 Recent research supports the theory that unskilled writers produce writing through the mediation of spoken language. That is, their writing contains inexact meanings, or semantic abbreviations, characteristic of conversations in which the listener is familiar with the situational and cultural contexts of the conversation. Two studies further examine this theory. In the first, descriptive essays written for peer audiences in grades four, eight, and twelve were analyzed. Although the total number of words increased with grade level in the samples of weak writing, the rate of semantic abbreviation remained the same, while the increase in words in the strong writing samples was accompanied by a lower rate of semantic abbreviation. In the second study, writings from grades eight and twelve for three different audiences were analyzed. In the strong writing samples the rate of semantic abbreviation decreased from parent to peer to editor audiences, while the weak writers produced more semantic abbreviation for the peer audience than for the other two. While this explanation for weak writing requires further research, it will help writing instructors in assisting students to revise their weak writing in the direction of more explicit meaning and to understand the context-dependent aspects of language. (HTH)
Vera John-Steiner, in her presentation, has supported Vygotsky's theory of writing as a process of transforming internal thought into explicit and communicative language. Using evidence from the notebooks of professional writers, she has argued that words in inner speech are highlights of semantic frames and of condensed inner images. Writing explores and elaborates and externalizes these frames and images.

It is appropriate, then, for me to begin my discussion of the role of spoken language in the process Vera has discussed by sharing the condensed inner image that I have in mind. I'm interested in the insight Vygotsky offers into the writing processes of unskilled writers. Initially, the image at the base of my thinking was a straight line:

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Inner Speech → Spoken Language → Written Language
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This image seemed to adequately represent Vygotsky's idea that beginning writers produce writing through the mediation of spoken language. (That idea is discussed in Thought and Language, pages 98-101. Like Michael Halliday, as Vera reported, I had trouble accepting the idea at first. I could not remember producing writing by abstracting from speech. It was not until I read...
Mind in Society, edited by Vera and three other writers, that I realized that there are two parts to Vygotsky's theoretical assumption: 1. Unskilled writers produce writing through spoken language. 2. Skilled writers abstract directly from verbal thought to written language. This, I believe, accounts for Halliday's remark that for him sentences are readily available to transform thought into prose.

My mental image was at first a straight line. Then Nan Elsasser, our next speaker, pointed out that the straight line was not what Vygotsky was saying. Vygotsky argues that speaking and writing have distinct forms and serve distinct functions. We need, therefore, two lines:

And to this image I now add two more lines to represent a developmental course. My image now resembles a windshield wiper:

The first new line, the solid one, represents a writer's achieved development. This is what the writer can do independently on a given task, and this is what
we measure when we assess writing abilities. The second line, the broken one, represents Vygotsky's concept of a zone of proximal development. This is what the writer can do in cooperation and collaboration with peers and adults. The concept of proximal development is an extremely important one; it is one direction my further research will explore. Proximal development, I strongly suspect, is what leads a writer from writing ability that leans heavily on the dialogic form and interpersonal function of everyday speech to writing ability that includes the monologic form and ideational function of written language. In plainer terms, we can say that inexperienced writers produce writing through the mediation of spoken language (Vygotsky, 1934/1962). With experience, with reading and writing practice and with instruction, spoken language as an intermediate link between thought and writing gradually disappears (Vygotsky, 1978).

A good deal of recent research supports the idea that unskilled writers produce writing through the mediation of spoken language (Hirsch, 1977; Goody and Watt, 1977; Olson, 1977; Elsasser and John-Steiner 1977; Shaughnessy, 1977; Emig, 1978; Hartwell, 1980). And so does observation; these writers, for example, are writing as if they were talking.

First grade writer: I was waking thru the wds. Wan I saw a pritty brd.

Tenth grade writer: One night me and my two friends went to the store.

The second writer knows more than the first about spelling and punctuation. The second sentence, though, shows more of the context-dependent meaning of spoken dialog. The reader cannot tell which night, which friends, or which store. Egocentrism (Piaget, 1926/1955) is often used to explain such writing (as in Moffett, 1968; Greenfield, 1972; Shaughnessy, 1977). Recent research (Kraus and Glucksberg, 1977; Kröll, 1978), however, suggests that we question egocentrism as an explanation for inexplicit meaning in student writing. And so does
Vygotsky's theoretical stance: Piaget's description of egocentric thought and language is a psychological one, and there is no room for social influences in that description. The implication of that position is that teachers should sit back and patiently wait for student writers to outgrow egocentrism. To my mind, it makes more sense to argue that reading and writing have something to do with overcoming apparently egocentric characteristics of student writing (see Carothers, 1959, who speculates that literacy is a driving force behind movement through Piaget's developmental stages).

Vygotsky, of course, argues that egocentric speech is social in origin and becomes increasingly personal and cryptic as it turns into inner speech. In that interpretation, our tenth grade writer is elaborating private inner speech (see Markova, 1979) enough to meet the demands of a certain social situation. Given a conversation with a close friend, the sentence "One night me and my two friends went to the store" would take on a fuller meaning. Intimacy would make the identities of night, friends, and store as clear as they need to be for effective communication. In that sentence, and throughout the writing of unskilled writers, the semantic abbreviation characteristic of inner speech is not transformed into the explicit, autonomous meaning characteristic of written language. The transformation has stopped at the level of spoken dialogue. Like Flower (1979, p. 19), I am saying that semantic abbreviation is part of the "undertransformed mode of verbal expression" typical of the writing of unskilled writers. Unlike Flower, though, I am saying that such writing is not only "Writer-Based"; it is based also in the form of spoken dialogue and the function of interpersonal communication.

At SUNY/Buffalo we have done two studies to examine the assumption that inexplicit meaning in weak student writing is the result of semantic abbreviation characteristic of inner speech being transformed only to the extent necessary to meet the demands of everyday spoken dialogue. We operationally defined
semantic abbreviation (in both studies) by combining features of spoken dialogue, 

demonstrative exophoric references (Halliday and Hasan, 1976) and formulaic expression (Ong, 1979). We selected these measures because they 
determine the extent to which writers refer to situational and cultural contexts 
(Malinowski, 1923; Bernstein, 1975) without representing those contexts 
sufficiently within written texts. The underlying assumption here is this: In 
unskilled writing, private verbal thought has been transformed into "one-half of 
dialogue written down," that is, into writing that requires familiarity with the 
situational and cultural contexts of language that the writer has in mind.

This twelfth grade writer's sentence will illustrate the manner in which 
the semantic measures were employed:

In the TV shows or police shows, I think these people (not to 
just entertain us) but to show us how some people react when they 
see a crime committed.

In that sentence, "these people" is an instance of demonstrative exophoria. We cannot tell which members (writers, producers, sponsors, all of these, or 
two out of three) the writer wants to include in a class of people responsible 
for television programs: "The TV shows," on the other hand, is not counted as 
exophoric, since "police shows" is an apparent attempt to elaborate that 
expression. "Some people" is used formulaically; it is a cliche that refers 
to a class of television viewers without specifying the members of that class. Finally, the pronoun "they" is an instance of personal exophoria; it refers back 
to "some people," the referent for which is not in the text.

Calculations of rates of semantic abbreviation were figured as frequency 
per total words (in both studies).

In the first study (Collins and Williamson, 1981), we used description 
of place essays written for peer audiences in grades, 4, 8, and 12 as a data 
base. Analysis revealed that for samples of weak writing in the study, total
words increased with grade level while the rate of semantic abbreviation stayed about the same. (Refer to Table 1 here.) This indicates that for weak writers longer and more inexplicit texts were produced at each higher grade level. For strong writers, a greater increase in total words was accompanied by a significantly lower rate of semantic abbreviation (Table 1). Stronger writers produced longer texts which contained more explicit writing. Conclusions: Stronger writers learn to use more words to adequately represent situational and cultural contexts of language in their writing. Weaker writers learn to use more words (but still fewer words than strong writers), and weaker writers use more words to produce more inexplicit meaning as grade level increases.

Because the operational definition of semantic abbreviation was based upon features of spoken language, this first study supports the assumption that weak writers produce writing through the semantics of everyday spoken dialogue. Inner speech, for them, is elaborated in writing to the extent appropriate for talking with a friend.

In the second study (Collins and Williamson, in press) we asked if explicitness of meaning would vary with assigned audience. Syntactic complexity does (Cayer and Sacks, 1979; Crowhurst and Piche, 1979), and semantic complexity ought to increase as assigned audiences become more remote and unfamiliar, since less intimate audiences need more explicit information. The variance of semantic explicitness with audience, however, seems to follow a developmental pattern; in a study by Rubin and Piche (1979) only expert adults substantially adapted persuasive strategies to audience differentiation.

That finding was supported by the results of our second study. We analyzed samples of writing from grades 8 and 12 in which writers had responded to three tasks: a description of place for a peer audience, a persuasive letter to a parent audience, and a persuasive letter to the editor of TV Guide. We found
that strong writers in the study adjusted the rate of semantic abbreviation according to audience assigned by task. They distinguished among parent, peer, and editor audiences and decreased the rate of semantic abbreviation in that order. (Refer to Table 2.) Weak writers, on the other hand, made an apparent distinction only between peer and "adult" audiences. They produced more semantic abbreviation for the peer audience than for the other two, and their writing revealed a similar rate of inexplicit meaning for those two, the parent and the editor (Table 2).

I believe these results support Vygotsky's theory of the developmental interaction of spoken and written language. Weak writers, regardless of age or grade level, produce writing through the mediation of spoken language. Their writing depends upon reader familiarity with contexts of situation and culture. Their writing is dialogic in form; it requires the cooperation of an interlocutor to make meaning explicit.

Additional research, of course, must be done before the theory can be accepted as an explanation for inexplicit meaning in weak student writing. Questions such as these must be answered: If weak writers assume that readers, like participants in dialogue, share referential contexts, why does the representation of those contexts vary according to peer and adult audiences? Why do weak writers recognize only a generalized adult audience, instead of differentiated audiences as specified by task? Do weak writers represent meaning for teachers, rather than for readers, in their writing, so that teachers comprise what I am calling the "adult" audience? Would holding the mode of discourse constant, which was not the case in our second study, provide similar results? Or is mode, especially persuasion, a more important factor than audience in influencing the semantics of weak writing? These questions, and others, must be answered before the true nature and extent of the unskilled writer's dependence upon spoken language can be understood.
If speaking and writing interact in the unskilled writer's composing processes, then speaking and writing should interact in the composition classroom as well. Teachers who work with weak writers should adopt a stance of helpful, concerned readers. We should let unskilled writers know where meaning is abbreviated in their texts, and we should have them revise in the direction of more explicit meaning. We should have writers talk with us and with peers about context-dependent aspects of language and logic in their writing. We should regard first drafts as indicative of what writers can do independently, as a reflection of achieved development. We should regard talk about subjects of writing as indicative of what writers can do in cooperation with others, as a reflection of a writer's zone of proximal development. We should regard each successive revision of a piece of writing as a chance to transform verbal thought into increasingly meaningful written language.

The key to these strategies of working with weak writers is cooperation. Strong writers, I suspect, are those who have mastered the monologic form and ideational function of written language through reading and writing practice. Weak writers, in eighth grade or twelfth or in college, have missed that practice. Their writing resembles the dialogic form, and serves the interpersonal function, of spoken language. The significance of that form and function resides in cooperation, in the cooperative construction of meaning exhibited by participants in spoken dialogue. Assumed cooperation in the achievement of meaning characterizes writing produced through the mediation of spoken language. Real cooperation, of the sort that asks for and helps to achieve explicit meaning, might lead eventually to the independent construction of such meaning. To paraphrase Vygotsky one last time: What a writer can do in cooperation today, he or she can do alone tomorrow.
These data came from the Cross-Sectional Sample of Writing Performance. Planned as a data-base for descriptive studies of writing performance, the design for the sample and specific writing tasks were developed in early 1976 by Charles Cooper, Lee Odell, and Cynthia Watson. During the 1976-77 school year, Charles Cooper and Cynthia Watson coordinated the gathering of the sample from school districts in New York, Michigan, and Illinois. Subsequently, Charles Cooper and Lee Odell supervised the primary-trait scoring of the sample.
Spoken Language and the Development of Writing Abilities

First-Grade Writer:

I was warking thru the wds. Wan I saw a pritty bird.

Tenth Grade Writer:

One night me and my two friends went to the store.

Twelfth Grade Writer:

In the TV shows or police shows, I think these people (not to just entertain us) but to show us how some people react when they see a crime committed.

Table 1

Mean Rate of Semantic Abbreviation by Grade and Ability
(Expressed as Percentage)

<table>
<thead>
<tr>
<th>Grade</th>
<th>4</th>
<th>8</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weak</td>
<td>11.6</td>
<td>11.9</td>
<td>12.6</td>
</tr>
<tr>
<td>Strong</td>
<td>8.4</td>
<td>5.0</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Table 2

Mean Rate of Semantic Abbreviation for Ability Groups
(Expressed as Percentage)

<table>
<thead>
<tr>
<th>Audience</th>
<th>Weak</th>
<th>Strong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer</td>
<td>12.3</td>
<td>5.0</td>
</tr>
<tr>
<td>Parent</td>
<td>9.4</td>
<td>6.0</td>
</tr>
<tr>
<td>Editor</td>
<td>9.7</td>
<td>2.5</td>
</tr>
</tbody>
</table>
REFERENCES


Flower, L. Writer-based prose: A cognitive basis for problems in writing, 
College English, 1979, 41, 19-37.

Goody, J., & Watt, I. The consequences of literacy. In J. Karabel & A.H. 
Halsey (Eds.), Power and Ideology in Education. New York: Oxford 

Greenfield, P.M. Oral or written language: The consequences for cognitive 
development in Africa, the United States and England, Language and 


Hartwell, P. Dialect interference in writing: A critical view. Research 

Hirsch, E.D., Jr. The philosophy of composition. Chicago: The University 

Krauss, R.M. & Glucksberg, S. Social and nonsocial speech. Scientific 
American, 1977, 236, 100-105.

Kroll, B.M. Cognitive egocentrism and the problem of audience awareness 

Malinowski, B. The problem of meaning in primitive languages. In Ogden, 
Brace & World, 1923.

Sharpe, 1979.

Moffett, J. Teaching the universe of discourse. Boston: Houghton 
Mifflin, 1968.

Olson, D.R. From utterance to text: The bias of language in speech and 


