

## EARLY CHILDHOOD LANGUAGE AND CLASSROOM DISCOURSE

by Courtney B. Cazden



Before going to graduate school, I was a public school primary teacher in a working class district in Connecticut (1954-61). My first- and second-grade students came from stable families—white, African American, and early migrants from Puerto Rico—whose fathers worked on assembly lines at places such as Singer sewing machines or Sikorsky helicopters. The elementary school functioned well, albeit traditionally. However, in the privacy of the staff room, we teachers shared our disappointments that so many of our elementary school graduates would end up in the lowest high school tracks.

During these same years, public discussion of the need to improve K-12 education was stimulated (as now again) by external events—first top-down by Sputnik and the space race with the Soviets and then bottom-up by the civil rights movement that demanded an end to legal segregation, as well as to racial and social-class gaps in educational opportunity. Academics began to advocate school reforms, some even suggesting students' language, especially "Black dialect," as a possible barrier to higher achievement. I was eager to learn more.

So in the fall of 1961, my husband and I and our two children moved back to the Cambridge area where we had met, and I began a doctoral program at the Harvard Graduate School of Education. We read Noam Chomsky's linguistics papers and in a course on the Psychology of Language, Roger Brown talked about the social psychology of language use. I was "hooked" and without ever being fully trained as a linguist, psychologist, or anthropologist, I began building a career at the intersection of education and these three fields.

My early interests in social class and cultural differences in children's language continued as well as my delight in the creative agency of each individual.

### Early Child Language Development

At that time, Roger Brown was beginning a new kind of research on children's language development. Instead of giving tests to age-graded groups, he initiated much more labor-intensive observations over time: audiotaping, transcribing, and analyzing natural interactions between a child and parent at home. Brown started with two children of Harvard graduate students. When I joined the project as a research assistant, I asked if we could add a third child from a working class family, "Adam" and "Eve" were joined by "Sarah," neither of whose parents had gone beyond high school (Brown 1973.)

I visited Sarah every two weeks, taping two hours of conversation between her and her mother. I transcribed the tapes as accurately as possible, down to the level of the smallest unit of meaningful language such as the noun and verb inflections—i.e. the noun both plurals and possessives, and the verb both present progressive, "ing," and the regular past tense -ed. To decide when a researcher could



*AnthroNotes* editors invited Harvard Professor Courtney Cazden to reflect back on her pioneering studies of early child language development, classroom discourse, and differential treatment and cultural differences across social, economic, and cultural groups.

assert that a child had “acquired” one of these grammatical inflections, Brown established an arbitrary criterion: if the child was supplying the inflection in spontaneous speech on 90% of the occasions in which it was grammatically required. So if Sarah said, “Mommy eat” when her mother was at that moment *eating*, the missing inflection—*ing*, would be counted as an omission.

Studying developmental phenomena across children requires a measurement or metric for making comparisons. **Chronological age (CA)** is the convention and is expressed in months of age, but we also used average **mean length of utterance (MLU)** in morphemes (equals the number of different minimal units of meaning) as an alternative. (While *Mommy eat* has just 2 words (or two morphemes), *Mommy eating* has 3, with the noun inflection “ing” considered a “bound morpheme.”) The comparison of similarities and differences among the three children according to these two metrics became informative. Chronological age and mean length of utterance in this research are comparable to chronological age (CA) and mental age (MA) in various studies of intellectual development. Like mental age, MLU is a single global measure, and equating children on it yields additional information on the relative development of more specific abilities, such as the acquisition of complex grammar.

When we compared the three children on chronological age, the developmental sequence was clear: Eve had by far the fastest development, achieving an average MLU of 4 when she was only 27 months old, while Adam and Sarah did not construct equivalently long utterances until they were 40-42 months old. But if age was ignored and MLU was the metric, the order of developmental progress changed dramatically. At average MLU of 2.25, only Sarah had acquired one of the inflections, plurality. When all three children had an MLU of 3.5, Sarah had acquired 5 inflections, while Eve had 4, and Adam only 2.

In addition to what could be considered the errors of omission when noun or verb inflections were grammatically required but not yet supplied, the three children

also made some errors of commission. Before they learned to distinguish regular and irregular forms, they created over-generalizations (OGs) of the plural (*mans* instead of *men*), possessive (*mines* instead of *my*), present indicative (*doos* instead of *do*), and past (*goed* instead of *went*). OGs derive from a child having learned the rules of English grammar. All three children first produced correct irregular forms and then for a time alternated them inconsistently with incorrect OGs, and finally observed the mature distinction. Sarah first used the correct irregular “went” at 27 months, alternating thereafter with “goed.” She continued using both until “goed” disappeared after 49 months. Later, other researchers confirmed this three-step sequence in a larger sample of children.

Since over-generalized forms were never heard in parental speech, they are particularly intriguing evidence of young children’s creative cognitive agency at work. While all three evidenced this cognitive process, we also noted individual differences in frequency. While Eve and Sarah supplied only 7 OGs of the possessive *mines*, Adam alone supplied 36; he also metaphorically over-generalized content words as in “They *talking*” about two irons that faced each other on the ironing board.

In their early work, Roger Brown and Ursula Bellugi had hypothesized that a particular form of parental response they called *expansions* might provide especially useful information for the child’s acquisition of grammar. For example, if the child says, “Boy fall down,” the parent might reply, “Yes, he fell down.” They hypothesized that such expansions might be an especially helpful form of interaction because the response encodes the correct grammatical forms at the moment when the meanings they express were still likely to be present in the child’s mental attention.

My doctoral thesis (Cazden 1965) was a small experimental study designed to test this hypothesis with 12 children age 28-38 months in a language-impooverished private day-care center in an African American community of Boston. The children received daily individual play ses-



sions with especially trained tutors for three months. Children randomly assigned to the “expansion” group received affirming and deliberate expansions; children in the “modeling” group received an equivalent density of affirming and well-formed responses that were relevant to the child’s topic but carefully not expansions of the child’s utterance. The third control group children had opportunities to play with the toys and books in pairs, but interactions with the adult were kept to a minimum.

Our hypothesis was *not* confirmed. While children in both treatment groups gained more than those in the third control group, children in the modeling group gained the most on all six measures of their grammatical development. In the natural speech situation, expansions and non-contingent modelings of well-formed utterances often occur together. The parent in the “Boy fall” situation might have added something like, “Do you think he hurt himself?” But in a controlled experiment, there had to be a strict separation. As a result, the expansion-dense adult responses could be perceived as uninteresting and so attended to less, whereas the adult modelings were in effect *extensions* of the child’s original meaning and thus potentially more interesting. The density of expansions in natural conversation may thus be a more valid indicator of its value.

In a more detailed analysis of expansions, we found that Sarah’s utterances that omitted inflections were followed much less frequently by a parent utterance that included the appropriate inflections (only 29%) than were Adam’s (51%) and Eve’s (49%). Comparing just the fastest and slowest developers, there were 294 expansions for Sarah and 427 for Eve. That is, Sarah received significantly fewer expansions even in absolute numbers, although the period of time covered by the time each child reached MLU of 5.0 was 23 months for Sarah and only 9 months for Eve. Thus we could tentatively conclude that at least these basic aspects of grammar learned before school seem to be learned despite differences in the child’s oral language environment.

### **Back to the Classroom: San Diego**

In 1974-75, I went back to primary school teaching in order to test the real-world relevance of some of the knowl-

edge about language development that I had been analyzing and teaching. I wanted to teach working class children again. I also wanted to collaborate with sociologist Hugh (Bud) Mehan at the University of California, San Diego, So I taught 25 children, all either Black or Chicano, in a combined first-second-third grade class in east San Diego, with Mehan as the researcher taping and analyzing our classroom interactions.

Mehan (1979) reported his detailed analysis of the participant structure of the interactions, and his work was as innovative in its time as Brown’s description of the grammatical structure of children’s early utterances the decade before. In brief, Mehan described in detail the participant structure that has come to be called the “default” “IRE/F” sequence of teacher Initiation, student Response, and teacher Evaluation/Feedback. My reflections as the teacher are recorded in my introduction to his book and in a more personal account (1976). We have each reported elsewhere separate studies of children’s display of competence in this classroom setting.

It was a challenging year for me, but memories of individual children are still vivid more than 37 years later: Alberto for his invented spellings in the captions for his amazingly detailed drawings, such as “I lik to rid on a bot”; and Greg for his quick sense of humor: When he overheard my bilingual co-teacher explaining that she would be taking some children to her bilingual education class because “We need some real live children,” he quipped, “Ain’t no one dead in here is there?”

Given my previous research, I responded to three aspects of these children’s language differently than I might otherwise have done. First, I welcomed invented spellings like Alberto’s, which I perceived as evidence of his valuable attention to the sounds in each spoken word. Second, Black English was so omnipresent that I ceased to hear it in utterances such as Carolyn’s: “He on the wrong page” and “There go Leona’s”—examples of natural cultural differences that were in no way barriers to anyone’s understanding.

The third aspect involved my interpretations of test-induced distortions in children's speech. In response to requests from early childhood coordinators in other California school districts, I tried out the CIRCUS battery of oral language tests from Educational Testing Service to see if it might be useful for the oral language evaluation then mandated in California. One of the subtests asked the children to complete such statements as *Here is a child. Here are two \_\_\_\_\_*. Eight of these items asked for such irregular forms. The seven native speakers of English gave 35 "incorrect" over-generalizations out of 56 possible responses: *childrens, feets, mines, morest, gooder, etc.* Having spent so much time earlier coding transcripts for just such items, I felt sure I would have noticed if they were that frequent in the children's spontaneous speech. On the regular plural, possessive, and comparative items, the children got 74 out of 98 correct. Something was strange about missing only the irregulars in the test situation.

I could think of no way to elicit tokens of *mine, most, better* and *best* in a more casual situation, but eliciting plurals seemed possible. From *Ebony* magazine, I cut out pictures of a group of children and a group of men. For pictures of feet, I drew around my own. A few days later, I found a moment to ask each of the children individually and as casually as possible, "What's that a picture of?" The over-generalized plurals dropped from 15 to 6.

One possible explanation for the over-generalizations may be inherent in the test situation itself. Oral language testing may inevitably elicit more monitored speech, thereby shifting language production to what William Labov has termed hypercorrections, favoring forms that are more prestigious (in dialects) or more rule-governed (in development) (Cazden 1975). In other words, the children in the testing situation were offering more incorrect answers (over-generalizations) simply because they were trying to be more careful, actually over-correcting their natural speech.

## Back to the Classroom: Research

A few years after San Diego, I shifted my university research back to my initial interest in classrooms, only gradually realizing how different, difficult, and less satisfying that would turn out to be. For one, switching from studying a pair of interactions to large groups has huge implications, especially the difficulties of taping student speech and keeping track of individual speakers. In addition, interactions within the family are typically among trusted familiars within a single cultural and linguistic group, while demography in the U.S. (and other developed countries such as New Zealand) means that teachers are very likely to be strangers and from the dominant culture, no matter what proportion of their students are from a non-dominant minority.

Fortunately my first classroom research was in one primary-grade setting during "Sharing Time" (or Morning News). One child narrated a personal experience to which the teacher responded, sometimes in the middle and always at the end. In her doctoral research, Sarah Michaels (1981) had done a fine-grained linguistic analysis of one California teacher's negative responses to the narrative of an African American girl. When Michaels moved to the Boston area, we continued that research, replicating in Boston a teacher's negative treatment of what we came to call "episodic" narratives of primarily African American children. We explored possible causes of the teachers' reactions to stories that seemed to them to be "rambling" rather than tightly focused on a single story idea.

Possible causes of negative reactions from teachers included the greater length and complexity of the episodic narratives and the topic's unfamiliarity or lack of significance to the teacher. In addition, there was the cultural difference between child and teacher. Both of our teachers were white, and in the Massachusetts classroom 96% of the white children's narratives were topic-centered in contrast to only 34% of the black children's, which were primarily strung out narratives of various happenings.



To further explore a possible ethnic base for the teachers' differential responses, Michaels and I conducted a small matched guise experiment in which mimicked versions of the two kinds of narratives, with dialect differences and social class markers removed, were played to five black and seven white students at the Harvard Graduate School of Education. When the adults were asked to comment on the quality of the narratives and the probable academic success of the child narrator, the white adults were much more likely to find the episodic narratives hard to follow, while black adults noted differences but appreciated both.

Leona's story that we named "At Grandmother's" evoked the most divergent responses. All the white teachers rated Leona below children who told simple topic-centered stories. The black adults, in contrast found the story, "At Grandmother's" easy to understand and interesting with lots of detail and description. All the black adults except one rated the child as highly verbal, very bright and/or successful in school. Two expanded on the importance of the child's grandmother in the story, explaining that the holiday is an occasion when she gets to spend the night with her grandmother who is an important figure in her life. The black teachers also said that if you missed that inference about her grandmother you missed the whole point of the story. Missing the point was exactly the case for the white adults (Cazden, 2001).

### **New Zealand**

In subsequent research in New Zealand (NZ), it became clear that such differential treatment is not confined to racial differences in the U.S. While in NZ on a Fulbright fellowship, I played this same tape to three groups of white teachers, graduate students, and speech therapists. Their responses were very similar to those at Harvard, all but one finding "At Grandmother's" difficult to follow.

Also in New Zealand, I discovered similar white teacher responses to indigenous Maori children in one-on-one situations. Because of national concern for the under-

achievement of Maori students (about 15% of the population, comparable to African Americans in the US), New Zealand literacy educator Marie Clay wanted to look closely at the engagement of the youngest (5-year old) students, and how their teachers provided for cultural differences. She and her assistant observed Maori, Pacific Island, and white children for six mornings in six New Entrants classrooms. In these classrooms, the children were taught by white teachers, who focused particularly on individualized reading and writing activities with their students. The researchers wrote down all teacher interactions with the two children from each group who were nearest to their 5<sup>th</sup> birthday. Researchers repeated this process with different children during the second term when the classes were larger due to the addition of a new group of just-fives.

The researchers found that all the children, new to school though they were, stayed on task in their individual activities of reading, writing, and drawing more than 90% of the time. But the attention of the circulating teacher was distributed unequally across the ethnic groups, especially in extended interactions when the teacher in some way asked the child to "talk more" (TM).

In the first term, the Pakeha and Pacific Island children averaged more than 5 TMs per morning, but the Maori children received less than 4. In the second term when the classes were larger, it is not surprising that there were fewer opportunities for interactions with the teacher for all the children, but the relative Maori disadvantage increased: more than 3.5 TMs for Pakeha and Pacific Island children vs. less than 2 for Maori. Teachers admitted to Clay that the Maori children "were harder to talk to." Clay stressed the potential consequences of such differences accumulating over entire days throughout the school year, but she did not explore underlying causes.

### **Current Research Interests**

In recent years, both before and after my retirement from Harvard, I have been more active in writing than in doing empirical research myself.

Much of my interest has remained on discourse within the classroom, along with differential treatment and cultural differences. *Differential treatment* and *cultural differences* refer to two different perspectives on the single problem of achieving greater equity in learning opportunities. As frequently used, the terms refer to perspectives that contrast with each other. The differential treatment perspective usually criticizes *over-differentiation* (as in the Sharing Time and Talk More examples above), thereby unintentionally reinforcing, even increasing, inequalities in particular knowledge and skills that were present before entering school. The cultural difference perspective, in contrast, usually criticizes *under-differentiation*, and asserts that differences should be taken into account more rather than less (the focus of much recent research).

The cumulative work of many researchers contributes to a more complex and less simply oppositional picture. Differential treatment can be helpful as well as harmful, and a focus on generalized cultural differences can detract from close observations and empathetic listening to individual learners.

Currently (at age 85 but still active) I work twice a year in Australia on an independent research team evaluating the “Stronger Smarter Learning Communities Project” (SSLC), a large national intervention project to improve the education of Aboriginal students. The SSLC program is directed by an Aboriginal educator, Chris Sarra. A major tenet of the SSLC program is “high expectations leadership” that can counter deficit thinking and racist stereotypes, still pervasive in Australian culture.

As part of our evaluation, we interviewed several principals. One spoke strongly about his beliefs:

I passionately believe in the capacity and future of our Indigenous children and community. . . . It's the latent racism of low expectations and the fields that we construct within the school that really add to disengagement of Indigenous kids. . . . If you've got 10% of Indigenous students in your senior

school, then you should have 10% of your kids in physics. . . . I'm working on challenging the teachers to review their own practices, so that if a student fails, it goes from 'blame the kid' to 'How am I going to get them over the line.'

As the evaluation research continues, we will learn more about what is happening in the classrooms to translate such verbal expressions of high expectations into enhanced learning opportunities for Aboriginal children. Beyond the importance of this work in Australia, it is another attempt to answer the fundamental questions about barriers to learning and achievement among children of lower socio-economic communities, questions I took with me to Harvard from that working class school in Connecticut some 50 years ago.

## References

- Brown, R. 1973. *A first language: The early stages*. Harvard University Press.
- Cazden, C. B. 1965. *The acquisition of noun and verb inflections*. Unpublished doctoral dissertation. Harvard Graduate School of Education.
- \_\_\_\_\_. 1968. The acquisition of noun and verb inflections. *Child Development* 39 (2), 433-448.
- \_\_\_\_\_. 1975. Hypercorrection in test responses. *Theory into Practice* 14, 343-346.
- \_\_\_\_\_. 1976. How knowledge about language helps the classroom teacher—or does it? A personal account. *Urban Review* 9, pp. 74-90.
- \_\_\_\_\_. 1990. Differential treatment in New Zealand: Reflections on research in minority education. *Teaching and Teacher Education* 6 (4): 291-303.
- \_\_\_\_\_. 2001. *Classroom Discourse: The Language of Teaching and Learning*, 2<sup>nd</sup> edition. 1<sup>st</sup> ed. 1998. Heinemann.
- Mehan, H. 1979. *Learning Lessons*. Harvard University Press.
- Michaels, S. 1981. Children's narrative styles and differential access to literacy. *Language in Society* 10, pp. 423-42.
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