
	5. Self reinforcement	5. Feedbacks	5. Evaluative or motivational statements	5. Inaudible mutterings
	6. Planning	6. Questions/Conditional statements	6. Plans/hypothetical reasoning	6. Other
	7. Commands	7. Other	7. Commands to the self	
	8. Questions		8. Questions/answers	
	9. Inaudible		9. Transitional statements	
			10. Other	

Although there are a variety of studies on private speech categories, the content is more or less similar. The present data have been analyzed through the private speech categories of Krafft and Berk (1998). They categorize the private speech of children into six categories: affect expression, word play and repetition, fantasy play speech, describing one's own activity and self guidance, inaudible muttering and other. In addition, the linguistic peculiarities of private speech are discussed from various perspectives.

3. Results and Discussion

3.1. Categories of Private Speech

3.1.1. Affect Expression

Along with the words of the language they were or into, children acquire the extra linguistic properties of that particular language. These expressions of affection or detest also show variances in different cultures. Krafft and Berk (1998, cited by Clark 2005: 113) defines such expression as 'expressions of emotion that are not directed to any particular listener, or expressions having no external stimulus but that seem to be attempts by the child to integrate a past event or thought'

For the present study, Kerem also used examples of these expressions such as:

- (1) *Ooo! Ucuz atlattık! Aaaa! Yandım!*
'We got off lightly! I lost!' (While playing racing game on computer)
- (2) *Ooo! Atkı çok (...)*
'The scarf is so (...)' (While playing clothing game on computer)
- (3) *Uuu! Çok güzelmiş çok güzel.*
'Very beautiful, very beautiful.' (Looking out of the window)
- (4) *Ooo! İlerle, kaza yapmak üzereyiz!*
'Move on, we are about to make an accident!' (While playing racing game on computer)

Kerem used these expressions particularly when he was engaged in playing games on computer. He also produced them to express his affection on the view out of the window (3), or excitement during the game (1, 4). Although there was nobody in the setting during these games, the child needed to express his feelings by using these exclamations along with complementing sentences.

3.1.2. Word Play and Repetition

Children around the age of three are very eager to learn songs and word plays. They both like to display what they know in front of the others and enjoy to repeat them on their own, thus, they perform a kind of rehearsal for the newly learned items. Clark (2005)

states that in social speech, repetitions have at least two functions for children. First, they suggest acceptance or ratification of the adult term; second, they offer children an opportunity to try to produce the target term in a recognizable way and thus practice the unfamiliar term. She points out that how often children choose to ratify new terms this way may vary. It depends on the vocabulary the child already knows as well as on skills for the structuring of turns and the contents of turns in conversation.

Krafft and Berk (1998, cited by Clark 2005: 113) defined the process that arises during the private speech as the 'repetition of words and sounds for their own sake'. In the present study, the participant created a rhythm for himself and repeated words or sounds consistently without having an aim.

- (5) *Dıt dı dıt dı doş, Dıt dı dıt dı doş*
- (6) *Pahalı, pahalı, pahalı, pahalı, pahalı, pahalı, pahalı, pahalı, pahalı, pahalı, pahalı*
(‘Expensive’)
- (7) *Pizza, pizza, pizza, pizza, pizza, pizza, pizza yapıyorum. Pizza, pizza, pizza, pizza, pizza, pizza, pizza yapıyorum. Pizza yapıyorum.* (‘I am making pizza.’)
- (8) *Restoran, restoran, restoran.* (‘Restaurant’)

Although children do not witness such odd usages in their environment children might be using these expressions as gap fillers while accomplishing the tasks, sound play or the rehearsals of newly learnt sounds, words or phrases.

3.1.3. Fantasy Play

Krafft and Berk (1998) take this category as the speech produced during role play. The child takes the self, an object or a toy as a social partner and role plays in a made up setting. While doing these, they are inspired by anything that they have lived or heard before. These activities are good for children to practice the social interaction in daily life with an imaginary partner. Drucker, Franklin and Wilford suggested that constructing narrative is an essential process for remembering, communicating real and imagined events and making sense of experience. Because 'pretend play allows children to construct narratives spontaneously, alone or in collaboration with others, it is an arena for development of one of the most intellectual capacities of human mind' (1999: 11).

- (9) *Çocuk parkının bir de merdiveni olması gerek. Bir, iki, üç, dört, beş turmandık çok yükseğe.*
'There has to be a ladder in the playground. One, two, three, four, five we climbed up very high.'
- (10) *Restorana hoşgeldiniz.*
'Welcome to the restaurant'
- (11) *Okulun şarkısı, ben bir zamanlar okula gitmişim, anneyi yakalamışım.*
'The school song, once upon a time, I had gone to school, I caught mom' (He is not singing but pretending he is telling a story.)

The child pretends to be a waiter (10) or to read a story to someone (11). While doing these he uses the expressions peculiar to the context such as using second person plural to be polite in the context of restaurant, or starting with the frozen expression of almost all stories: ‘once upon a time’. Thus, these findings are in the same line with Vygotsky’s theory that explains private speech as the rehearsal or precipitation of the social speech.

3.1.4. Describing One’s Own Activity and Self-Guidance

It is interesting to see that the participant of the study constantly described his activities although he knew that nobody was listening to him or he was already in the middle of doing what he was saying. Krafft and Berk (1998) describe the situation as the child’s using the remarks about his or her own activity, directed to nobody in particular. They state that this category includes descriptions of what the child is doing as he or she is doing it, thinking out loud or goal directed plans for action.

- (12) *Bu yüklenmeye başlasın ben de anneme gidiyim, çişimi yaptırısın.*
‘As it starts loading, I will go to mom and she will take me to the toilet’
- (13) *Boyaya batırıyorum ve sürüyorum ikisini de.*
‘I put it in the paint and coat them both’
- (14) *Bir tane daha koyalım.*
‘Let’s put one more.’

While saying all the above utterances, the child is actually accomplishing the activities. Therefore ‘the fact that children were more likely to be successful after scaffolding if they used private speech suggests that the path to individual task competence requires not only adult sensitive and contingent regulation, but also children’s active participation, effort and self-regulation’ (Winsler, Diaz & Montero 1997: 75)

3.1.5. Inaudible Mutterings and Others

These are the utterances that are not possible to record due to mutterings, mumblings or being too silent to hear by the researcher. There are a number of examples of such expressions in the present data as the child is speaking to himself, not the others. Everything is fine if he, himself gets the point he is trying to make. In addition to these categories, there is no other utterance that could not be coded in any of the content categories above.

3.2. Language of the Private Speech

The utterances in the private speech are addressed to the self, therefore, it tends to be simple in structure and syntax. Vygotsky (1986, cited by Clark 2005: 193) stated that ‘egocentric speech evolves to become inner speech and that the language of egocentric speech gradually becomes more like inner speech with reduced use of the subject while maintaining the predicate’.

(15) *Kırıldı, ay düştü*
'(It was) broken, (it) fell.'

(16) *Silaha benziyor.*
'(It) looks like a gun.'

Kerem is uttering these sentences to himself but as he knows what he is talking about, he avoids adding the subjects to the utterances above. In addition to these, Turkish lets sentences with subjects dropped and indicated as adding person suffix in the verb very often. This might also be another reason for the reduced structures.

The vocabulary still consists of words that are present in the immediate setting. Wiley (2006: 328) recalls special qualities of private speech as "silent, elliptical, embedded and egocentric". Therefore the language is relatively private both in words and their meaning. As illustrated below, the child innovates a word which definitely has meaning in his context but not to the outsiders.

(17) *Robot kapışları*
"Robot 'kapış'+Pl+Acc

In the same way, tense of the utterances does not do beyond present tense as the child describes his/her activities as he/she actually does them at the same time. Past tense marker *-di* is used for very recent activities, in the completion of a task. Hearsay/evidential marker *-miş* is used in the examples as evidential because the child tells a story or read something on his own (18, 19).

(18) *Giderken dondurmacının arabasına çarpmış.*
'While he was going, he hit the iceman's cart.' (Looking at a picturebook)

(19) *Giderken rastlamış. Bu da ona sarılmış.*
'He came across then this one cuddled him.'

Moreover, as the child does not have developed theory of mind, the pronouns are often 'I, me, we'. It is interesting to note the use of 'we' frequently in the utterances as the child is alone in doing the tasks. Keeping the principles of zone of proximal development, the use of 'we' implies the child's own guidance to his behaviors and actions (20). In addition, via these usages, the child also reminds and repeats the social rules or routines to himself or imaginary playmates (21, 22).

(20) *Şimdi kamyonumuza gidiyoruz.*
'Now, we are going to our truck'

(21) *Hasta olduğumuzda soğuk su banyo yaparız.*
'When we are ill, we take a cold shower.'

(22) *İkisinden birisini alıyoruz.*
'We take one of the two' (While playing with small pieces of a group game)

In the present study, frequent use of demonstratives is noteworthy. The language system emerges with the natural connection with the utterance and its context. Therefore deictic terms can link the utterance with specific person, time, place, or speech event.

For the present data, ‘this’ is the most frequently used demonstrative with its case marked forms.

- (23) *Bunu burdan atsam buraya gelir mi?*
‘If I throw it here, does it come here?’
- (24) *O da benim, o da benim. (...) Bunlar gerekmeyen, bunlar gerekmeyen.*
‘That one is mine, that one is mine, too.(...) These are unnecessary ones, these are unnecessary ones.’

In the social speech, our body language makes our speech partner understand our focus of attention, thus we do not need to remind or explain what we are talking about all the time. However, the child frequently used one of the demonstratives while he was dealing with objects in his focus. He is aware that there is no speech partner, yet he reminds his focus and describes his actions. The child also uses the demonstratives for initiating the attention although the speech is not addressed to an available partner. In the context of private speech, Pellegrini (1981) suggests that the most relevant information for children involves the identification of the objects and locations of them as they already know the action and do not need to name it.

4. Conclusion

Along with the social speech used overtly, the private speech has always existed in the initial years of the children, however, it has not been taken into account until the beginning of the last century. There have been a number of scholars who categorized differently the content of the private speech that children used. For the present study, the categories used by Krafft and Berk (1998) have been used and the utterances are coded according to the six subcategories. Among those categories, ‘fantasy play speech, describing one’s own activity and self guidance’ are the most frequently witnessed ones. It can be stated that in his private speech the child rehearses and imitates what he was exposed to during his social speech.

The linguistic elements of the private speech also reflect the language acquisition and cognitive development process of the child. As the participant of the study used pronouns, vocabulary and tenses that are present in the immediate time and place. There is also overuse of demonstratives due to the child’s perception of the speech as reciprocal.

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