This paper describes the communicative function of language in a monolingual public school kindergarten. The study was based on observations of classroom communication and interviews with the teacher. The paper describes the speech of students and the teacher during different segments of the school day, and presents an analysis of 290 speech acts transcribed during observations of circle time, math time, and free time activities. The speech acts were categorized by communicative function, based on Saville-Troike's six categories: (1) directive; (2) expressive; (3) metalinguistic; (4) phatic; (5) poetic; and (6) referential. The study found that members of the class were most likely to engage in directive communication or to communicate factual information to one another. They were less likely to use speech as a means of personal expression, to show group solidarity, or simply as language play. (MDM)
Communicative functions of speech in a monolingual kindergarten

Mary Jean Tecce DeCarlo

University of Pennsylvania
Graduate School of Education

This paper describes the communicative functions of language in a monolingual public school kindergarten. Saville-Troike's six categories of communicative function are used to classify and examine the speech acts of the members of this community. The relationship of these functions to one another and to the purposes of the school are discussed.

Language is the medium of education; participants in the educational process are expected to be able to read, write, and speak in diverse ways in order to expand their knowledge base and thinking skills. The way the participants use language in the classroom provides a wealth of information about the values, attitudes, abilities, and intentions of the participants.

Language has not gone unattended to by researchers who look at educational settings. Detailed studies have been done by Crahas and Delhaxle (1991), Kearney (1991), White and Kistner (1991) and others that focus on the ways teachers use language in the classroom. Many studies have also been done on language use in second language classrooms (e.g. Wong Filmore, 1980; Cooley & Lujan, 1982; Sapiens, 1982). Less work has been done describing and discussing language use by students in American public schools where standard English is used by the participants.

Ethnography, an analytic description of a cultural scene, is often used to provide rich data about the context and activities of participants in educational settings (Goetz & LeCompte, 1984). This paper is a descriptive ethnography that focuses analysis on the micro level. The researcher intends to look at language use and functions in a public school kindergarten and describe the patterns observed.

A kindergarten class in the School District of Latham was observed. The school, Latham Elementary, has 560 children ranging from kindergarten to fourth grade. Students range in age from 5 to 11. Latham Elementary is in a suburban district bordering a large East Coast city. The school, like the community, is multi-cultural, including European Americans, Asian Americans, and African Americans. The school has significant Jewish and Korean populations within those categories.
Room 4, the kindergarten observed, has 26 students, a full-time teacher, and a part-time aide. Of those 26 students, 11 are female and 15 are male. Both the teacher and the aide are female. Of the 11 females, 7 are European Americans, 1 is Asian American, and 3 are African Americans. Of the 15 males, 11 are European Americans, 2 are Asian Americans, and 2 are African Americans. Therefore, 11.5% of the class is Asian American, 19.2% is African American, and 69.2% is European American. Both the teacher and the aide are European American.

The educational philosophy espoused by Mrs. Goldberg, the teacher, is whole language. While Mrs. Goldberg didn't define whole language, Goodman defines it as a philosophy where "learners are encouraged to take risks and invited to use language, in all its varieties, for their own purposes" (1986:40). In a whole language classroom, "all the varied functions of oral and written language are appropriate and encouraged" (1986:40). Mrs. Goldberg describes her room as a place where children are encouraged to read, write, and talk.

Observations were conducted at the beginning of the day. Observations included circle time, math time, and free time. Each day started with circle time, where the children were asked to share a verbal response to a prompt from the teacher. The daily schedule was also read during this time. Following circle time was math time. In math, the children used small objects as counters to show a number, wrote about the number and explained their story to the teacher or aide. As children finished their math work, they had free time to read books and play in various classroom areas.

The class was observed four times for a total of six hours or one and one half hours each time. Handwritten notes were taken by one observer who recorded exact quotes whenever possible. Careful attention was paid to the speech of the children. However, individual speakers were not consistently identified in the notes. The teacher and aide were identified when their speech was recorded, however their speech was recorded less often.

Hymes suggests ethnographers use a paradigmatic approach when describing speech behavior and use (1968). This approach begins with discovering a relevant frame or context. The researcher then identifies items that contrast with the context and determines the dimensions of contrast. This paradigmatic approach was applied to the observations of Room 4.

The search for a relevant frame begins with the identification of a speech community (Saville-Troike, 1989). For this study, Room 4 is defined as a speech community, and is therefore the frame for this analysis. The members of this community share the same work space for roughly five hours a day. Within this space there is a
quantity of interaction among all participants. This meets Gumperz's (1962) definition of a speech community which focuses on the frequency and quantity of interaction.

The members of this community also share rules and norms of language use, thereby fulfilling Hymes' (1972) requirements for a speech community. The members are expected to speak standard English even if they know another language variety. Members are also expected to answer direct questions from adults. Members share classroom and school rules about speaking. These include raising your hand before speaking and allowing only one person to speak at a time.

All talk observed in the classroom situation was in standard English. Mrs. Goldberg reported that none of her 26 students were participants in the school's English as a Second Language program. However, several of her students used home languages other than standard English. These languages includes Bulgarian, Greek, Korean, and Chinese.

The teacher also reported that several children may speak Black English Vernacular (BEV) in their homes. She added with pride that no student used BEV in the classroom. She described herself as "active" in promoting "proper English" among her students. She gave an example of this as correcting "me and my friends" to "my friends and I."

Also, there are clear roles being fulfilled in this classroom speech community, roles such as teacher, student and aide. Within those roles are norms about whose speech carries how much prestige and power. The teacher has the most power. She sits in a chair during circle while the children are on the floor. She stands when the students are seated at their desk. She manages both the topics and the turns of speakers. The aide, as an adult, has more power than the students. She moves about the classroom at will and can speak at almost any time.

Within the roles of the students, power is also distributed, with some individuals exercising more power than others. Some students talk over a more timid student's turn, thereby directing the turn taking process to their advantage. Other students rarely speak unless spoken to.

Within this speech community of the members of Room 4, several speech situations exist. The community members interact in the playground, the cafeteria, the gymnasium, and the classroom. They were observed only in the speech situation of the classroom. The classroom meets Saville-Troike's definition of a speech situation by maintaining "a consistent general configuration of activities" although a great diversity of interaction occurs within the situation (1989:27).

Speech events are defined by Saville-Troike (1989) as a unified set of components, including the same general communication purpose, the same general topic, the same participants, the same language variety, and a single setting. All speech events observed in
Room 4 share the classroom setting and language variety. The overarching communicative purpose of the speech events observed was the education of the students. Several speech events within this situation were observed, including circle time, math time, and free time. The three events vary according to topic, topic control and participants.

Each day began with circle time. Circle time was led by the teacher. She sat in a chair while the students sat in a circle on a rug. The teacher set the topic and the students contributed in round robin fashion. The aide was not a participant in circle time. The topics I observed were: 1) What did you do this weekend? 2) Name things that are green; 3) Tell me about a time you were scared; and 4) Tell an April Fool's joke. Circle time also included a teacher-directed group reading of the day's schedule.

Math time was another speech event. Math lessons focused on identifying and showing numbers using manipulatives. A number was introduced and students built subsets that totaled the number. For example, a boy had a card that depicted a pond and a grassy area. He put three clay frogs in the pond and five outside it. This represented the target number "eight."

Students then drew a picture based on their work with the manipulatives and wrote a story about the picture. Each child told his or her story to either the teacher or the aide in order to check for comprehension of the concepts. This was an important step, as kindergartners are emerging writers and their written stories were often in invented spelling. Many of the stories were a string of poorly written unrelated letters to which the children brought meaning when they read them aloud. Topics of speech were mostly task-related during this speech event. Participants included the teacher, the aide, and the students.

The third speech event was free time. After telling their math stories to an adult, students were free to choose activities within the classroom. These activities included: coloring, doing puzzles, playing with toys, and reading. Most chose to gather on the rug to share in book-related activities. Some children actually read, but most engaged in book reading behaviors, such as turning the pages and describing what was happening in the pictures. During this time the students talked among themselves about whatever they chose. Both the teacher and the aide worked with individuals who had problems with their math.

Within any given speech event there exist many speech acts. Saville-Troike contrasts the ethnographic usage of the term "speech act" to the usage preferred by pragmatists or speech act theorists. The former limits "speech act" to a single grammatical sentence, while the latter focuses on a functional perspective. In the ethnography of communication, a single sentence may have more than one function (1989:15).
Conversely, a speech act may include more than one sentence if those sentences together fill one functional role.

The data recorded from observations in Room 4 was separated into speech acts. This was done by rereading the data and deciding which groups of words represented a single idea. The speech acts transcribed ranged in length from one word to thirteen words. These extremes include:

Stop!  
Jacob!  
Monday!  
Why did the chicken cross the road?  
I'm gonna put four in the water and four out of the water.

Grammatically, some speech acts are less than a complete sentence while others are one or two grammatical sentences in length:

...wanted to ride a camel.  
How many, Marios?  
I don't care. I'm not giving you any.

The communicative function of the 290 speech acts transcribed will be the focus of the microanalysis.

Hymes states the functions of communication are directly related to the participants' purposes and needs (in Saville-Troike, 1989:14). Room 4's needs and purposes have been organized according to the communicative functions delineated by Saville-Troike (1989:14). These include the directive function, the expressive function, the metalinguistic function, the phatic function, the poetic function, and the referential function.

The process of labeling a speech act as one discrete function or another is nearly impossible. In Hymes' analysis of the Shakespeare quote "Once more unto the breach, dear friends, once more," he shows how the quote can be assigned to each of the six categories of communicative functions. For example, to the actor, it may be an expressive; to the soldiers in the play it may be directive. Hymes resolves this dilemma by recommending that the researcher recognize a hierarchy of functions within a social setting (1968:120). Speech acts can be categorized according to their most significant social function. However, in some situations no one function can override others (Hymes, 1968:120).

Recognizing the inherent limits of this type of categorization, an attempt was made to focus on the most salient function of each speech act within each specific speech event. Grammar and lexicon were used as a starting point in categorizing, but social function was the main consideration.
Of the 290 speech acts, 40% (116) were labeled directives. Expressives accounted for 5.5% (16) of the speech acts. Zero metalinguistic speech acts were recorded. Phatic speech acts constituted 13.8% (40) of the speech acts and 2.1% (6) were poetic. The remaining 38.6% (112) were referential.

Functional Categories of Speech Acts Observed in Room 4

<table>
<thead>
<tr>
<th></th>
<th>Circle Time</th>
<th>Math Time</th>
<th>Free Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directive</td>
<td>32</td>
<td>68</td>
<td>16</td>
</tr>
<tr>
<td>Expressive</td>
<td>12</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Metalinguistic</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Phatic</td>
<td>40</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Poetic</td>
<td>0</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Referential</td>
<td>18</td>
<td>78</td>
<td>16</td>
</tr>
</tbody>
</table>

The directive function of language accounted for 40% (116) of the speech acts recorded in Room 4. This percentage is the largest of all the encoded categories. Students used directives with one another, with the teacher and with the aide. Examples include:

Mrs. Lloyd, help me write my name.
She said table four.
Stop!
Don't even try to take one!
Me! Me!

Saville-Troike defines the directive function as "requesting or demanding" (1989:14). So perhaps the directive function of language seems natural in the education environment. Hymes associates the directive function with imperatives, which account for sixteen of the speech acts in this category (1968:117). Other imperatives appear in question form, but are meant to control the actions of others:

What did we say about tying shoes together?
Are you allowed to have that?

A majority of both the teacher's and the aide's speech were directives:

Alex are you all done?
Sarah, tomorrow is...?
Give this to the teacher, Ryan.
Listen!
Interestingly, only 38 of the 116 directives observed were produced by the teacher. Six were produced by the aide. The remaining 72 directives were peer interactions.

According to Saville-Troike's definition, expressive speech acts "convey feelings or emotions" (1989:12). Expressive speech accounted for 5.5% (16) of the acts recorded. Twelve of the 16 used a first person pronoun. Examples include:

- Mine was so funny!
- I don't care!
- I think I know!
- I'm gonna punch you in the face!
- I don't need your help!

The above statements, and others such as "Ow!" and "Darn!" placed the emphasis on the speaker and his or her desire to convey personal feelings. For most of these speech acts, the effect on the listener was secondary to the speech act's effect on the speaker. The expressive function, therefore, has more importance for the speaker than for the listener. Hymes associates expressives with first person pronouns and interjections (1968:116). All the speech acts identified as expressive in this study include first person pronouns or interjections.

Forty, or 13.8%, of the speech acts recorded in Room 4 had a phatic function. These included the Pledge of Allegiance, which was recited chorally following circle time. The Pledge was counted as one speech act. Its primary function was to symbolize the children's membership in the national community.

All of the other phatic acts were also observed during circle time. Students' contributions to the circle time prompts followed a pattern. The teacher set the topic and the students all contributed a response round-robin style. Mrs. Goldberg stated the purpose of circle was to encourage students to improve their oral communication skills. The students' purpose seemed different. Almost all student responses followed the form and often the content of the first student's response. The communicative function of responses during circle time for the children was to entertain one another, while conforming closely to group members' previous contributions.

During circle time on April Fool's Day, the students were asked to tell an April Fool's Joke. They had been assigned to learn one for the previous night's homework. The first child told the following joke:

Why did the chicken stop in the middle of the road?
No student answered, so the student finished:
He wanted to lay one on the line.
The class laughed and the student smiled broadly.
Every joke that followed used the same format. However, none of the jokes were sensible in that there was no relationship between the set-up question and the punch line:

Why did the roaster go to Hawaii?  
...(he) wanted to ride a camel.

Why did the chicken walk around the room?  
...he wanted to join the Army.

The most original joke still followed a similar format:

How do you get 'a cat out of cement?  
...with a meatball.

Every joke was received with great laughter by the group.

The same pattern emerged in answers to the prompt: "Tell me about a time you were scared." The first child said she was always afraid of the dark. Each child in the group then added that he or she was also afraid of the dark, adding the intensifier "so" in longer and longer tones as the turn taking progressed.

I am so000 afraid of the dark.  
When my mom turns out the light, that's when I'm so, so, so, so, scared.

Group members responded with empathetic sighs and "yeahs." The function of both the jokes and these statements about the dark was to solidify group membership.

Saville-Troike defines the phatic function as showing "empathy and solidarity" (1989:14). While all the speech acts encoded here as phatic carry expressive, referential and directive functions as well, the primary social function of these acts was to show group solidarity and connect the members of this speech community to one another.

Poetic speech accounts for the smallest percentage of functional speech acts recorded. The six poetic speech acts all took place during the speech event of math time. As described earlier, students were using manipulatives to show subsets with one to one correspondence to a number. Many of these manipulatives were animal shapes. While creating his subsets, one student was observed saying "Ribbit" while working with frog manipulatives and another saying "Oink Oink" while working with pig manipulatives. These speech acts were not directed at specific listeners, nor did they result in a response from other students who may have heard them.

The purpose of these speech acts seemed to be the enjoyment of the language itself. Therefore, these speech acts were considered aesthetic, or poetic in Saville-Troike's framework. Hymes (1968) discusses the poetic function in light of Jakobson's work. According to Hymes, Jakobson reminds us that while poetry itself fits into the poetic function of language, the category extends beyond poetry. The poetic function is usually
used in conjunction with the other functions of speech, especially the referential. Hymes uses a passage from Alexander Pope, "The sound must seem an echo to the sense," as an example (122). The speech acts of "Ribbit" and "Oink Oink" are, in and of themselves, sufficient for the speakers.

In this study, 38.6% (112) of the speech acts recorded are classified as referential. The majority of these referentials were observed during the speech event of math time or at the end of circle time when the class read the daily schedule. During the speech event of math time, the recorded referential speech acts included:

- I'm gonna put four (manipulatives) in the water and four out of the water.
- I've got eight.
- These are pointy pigs.
- I've got five greens and eight reds.
- They're apples.

Many of these were recorded while students told their stories to the teacher and the aide.

Other referentials included answers to the teacher's questions about the daily schedule:

- What day of the week is it?
  Wednesday.

- Should we count how many days until Sunday?
  1,2,3,4.

- What is our weather like today?
  It is cloudy outside.

- On Wednesday, what Special do we have?
  Gym! We have gym today.

Referentials were also recorded during free time, usually concerning books:

- No, I'm looking for a nature book.

- There's no octopuses in this book.

Saville-Troike defines referentials as having "true or false propositional content" (1989:14). Referentials are the primary way speakers convey factual information to listeners. As suggested by Burke, any utterance can have a referential aspect (in Hymes 1968). However, in many cases, the reference is not as salient as the other functions of the speech act. The acts coded as referential here have, as their primary focus, the intent to provide true or false information from the speaker to the listener. Most often, the speaker was a student and the listener the teacher or the aide.
Conclusion

The members of the speech community in Room 4 used language for a variety of functions and purposes. They were most likely to use language in order to direct another's actions or to communicate factual information to one another. They were less likely to use speech as a means of personal expression, to show group solidarity or simply as language play.

Aside from the referential function, which accounts for most speech, the directive and phatic functions of language stood out. The children in Room 4 used much of their speech to influence the actions of their peers and to build group solidarity. Interestingly, Mrs. Goldberg stated that while her primary focus in kindergarten was to nurture emergent literacy, it was also a time for the children to learn how to interact within the large group setting of the classroom. This was evidenced by the functions of the speech they produced. The students were using language as a way to manage the dynamics of their group.

This study leads to several questions. How would these observations compare with those done in a similar speech community where the teacher did not espouse a philosophy that invited students "to use language in all its varieties, for their own purposes" (Goodman, 1986:40)? How might the findings differ if the speech situation were in a similar classroom, but in a more linguistically diverse speech community? Are there any correlations between the gender or ethnicity of the speaker and the functions of the speech they produce? Finally, how do the patterns here correlate to the theories of child development that describe language use by children at this age?

1 A fictitious name.

2 It was not recorded verbatim and, therefore, is not included in the discussion of speech act length and grammar.

3 A version of this paper was originally written for Dr. Nancy Hornberger's Sociolinguistics in Education class (ED 546) at the Graduate School of Education, University of Pennsylvania.
References


