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The importance of conversational discourse strategies in the acquisition of literacy

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0. The recent literature on discourse analysis suggests that conversational inference is a matter of multi-level linguistic signalling whereby speakers process intonational and rhythmic cues along with lexical and syntactic options. There is further initial evidence that this inferential process is subject to developmental constraints as well as subcultural differences (Gumperz & Cook-Gumperz, 1976). In learning to become literate in school the child has to learn to shift from his or her home-based conversational discourse strategies to the more written-like strategies of discursive prose. To the extent that the home-based discourse strategies differ from those of the school, this transition to literacy is made more difficult.

1. In this paper, six oral narratives from young school children are examined for evidence of this process. Four narratives are from first graders; two are from fourth graders. Our data were elicited in a one-on-one interview situation in which the narrative was "for the record" rather than conversationally embedded. While this is experimentally elicited rather than naturally occurring discourse, our study can perhaps best be seen as a naturalistic experiment, in that it derives from a much larger, long-term ethnographic study of speech events in classroom and home settings. The interviewer who elicited the narratives studied here had served as a teacher's aide in the children's classroom throughout the entire school year. As a participant observer, she was very much a familiar figure to these children, working with them individually and in small groups in and out of the classroom and even visiting them in their homes on occasion. Moreover, in her role as ethnographer, she had observed and catalogued the various recurring speech events that the children encountered on a daily basis, in and out of school. Many hours of conversation in various contexts, both formal and informal, had been recorded and indexed. On the basis of detailed linguistic analysis of selected episodes of this naturally occurring talk, a number of hypotheses were generated having to do with the children's use of intonation and various discourse strategies in school-related discourse tasks. To test out some of these preliminary hypotheses, we needed a more controlled setting and stimulus whereby we could channel the topic of discourse and minimize complicating interactive elements. Having the children tell us about a single, specific topic would provide us with comparable data from a large number of children and would also allow for replication by others. Our ethnographic study indicated that a common
topic of one-to-one adult/child conversation involved the adult probing the child about some specific past event. Questions like, "What did you do on the field trip?" or "What was the movie about?" were found to occur frequently both in informal home settings as well as more formal classroom interaction.

In order to have some control over what "past event" the children were to talk about, we showed them all a six-minute film made by W. Chafe in conjunction with a narrative discourse project. This film had already been shown to a wide number of adults from a variety of cultural backgrounds. This then provided us with extensive baseline data on adult narrative styles and strategies with which to compare our own findings.

The participant observer attempted to limit her influence on the speaker while he or she was narrating. However, interaction did occur. She involuntarily provided listenership cues: nodding, back channel vocalizations, laughter, etc. (Erickson, 1976). It is interesting to note that more of this listenership interaction occurred with some children than with others, and the timing of these cues was more rhythmic and regular with some than with others. The presence or absence or degree of rhythmicity of these cues may well have had an effect on the amount of talk or even on the complexity of the discourse elicited from the child. Further study on this topic is now in progress.

2. Our goal in asking the children to organize a monologue recounting the events in the film was to pose an exercise which would give us some control over what was being reported and yet place few other conditions on narrative strategy. As the first graders were not yet fluent writers, we also included two fourth graders in our study, from whom we could get both oral and written narratives on the same topic. Our design thus permitted us to do systematic comparisons across different children performing essentially the same task, as well as providing us with comparable data from the same children at contrasting discourse tasks.

Our theory and analytic methods derive from that tradition of conversational analysis which focuses on the notion of thematic cohesion as developed by Gumperz and his collaborators (Gumperz, Kaltman & O'Connor, 1979). By thematic cohesion we mean the processes by which a text, whether spoken or written, is tied together. These include the devices and strategies, at all levels of discourse, by which people chunk information so as to highlight certain parts and background others, signal topic shifts, and establish and maintain perspective within a topic. Our approach is to examine how prosodic, lexical and semantic devices are used to establish thematic cohesion and progression in the six oral narratives. This analysis then provides a basis from which to investigate the relative transferability of oral discourse into discursive prose, as exemplified by the fourth grade written narratives.

Given the different channel constraints that obtain across written and oral modalities, we were particularly interested in
the functions served by prosody and other paralinguistic cues in the oral narratives, as it is these features that are not available in written language. Furthermore, research in interethnic communication has shown that the ways of combining prosody with syntactic and lexical forms are frequently specific to ethnic and social groups. This work has also suggested that some speakers rely more heavily on prosodically based signals than do others to achieve and maintain discourse cohesion.

3. Our approach in analyzing the oral narratives was to isolate systematic differences in the signalling of thematic cohesion and specifically to study the relative reliance on prosody as a cohesive device. We found that of the four first grade narratives, two use a wide variety of lexical and syntactic devices to signal agent focus, causal connections, old vs. new distinctions and co-reference relations. For ease of reference, we will call this a "literate" discourse style, as it bears closer resemblance to the oral style of middle class, literate adults (Chafe, 1980). The other two narratives rely more on prosodic cues such as rhythm and cadence to signal similar relations and distinctions. We refer to this as an "oral" discourse style (again for convenient reference). The two fourth grade narratives are more fluent and complex, but reflect the same "literate" vs. "oral" style contrast seen in the first grade narratives. Furthermore, this stylistic dichotomy is reflected in their written versions of the same narrative. Let us now examine in more detail the distinctions we are making between oral and literate style.

3.1 When we analyzed the narratives for number of nominals and verbals and number and types of nominal and verbal complements, no conclusive pattern emerged. While one of the "oral" style narratives has the fewest number of nominals and verbals and the fewest intraclausal complements, and one of the "literate" style narratives has the greatest overall number and variety of these constructions, the other narratives overlap on these dimensions. Hence, raw counts of items and constructions gave us little insight into narrative style and strategy. However, when we looked at the deployment of complements within and across clause boundaries with regard to the work they did to provide ties between events in the narrative, we did find clear differences. In the "oral" style narratives, complements tend to be verbal complements -- that is, they add information about a given verbal process. For example,

(1) and then he dro--ve off with 'em
(2) and he had a wreck on his bike
(3) and the peaches fell out on the ground

In 1-3, the various prepositional phrases add information about the verbal activity. In contrast, in literate style narratives, complements are frequently embedded against key nominals denoting
major characters in the overall narrated event. For example, in these phrases taken from the first grader, Jenny,

(4) a man ... that was pickin' some ... pears
(5) this boy on this bike came along
(6) he um ... saw 'em with the pea--rs

In 4–6, the that-complement and the prepositional phrases add information about the nominals and the pronoun. The embedded information is then used to maintain explicit reference identity throughout the narrated episodes.

We find that the two groups of narrators employ different strategies for identifying a character in the film and then referring back to the character at a later point in the narrative. The children with a "literate" style use complex nominal syntax to describe a new character. Then in referring back to this character, after other events or characters have been talked about, these children again use complex syntax, as well as lexical and grammatical parallelism, to reestablish the character's identity. For example, the "literate"-style speaker, Jenny, says:

(7a) ... there was a man /

... that was ... picking some ... pears //

Twenty-four lines later she mentions him again, saying,

(7b) ... and then / ... they ... 'walked by the man /

who gave / ... wh-who was picking the pears //

Here Jenny signals that the second mention of "the man" is old information through the use of the definite article "the." She then goes on to provide explicit identification of the character through the use of lexical ties and parallel syntactic structure.

Contrast this with the "oral"-style speaker, Merle, as he introduces the same character:

(8a) it was about / ... this man /

he was um / ... um ... takes some um ... pēach-- / ... some ... pēa--rs off the tree /

Here Merle uses two independent clauses where Jenny used a single relative clause. In isolation the difference is of little communicative importance; one uses embedding where the other uses apposition. However, if we now look at how the children refer back to characters already introduced and reestablish character identity, we find that the "oral" style strategy makes very different
interpretational demands on the listener. Where the "literate" style narrators use embedded nominals to signal identity and non-identity of major characters, the "oral" style narrators are less inclined to do so and instead employ prosodic conventions.

An example will clarify this point. In the beginning of his narrative (example 8a above), Merle introduces the pear picker, describes him as such, and then leaves him and proceeds to talk about other characters and events in the film. Twenty-five lines later Merle again mentions this character, saying,

(8b) ... and when that ... when he 'pa--ssed /

| by that ma^n / ... the man . . .

the ma^n came out the tree /

Here he uses vowel elongation and a high rise-fall contour on "man," which serves as a cue that he's talking about old information, almost as if to say, "you know what man I mean, that man I already told you about." We emphasize that this is not an isolated instance, but a recurrent strategy. While our claims about the communicative intent of such cues are hypotheses which need further testing, we do find other instances: all three "oral" style narrators employ this signalling device at some point in their narrative.

3.2 When we shift our attention from nominals, verbals and intra-clausal complements to inter-clausal syntactic structures -- i.e., infinitives, that complements and various relatives -- we do find a difference of frequency across the narratives: among the first graders, one "oral" style narrator, Wally, has no inter-clausal complements; the other, Merle, uses only one. One "literate" style narrator, Jenny, uses four such complements. The other, Joel, uses seven.

In the light of what we've said about differing channel conditions in spoken and written language, inter-clausal complements are significant because they enhance cohesion in both spoken and written language, explicitly mapping hierarchical relations onto clausal structure. In substituting relations of super- and subordination for simple conjunction, they serve two purposes: on the one hand, they order two clauses with respect to one another; on the other hand, they provide additional information about a given noun phrase; the information can then be used as a "tag" -- establishing co-identity in a later utterance. It is this latter use and function that we regard as the most important aspect of these syntactic constructions' contribution to discourse cohesion. It is the tendency to use complements to establish co-identity which distinguishes the "literate" style from the "oral" style.

The differing strategies -- the use of complements as opposed to prosodic cues to accomplish similar communicative tasks -- can also be seen in the fourth grade narratives. The "literate"
style narrator Paul uses an abundance of complements -- of-phrases, participials and that-sententials -- to keep track of referents. For example, he opens his narrative with:

(9) this man / he was collecting / some kind of fruit / and ten lines later refers to

(10) ... the guy / .. collecting fruit //

and thirty-eight lines later uses a participial embedded in a that-sentential:

(11) ... the man that was um / ... that was collecting the fruits //

Paul's "oral" style counterpart, Geoffrey, makes far less use of these devices. Although Geoffrey opens his narrative like Paul, with the use of an appositional construction,

(12) this guy ... this 'man was 'pickin' pears

he resembles the first grader Merle in that he refers back to this character later in his narrative not with a complement, but rather with a prosodic cue: vowel elongation with a low rise-fall contour on "the ma-n."

3.3 If we consider yet another level of supra-clausal discourse organization, that of inter-clausal connectives, we can again contrast the use of lexicalizations as against the use of prosodic cues. Clausal connectives such as but, so, on the other hand, conversely, etc., serve to orient a clause or series of clauses with respect to a preceding clause or series. In written language they serve to integrate meaning, despite the absence of prosodic and situational cues (Hirsch, 1977: 24). In spoken language they serve a similar function of semantic integration. Either replacing an intonational or contextual cue or reduplicating its function, they make the semantic relationship between clauses fully explicit. The use of lexicalization as against prosodic cues can be seen if we compare two passages which use so-pronominals with a passage where the pertinent information is signalled solely by intonation.

The first example is from the first grader Jenny:

(13a) ... he um ... 'saw 'em with the pea--rs

so

... 'he thought / ... that ... they
The second example is taken from the fourth grader Geoffrey:

(13b) and he saw \`em eatin' pears / 
so he thought \`they did it / 

In both examples, the use of so lexically encodes a causal relationship between an act of seeing and an act of judgment. Compare this with a closing segment of the same episode taken from the speaker Merle.

(13c) ... the man came out the tree / 
saw the pears was go-ne / 
and then ... 'he know who had got 'em / 

Note that the form then, with a stressed high fall, serves as an implicit intonational signal, functionally equivalent to lexicalized forms, so, therefore, hence. The chain of events and inferences is related, not with a lexical connective, but with a prosodic cue superimposed on what is ostensibly a temporal connective.

Studies of Black conversational style and of Caribbean Creole have shown that lexical meanings are often relatively fluid and depend on prosodic conventions for assignment of a given situationally specific meaning (Hansell & Seabrook, 1978; Reisman, 1970). Given this state of affairs, proper interpretation depends on speaker and listener awareness of the signalling potential of a given prosodic cue. In line with these findings, we emphasize that it is the use of the high fall intonational contour which imparts the causal inference to 'then.'

While this causal inference does come across in Merle's oral presentation, in writing the prosodic contours are lost and consequently the precise force of 'then' would be unclear. This contrasts with the narratives of Jenny and Geoffrey, where the use of 'so' provides an explicit causal connection which would carry over into writing.

3.4 We will now examine in detail another case in which the meaning of a specific discourse feature is extended by a prosodic cue. Two of the oral style first graders use 'then' with prosodic marking to disambiguate reference relations where anaphoric pronouns do not provide sufficient semantic distinctions. The episode described is the most complex in the entire film. It involves several participants and an exchange in which the key figures are both boys. (As background: in this scene, three boys come upon a hat in the road, which belongs to a boy with a bicycle, whom they have left. One of the three boys whistles to this boy,
gets his attention, and approaches him, hat in hand. He gives the
boy with the bicycle the hat and in return is given three pears,
to share among his friends.)

All first grade narrators rely predominantly on surface pro-
nominals in referring to a character who has already been intro-
duced and who remains in focus as an agent. In this particular
scene, however, the anaphoric pronoun 'he' does not suffice to
distinguish between the two boys. There are several distinct
strategies for avoiding referential ambiguity in this case. One
is to fudge somewhat on the actual details of the scene and ex-
plot the number distinction between the three boys and the lone
boy on the bicycle. The anaphoric pronouns he/him vs. they/them
are then sufficient to keep the two sides separate. This strategy
is employed by Joel:

(14) ... they gave him back the hat /
    and for 'giving him back the hat/he gave 'em three
    pears //

A second strategy is to use nominal complements to provide enough
identifying information about the two boys to keep them separate.
This is done by the literate style fourth grader Paul, who says:

(15) a--nd uh ... the boy / ... with the hat /
    ... um handed him the hat //
    and ... um / ... the boy on the bicycle /
    gave him ... 'three fruits //

As noted earlier however, both oral-style first grade narra-
tors make no use of embedded nominal complements when talking
about key characters. Additionally, as both narrators attempt to
be factually precise in this episode, the strategy of exploiting
the singular/plural distinction is foreclosed. As a result, the
passages suffer from apparent ambiguity, as can be seen in the
following excerpt from Merle's narrative:

(16a) and then ... the ... the boy had blown his
    whistle and then /
    b ... he had ... then ... 'gave him his hat /
    c ... and then ... he had 'gave 'em some pear /

In lines b and c there is no way of knowing, short of having seen
the film, whether the subject in b and c is co-referential with
one of the three boys mentioned in line a, or with the earlier subject, the boy on the bicycle. (We find a similar ambiguity, in the same passage, in the first grader Wally's narrative.)

If our interpretation of this passage is guided solely by the general rules for cross-clausal co-reference and deletion, then Merle's recounting is ambiguous and confused. The ambiguity can be ascribed to the speaker's over-reliance on surface pronouns that do not carry enough semantic information to differentiate the characters. Additionally, the most plausible interpretation of the passage is at variance with events depicted in the film.

If however the general rules are temporarily held in abeyance and a more context-specific set of cues and patterns is considered, then the interpretation is very different. With regard to these patterns, we should first point out that within a given episode-unit, 'he' is used predominately with the same agent (a strategy which serves to create consistent agent perspective). Second, the form 'then', with a low falling pitch contour, marks an attempt to shift agent in most of its occurrences in the first grade narratives. In other instances, it appears to mark a more general attempt to shift "focus" of the narrated event to a new scene or location. It is rarely used solely as a temporal connective. These observations suggest that in Merle's passage, the occurrence of 'then' between "he had" and "gave him his hat" in line 16-b signals that 'he' is being rejected as a possible subject, putting "the boy" (blowing the whistle; line 16-a) back in focus as a subject. The use of 'then' in 16-c signals another change, this time with 'he' (the boy on the bicycle) back in focus as subject.

While this analysis requires manipulation of the normal rules for anaphoric deletion, it has three virtues: 1) it accords well with the strong tendency of all first grade narrators to use 'then' as a perspective shifting device, and in particular to signal shifts in agent perspective, 2) it accounts for the pattern of using 'he' to refer to the same agent throughout a given episode-unit, and 3) it allows us to "reconstruct" from the narration the actual sequence of events depicted on the film.

All three speakers with an oral style rely heavily on anaphoric pronouns and prosodic cues to signal referential identity and contrast. In describing this particular episode, where anaphoric pronouns do not sufficiently distinguish between actors, the temporal connective 'then' with prosodic marking was used by both Merle and Wally as an ad hoc agent shifter. This strategy succeeds only if you share either in-group or circumspect analytic awareness of this signalling convention. Furthermore, this strategy does not transfer to writing where the accompanying prosodic cue on 'then' would be lost. In contrast, the literate style speaker Paul relies much more on lexical elaboration and clausal embedding to achieve referential clarity in describing this episode. This strategy works equally well in written or oral discourse.

3.5 Finally, when we compare the relative transferability
of signalling devices to written discourse, we find that the fourth grader who uses a discourse style that relies heavily on prosodic cueing has more difficulty expressing himself in writing than does the fourth grader who uses more lexicalized cohesive ties in his oral discourse. It is in just those cases where Geoffrey uses prosodic cues to distinguish major characters in his oral narration that his written text fails to make the necessary lexical distinctions and hence is ambiguous. Paul, on the other hand, uses lexical complements to distinguish major characters in both his oral and written narratives; his written version is unambiguously.

4. While some of our findings are reminiscent of those of Bernstein and his collaborators (Bernstein, 1964; Hawkins, 1969) and Black dialect researchers in this country (Hess & Shipman, 1965), our methods and assumptions are different. With regard to method, we attempt a fine-grained linguistic analysis of various levels of discourse. This goes well beyond the frequency counts of lexical items and syntactic structures used by these researchers as the basis of their characterization of restricted and elaborated codes. Additionally, we do not regard our findings as indicative of differences in cognitive capacity, nor do we wish to suggest that they are somehow characteristic of an entire social class or minority group.

In our investigation of communicative background and speech activity we rely heavily on the concept of conversational inference: the situated process of interpretation by which participants in a conversation assess other participants' intent and respond on the basis of that assessment. This interpretive process relies on multiple levels of verbal and non-verbal signalling -- kinesic, paralinguistic, prosodic, lexical, and syntactic -- and embraces all levels of discourse: intra-sentential relations, inter-sentential co-reference, participant affect (humor vs. seriousness), activity frames (chat, discussion) and so forth. Through our ethnographic work and detailed linguistic analysis which focuses on the interplay of prosodic, lexical and syntactic signals in naturally occurring conversation in the home and classroom we have identified community-based differences in conversational norms and expectations. These we refer to as differences in discourse style.

In comparing these styles with regard to the creation and maintenance of thematic cohesion, we do not assume that any one style is inherently better, more complex or more appropriate than any other. In fact, all the oral narratives studied were chosen as examples of highly successful narrations. It is only in reference to a particular linguistic activity that questions of appropriateness arise. By examining thematic cohesion in spoken and written language, we are able to distinguish between communicative background and speech activity, two notions which have been confused and confounded in much of the sociolinguistic re-
search in the past. We attempt to give our findings a task-specific analysis: we ask how differing discourse devices serve to signal connective links in oral narration and then ask whether or not these devices transfer successfully into written discourse. In the transition from oral to written language, prosodic cues are lost; this study suggests that a child who relies heavily on these cues as cohesive devices in oral discourse may be at a disadvantage in making the transition to literacy.

Furthermore, by using the concepts of conversational inference and thematic cohesion we are able to study discourse strategies in a variety of classroom activities. What we find is that community-based differences in discourse style receive differing interpretations in the classroom. Nearly all linguistic performance (whether oral or written) is evaluated in school with reference to an implicit literate standard. Given this state of affairs, a discourse style which relies heavily on prosodic cues for signalling connective ties is frequently at variance with the teacher's own discourse style and literate expectations. As a result, the teacher often inadvertently interrupts or fails to see the point of what the child is saying. Cumulatively, this kind of disharmonious interaction results in a pattern of differential treatment and negative evaluation which has been documented for "sharing time" episodes and is now being investigated in oral reading lessons. Differential treatment and negative evaluation, in their turn, diminish the student's access to the kind of instruction and practice necessary for the acquisition of literacy.

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Notes:

1. While there is still much that remains to be understood about the uses and regularities of prosodic signals, there is mounting evidence that prosody serves a vast range of complex communicative functions (see Crystal, 1969, for a survey of this literature). The difficulty facing researchers concerned with prosodic cues and their functions is that prosody is at once pervasive yet elusive. It is more context-sensitive and inherently variable than lexical items and syntactic constructions. Hence its functional characteristics are less generalizable, less encodable; in a rough and ready sense, less "grammatical." This state of affairs derives, in its turn, from a series of causes: (1) as a physical phenomenon prosodic systems are poorly understood, as is evidenced both by the acoustic and physiological literature and by the fact that no standard notational system yet exists; (2) as non-segmental signals, prosodic cues are not readily susceptible to native speaker awareness and precise characterization (Silverstein, 1977); and lastly, (3) the reduction of the speech signal to orthographic substitutes, in written transcripts, entails a severe loss of prosodic information.

The method we use in analyzing prosodic cues in these oral narratives derives from the work of John Gumperz and John Trim. Initially, we chunk the speech into tone group units which are segments with a single, continuous prosodic contour. We indicate whether these units are major tone groups (ending with some indication of closure) or minor tone groups (signalling "more to come").

Secondly, we locate points of intonational prominence; the primary peak of the tone group being the nucleus, with peaks of lesser prominence identified as secondary heads. Thirdly, we indicate pitch contours on the tone group nucleus (rising, falling, level, rise-fall, etc.) as well as pitch level on the heads (either high or low). We then systematically examine the use of prosody within and across clauses, looking for relationships between tone group chunking, nucleus contour and clausal (syntactic and semantic) structure. We do not assume grammar-like consistency or unity of meaning. Rather we look for general patterns in the use and functioning of prosodic cues within and across speakers, in relation to particular discourse tasks.

The notations we use in transcribing prosodic and paralinguistic cues were developed by Gumperz and his collaborators based on Trim's work. In this system, tone group boundaries are indicated as major "/" or minor "/". Within the tone group we indicate the pitch contour on the nucleus as follows: "\" low fall, "\" high fall, "/" low rise, "/" high rise, "\" rise-fall, "\" fall-rise. Secondary heads are "'" high or "," low. Paralinguistic features such as a) shift to high pitch register "" or shift to low pitch register "" (both applying to the entire tone group), b) pausing "..." indicating a break in timing and "..." indicating a measurable pause, c) vowel elongation "--" following the
syllable, d) speech rate: "acc." indicating accelerating tempo and "dec." indicating slowing down, e) loudness over an entire tone is indicated by "p" (soft) or "f" (loud). Doubling of any one of the above symbols indicates extra emphasis.

2. The difference between verbal structures as opposed to nominal structures has been discussed by Michael Halliday (1966) in terms of contrasts along two basic dimensions: a conceptual dimension of clausal transitivity and associated causativity; and the communicative dimension of theme. Nominalizations have greater flexibility than verbals along both dimensions. This flexibility helps explain the importance of nominalizations in scientific and technical writings and in discursive prose in general. Halliday comments on the development of taxonomic noun structures in a given language, arguing that the development of such lexical-syntactic capacities must be seen in the light of a given society's technological history, the communicative demands which arise therefrom, and the overall communicative advantage (flexibility) which nominalizations enjoy (1966:7-9, passim).

3. 'Then' with a high fall is functionally distinct from two other uses of 'then' by this narrator. (1) the use of 'then' with a low fall contour which frequently signals a shift in agent-perspective (it is used this way by other first grade narrators as well), and (2) the use of 'then' with a low rise which is used to mark episode-like breaks in Merle's overall narrative.

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