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Reading Education Report No. 43

TOWARD A COMPOSING MODEL OF READING

Robert J. Tierney
P. David Pearson
University of Illinois at Urbana-Champaign

August 1983

Center for the Study of Reading

READING EDUCATION REPORTS

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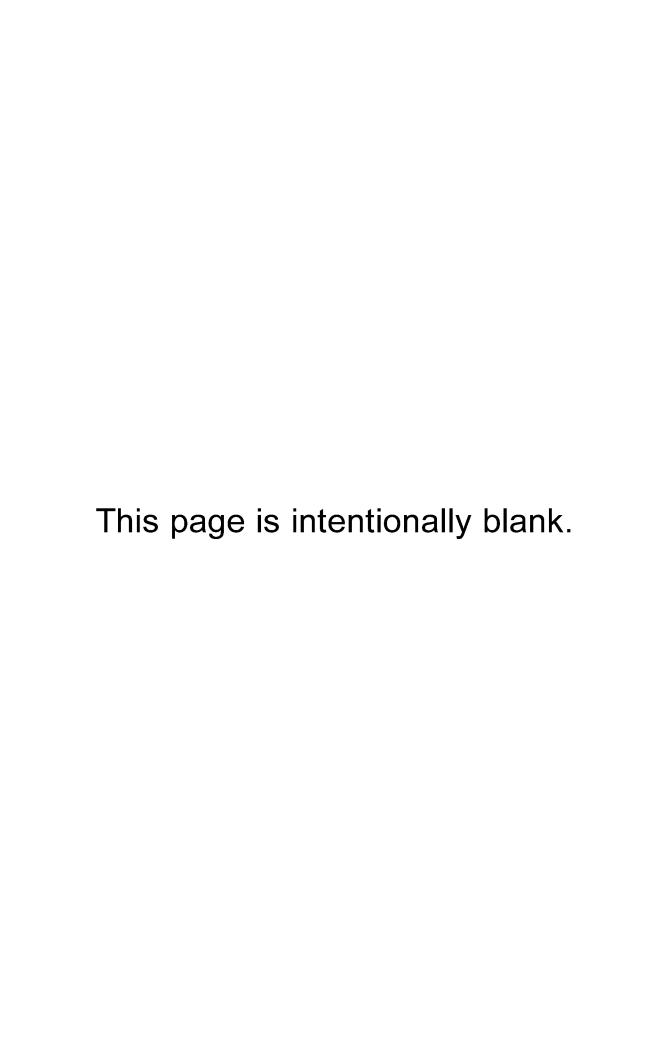
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Learning to Read Like a Writer by P. David Pearson & Robert J. Tierney and Writer-reader transactions: Defining the dimensions of negotiation by Robert J. Tierney. Special thanks go to Theresa Rogers and others, including A. Crismore, L. Fielding, J. Hansen, and J. Harste for their reactions to and help with the paper. Appeared in Language Arts, 1983, 60(5), 568-580.



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Toward a Composing Model of Reading

We believe that at the heart of understanding reading and writing connections one must begin to view reading and writing as essentially similar processes of meaning construction. Both are acts of composing. From a reader's perspective, meaning is created as a reader uses his background of experience together with the author's cues to come to grips both with what the writer is getting him to do or think and what the reader decides and creates for himself. As a writer writes, she uses her own background of experience to generate ideas and, in order to produce a text which is considerate to her idealized reader, filters these drafts through her judgments about what her reader's background of experience will be, what she wants to say and what she wants to get the reader to think or do. In a sense both reader and writer must adapt to their perceptions about their partner in negotiating what a text means.

Witness if you will the phenomenon which was apparent as both writers and readers were asked to think aloud during the generation of, and later response to, directions for putting together a water pump (Tierney, et al., in press; Tierney, 1983). As Tierney (1983) reported:

At points in the text, the mismatch between readers' think-alouds and writers' think-alouds was apparent: Writers suggested concerns which readers did not focus upon (e.g., I'm going to have to watch my pronouns here . . . It's rather stubborn—So I better tell how to push it hard . . . he should see that it looks very much like a syringe), and readers expressed concerns which writers did not appear to consider (I'm wondering why I should do this . . . what function does it serve). As writers thought aloud, generated text, and moved to the next set of sub-assembly directions, they would often comment about the writers' craft as readers might (e.g., no confusion there . . . That's a fairly clear descriptor . . . and we've already defined what that is). There was also a sense in which writers marked their compositions with an "okay" as if the "okay" marked a movement from a turn as reader to a turn as writer. Analyses of the readers'

think alouds suggested that the readers often felt frustrated by the writers' failure to explain why they were doing what they were doing. Also the readers were often critical of the writer's craft, including writers' choice of words, clarity, and accuracy. There was a sense in which the readers' think alouds assumed a reflexive character as if the readers were rewriting the texts. If one perceived the readers as craftpersons, unwilling to blame their tools for an ineffective product, then one might view the readers as unwilling to let the text provided stand in the way of their successful achievement of their goals or pursuit of understanding. (p. 150)

These data and other descriptions of the reading act (e.g., Bruce, 1981; Collins, Brown, & Larkin, 1970; Rosenblatt, 1976, 1980; Tompkins, 1980) are consistent with the view that texts are written and read in a tug of war between authors and readers. These think-alouds highlight the kinds of internal struggles that we all face (whether consciously or unconsciously) as we compose the meaning of a text in front of us.

Few would disagree that writers compose meaning. In this paper we argue that readers also compose meaning (that there is no meaning on the page until a reader decides there is). We will develop this position by describing some aspects of the composing process held in parallel by reading and writing. In particular, we will address the essential characteristics of effective composing: planning, drafting, aligning, revising and monitoring.

Planning

As a writer initially plans her writing, so a reader plans his reading. Planning involves two complementary processes: goal-setting and knowledge mobilization. Taken together, they reflect some commonly accepted behaviors, such as setting purposes, evaluating one's current state of knowledge about a topic, focusing or narrowing topics and goals, and self-questioning.

Flower and Hayes (1981) have suggested that a writer's goals may be

procedural (e.g., how do I approach this topic), substantive (e.g., I want

to say something about how rockets work), or intentional (e.g., I want to

(e.g., I want to get a sense of this topic overall), substantive (e.g., I

convince people of the problem). So may a reader's goals be procedural

need to find out about the relationship between England and France) or

intentional (e.g., I wonder what this author is trying to say) or some

combination of all three. These goals can be embedded in one another or

addressed concurrently; they may be conflicting or complementary. As a

or change. For example, a reader or writer may broaden, fine tune,

interviewed about a project he had completed on American Indians,

my focus on Hopis, but that was not what I was really interested in.

Finally, I decided that what I really wanted to learn about was medicine

men . . . I really found some interesting things to write about." In

they become focused at a level of specificity sufficient to allow the

begin reading a novel to discover the plot yet find ourselves asking

reading or writing to continue. Consider how a novel might be read. We

coming to grips with his goals our writer suggested both procedural and

substantive goals. Note also that he refined his goals prior to drafting.

In preparation for reading or writing a draft, goals usually change; mostly

reader reads (just as when a writer writes) goals may emerge, be discovered

redefine, delete or replace goals. A recent fourth grade writer, whom we

illustrates these notions well: As he stated his changing goals, ". . . I

began with the topic of Indians but that was too broad, I decided to narrow

specific questions about events and attending to the author's craft . . .

how she uses the language to create certain effects.

The goals that readers or writers set have a symbiotic relationship

The goals that readers or writers set have a symbiotic relationship with the knowledge they mobilize, and together they influence what is produced or understood in a text (Anderson, Reynolds, Schallert, & Goetz, 1977; Anderson, Pichert, & Shirey, 1979; Hayes & Tierney, 1981; Tierney & Mosenthal, 1981). A writer plans what she wants to say with the knowledge resources at her disposal. Our fourth grade writer changed his goals as a function of the specificity of the knowledge domain to which he successively switched. Likewise readers, depending on their level of topic knowledge and what they want to learn from their reading, vary the goals they initiate and pursue. As an example of this symbiosis in a reader, consider the following statement from a reader of Psychology Today.

I picked up an issue of Psychology Today. One particular article dealing with women in movies caught my attention. I guess it was the photos of Streep, Fonda, Lange, that interested me. As I had seen most of their recent movies I felt as if I knew something about the topic. As I started reading, the author had me recalling my reactions to these movies (Streep in Sophie's Choice, Lange in Tootsie, Fonda in Julia). At first I intended to glance at the article. But as I read on, recalling various scenes, I became more and more interested in the author's perspective. Now that my reactions were nicely mobilized, this author (definitely a feminist) was able to convince me of her case for stereotyping. I had not realized the extent to which women are either portrayed as the victim, cast with men or not developed at all as a character in their own right. This author carried me back through these movies and revealed things I had not realized. It was as if I had my own purposes in mind but I saw things through her eyes.

What is interesting in this example is how the reader's knowledge about films and feminism was mobilized at the same time as his purposes became gradually welded to those of the author's. The reader went <u>from</u> almost free association, <u>to</u> reflection, <u>to</u> directed study of what he knew. It is this directed study of what one knows that is so important in knowledge

mobilization. A writer does not just throw out ideas randomly; she carefully plans the placement of ideas in text so that each idea acquires just the right degree of emphasis in text. A successful reader uses his knowledge just as carefully; at just the right moment he accesses just the right knowledge structures necessary to interpret the text at hand in a way consistent with his goals. Note also how the goals a reader sets can determine the knowledge he calls up: at the same time, that knowledge, especially as it is modified in conjunction with the reader's engagement of the text, causes him to alter his goals. Initially, a reader might "brainstorm" his store of knowledge and maybe organize some of it (e.g., clustering ideas using general questions such as who, what, when, where or why or developing outlines). Some readers might make notes; others might merely think about what they know, how this information clusters and what they want to pursue. Or just as a writer sometimes uses a first draft to explore what she knows and what she wants to say, so a reader might scan the text as a way of fine tuning the range of knowledge and goals to engage, creating a kind of a "draft" reading of the text. It is to this topic of drafting that we now turn your attention.

Drafting

We define drafting as the refinement of meaning which occurs as readers and writers deal directly with the print on the page. All of us who have had to write something (be it an article, a novel, a memo, a letter, or a theme), know just how difficult getting started can be. Many of us feel that if we could only get a draft on paper, we could rework and revise our way to completion. We want to argue that getting started is

just as important a step in reading. What every reader needs, like every writer, is a first draft. And the first step in producing that draft is finding the right "lead." Murray (1982) describes the importance of finding the lead:

The lead is the beginning of the beginning, those few lines the reader may glance at in deciding to read or pass on. These few words--fifty, forty, thirty, twenty, ten--establish the tone, the point of view, the order, the dimensions of the article. In a sense, the entire article is coiled in the first few words waiting to be released.

An article, perhaps even a book, can only say one thing and when the lead is found, the writer knows what is included in the article and what is left out, what must be left out. As one word is chosen for the lead another rejected, as a comma is put in and another taken away, the lead begins to feel right and the pressure builds up until it is almost impossible not to write. (p. 99)

From a reader's perspective, the key points to note from Murray's description are these: (1) "the entire article is coiled in these first few words waiting to be released," and (2) "the lead begins to feel right . . . " The reader, as he reads, has that same feeling as he begins to draft his understanding of a text. The whole point of hypothesis testing models of reading like those of Goodman (1967) and Smith (1971) is that the current hypothesis one holds about what a text means creates strong expectations about what succeeding text ought to address. So strong are these hypotheses, these "coilings," these drafts of meaning a reader creates that incoming text failing to cohere with them may be ignored or rejected.

Follow us as we describe a hypothetical reader and writer beginning their initial drafts.

A reader opens his or her textbook, magazine or novel; a writer reaches for his pen. The reader scans the pages for a place to begin; the

writer holds the pen poised. The reader looks over the first few lines of the article or story in search of a sense of what the general scenario is. (This occurs whether the reader is reading a murder mystery, a newspaper account of unemployment, or magazine article on underwater life.) Our writer searches for the lead statement or introduction to her text. For the reader knowing the scenario may involve knowing that the story is about women engaged in career advancement from a feminist perspective, knowing the murder mystery involves the death of a wealthy husband vacationing abroad. For the writer, establishing the scenario involves prescribing those few ideas which introduce or define the topic. Once established the reader proceeds through the text refining and building upon his sense of what is going on; the writer does likewise. Once the writer has found the "right" lead, she proceeds to develop the plot, expositions or descriptions. As the need to change scenarios occurs so the process is repeated. From a schema-theoretic perspective, coming to grips with a lead statement or, if you are reader, gleaning an initial scenario, can be viewed as schema selection (which is somewhat equivalent to choosing a script for a play); filling in the slots or refining the scenario is equivalent to schema instantiation.

As our descriptions of a hypothetical reader suggests, what drives reading and writing is this desire to make sense of what is happening—to make things cohere. A writer achieves that fit by deciding what information to include and what to withhold. The reader accomplishes that fit by filling in gaps (it must be early in the morning) or making uncued connections (he must have become angry because they lost the game). All

readers, like all writers, ought to strive for this fit between the whole and the parts and among the parts. Unfortunately, some readers and writers are satisfied with a piecemeal experience (dealing with each part separately), or, alternatively, a sense of the whole without a sense of how the parts relate to it. Other readers and writers become "bogged down" in their desire to achieve a perfect text or "fit" on the first draft. For language educators our task is to help readers and writers to achieve the best fit among the whole and the parts. It is with this concern in mind that we now consider the role of alignment and then revision.

Aligning

In conjunction with the planning and drafting initiated, we believe that the alignment a reader or writer adopts can have an overriding influence on a composer's ability to achieve coherence. We see alignment as having two facets: stances a reader or writers assume in collaboration with their author or audience; and roles within which the reader or writer immerse themselves as they proceed with the topic. In other words, as readers and writers approach a text they vary the nature of their stance or collaboration with their author (if they are a reader) or audience (if they are a writer) and, in conjunction with this collaboration, immerse themselves in a variety of roles. A writer's stance toward her readers might be intimately challenging or quite neutral. And, within the contexts of these collaborations she might share what she wants to say through characters or as an observer of events. Likewise, a reader can adopt a stance toward the writer which is sympathetic, critical or passive. And.

within the context of these collaborations, he can immerse himself in the text as an observer or eye witness, participant or character.

As we have suggested alignment results in certain benefits. Indeed, direct and indirect support for the facilitative benefits of adopting alignments comes from research on a variety of fronts. For example, schema theoretic studies involving an analysis of the influence of a reader's perspective have shown that if readers are given different alignments prior to or after reading a selection, they will vary in what and how much they will recall (Pichert, 1979; Spiro, 1977). For example, readers told to read a description of a house from the perspective of a homebuyer or burglar tend to recall more information and are more apt to include in their recalls information consistent with their perspective. Furthermore when asked to consider an alternative perspective these same readers were able to generate information which they previously had not retrieved and which was important to the new perspective. Researchers interested in the effects of imaging have examined the effects of visualizing -- a form of alignment which we would argue is equivalent to eye witnessing. Across a number of studies it has been shown that readers who are encouraged to visualize usually perform better on comprehension tasks (e.g., Sodoski, in press). The work on children's development of the ability to recognize point of view (Hay & Brewer, 1982; Applebee, 1978) suggests that facility with alignment develops with comprehension maturity. From our own interviews with young readers and writers we have found that the identification with characters and immersion in a story reported by our interviewees accounts for much of the vibrancy, sense of control and fulfillment experienced during reading and writing. Likewise, some of the

research analyzing proficient writing suggests that proficient writers are those writers who, when they read over what they have written, comment on the extent to which their story and characters are engaging (Birnbaum, 1982). A number of studies in both psychotherapy and creativity provide support for the importance of alignment. For purposes of generating solutions to problems, psychotherapists have found it useful to encourage individuals to exchange roles (e.g., mother with daughter). In an attempt to generate discoveries, researchers have had experts identify with the experiences of inanimate objects (e.g., paint on metal) as a means of considering previously inaccessible solutions (e.g., a paint which does not peel).

Based upon these findings and our own observations, we hypothesize that adopting an alignment is akin to achieving a foothold from which meaning can be more readily negotiated. Just as a filmmaker can adopt and vary the angle from which a scene is depicted in order to maximize the richness of a filmgoer's experience, so too can a reader and writer adopt and vary the angle from which language meanings are negotiated. This suggests, for language educators, support for those questions or activities which help readers or writers take a stance on a topic and immerse themselves in the ideas or story. This might entail having students read and write with a definite point of view or attitude. It might suggest having students project themselves into a scene as a character, eye witness or object (imagine you are Churchill, a reporter, the sea). This might occur at the hands of questioning, dramatization or simply role playing.

In line with our hypothesis, we believe that in these contexts students almost spontaneously acquire a sense of the whole as well as the parts.

To illustrate how the notion of alignment might manifest itself for different readers, consider the following statement offered by a professor describing the stances he takes while reading an academic paper:

When I read something for the first time, I read it argumentatively. I also find later that I made marginal notations that were quite nasty like. "You're crazy!" or "Why do you want to say that?" Sometimes they are not really fair and that's why I really think to read philosophy you have to read it twice . . . The second time you read it over you should read it as sympathetic as possible. This time you read it trying to defend the person against the very criticisms that you made the first time through. You read every sentence and if there is an issue that bothers you, you say to yourself, "This guy who wrote this is really very smart. It sounds like what he is saving is wrong: I must be misunderstanding him. What could be really want to be saying?" (Freeman, 1981, p. 11)

Also, consider Eleanor Gibson's description of how she approaches the work of Jane Austen:

Her novels are not for airport reading. They are for reading over and over, and savoring every phrase, memorizing the best of them, and getting an even deeper understanding of Jane's "sense of human comedy" . . . As I read the book for perhaps the twenty-fifth time, I consider what point she is trying to make in the similarities and differences between the characters . . . I want to discover for myself what this sensitive and perceptive individual is trying to tell me. Sometimes I only want to sink back and enjoy it and laugh myself. (Gibson & Levin, 1975, pp. 458-460)

Our professor adjusted his stance from critic to sympathetic coauthor across different readings. Our reader of Austen was, at times, highly active and sympathetic collaborator and, at other times, more neutral and passive.

Obviously the text itself prompts certain alignments. For example, consider how an author's choice of words, arguments or selection of genre may invite a reader to assume different stances and, in the context of

these collaborations, different roles. The opening paragraph of Wolfe's Electric Kool-Aid Acid Test (1977) illustrates how the use of first person along with the descriptive power of words (e.g., cramped . . . metal bottom . . . rising . . . rolling . . . bouncing, etc.) compels the reader to engage in a sympathetic collaboration with an author and be immersed as an active participant in a truck ride across the hills of San Francisco.

That's good thinking there, Cool Breeze. Cool Breeze is a kid with 3 or 4 days' beard sitting next to me on the cramped metal bottom of the open back part of the pickup truck. Bouncing along. Dipping and rising and rolling on these rotten springs like a boat. Out the back of the truck the city of San Francisco is bouncing down the hill, all those endless staggers of bay windows, slums with a view, bouncing and streaming down the hill. One after another, electric signs with mean martini glasses lit up on them, the San Francisco symbol of "bar"-thousands of neon-magenta martini glasses bouncing and streaming down the hill, and beneath them thousands of people wheeling around to look at this freaking crazed truck we're in, their white faces erupting from their lapels like marshmallows--streaming and bouncing down the hill--and God knows they've got plenty to look at. (p. 1)

Also, consider the differences in collaboration and role taking the following text segments invite. While both texts deal with the same information, in one text the information is presented through a conversation between two children, and in the other text, the information is presented in a more "straightforward" expository style.

FLY

Lisa and Mike were bored. It was Saturday and they did not know what to do until Lisa had an idea.

"I know a game we can play that they play in some countries . . .

FLY

All over the world children like to play different games. In some countries, children enjoy playing a game called "Fly."

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We have found that readers of the first text usually assume a sympathetic collaboration with the writer and identify with the characters. They view the game through the eyes of the children and remain rather neutral with respect to the author. Our readers of the second text tend to have difficulty understanding the game at the same time as they are critical of the author. They adopt a role more akin to an observer who, lacking a specific angle, catches glimpses of the game without acquiring an overall understanding. Some of us have experienced a similar phenomenon as viewers of an overseas telecast of an unfamiliar sport (e.g., the game of cricket on British television). The camera angles provided by the British sportscasters are disorienting for the naive viewer.

Obviously a number of factors may influence the nature of a reader's alignment and the extent to which his resulting interpretation is viable. A reader, as our last example illustrated, might adopt an alignment which interferes with how well he will be able to negotiate an understanding. Sometimes a reader might adopt an alignment which overindulges certain biases, predispositions and personal experiences. Doris Lessing (1973) described this phenomenon in a discussion of readers' responses to her The Golden Notebook:

Ten years after I wrote [it]. I can get, in one week, three letters about it . . . One letter is entirely about the sex war, about man's inhumanity to woman, and woman's inhumanity to man, and the writer has produced pages and pages all about nothing else, for she-but not always a she--can't see anything else in the book.

The second is about politics, probably from an old Red like myself, and he or she writes many pages about politics, and never mentions any other theme.

These two letters used, when the boook was as it were young, to be the most common.

The third letter, once rare but now catching up on the others, is written by a man or a woman who can see nothing in it but the theme of mental illness.

But it is the same book.

And naturally these incidents bring up again questions of what people see when they read a book, and why one person sees one pattern and nothing at all of another pattern, and how odd it is to have, as author, such a clear picture of a book, that is seen so very differently by its readers. (p. xi)

Such occurrences should not be regarded as novel. It is this phenomena of reader-author engagement and idiosyncratic response which has been at the center of a debate among literary theorists, some of whom (e.g., Jakobson & Levi-Strauss, 1962) would suggest that a "true" reading experience has been instantiated only when readers assume an alignment which involves close collaboration with authors. Others would argue that readers can assume a variety of alignments, whether these alignments are constrained by the author (Iser, 1974) or initiated freely by the reader (Fish, 1970). They would rarely go so far as to suggest the destruction of the text, but instead as Tompkins (1980) suggested they might begin to view reading and writing as joining hands, changing places "and finally becoming distinguishable only as two names for the same activity" (p. ii). We do not wish to debate the distinctions represented by these and other theorists, but to suggest that there appears to be at least some consensus that effective reading involves a form of alignment which emerges in conjunction with a working relationship between readers and writers. In our opinion, this does not necessitate bridling readers and writers to one another. Indeed, we would hypothesize that new insights are more likely discovered and appreciations derived when readers and writers try out different alignments as they read and write their texts. This suggests

spending time rethinking, reexamining, reviewing and rereading. For this type of experience does not occur on a single reading; rather it emerges only after several rereadings, reexaminations and drafts. It is to this notion of reexamination and revision to which we now turn.

Revising

While it is common to think of a writer as a reviser it is <u>not</u> common to think of a reader as someone who revises unless perhaps he has a job involving some editorial functions. We believe that this is unfortunate. We would like to suggest that revising should be considered as integral to reading as it is to writing. If readers are to develop some control over and a sense of discovery with the models of meaning they build, they must approach text with the same deliberation, time and reflection that a writer employs as she revises a text. They must examine their developing interpretations and view the models they build as draft-like in quality—subject to revision. We would like to see students engage in behaviors such as rereading (especially with different alignments), annotating the text on the page with reactions, and questioning whether the model they have built is what they really want. With this in mind let us turn our attention to revising in writing.

We have emphasized that writing is not merely taking ideas from one's head and placing them onto the page. A writer must choose words which best represent these ideas; that is, she must choose words which have the desired impact. Sometimes this demands knowing what she wants to say and how to say it. At other times, it warrants examining what is written or read to discover and clarify one's idea. Thus a writer will repeatedly

reread, reexamine, delete, shape, and correct what she is writing. She will consider whether and how her ideas fit together, how well her words represent the ideas to be shared and how her text can be fine tuned. For some writers this development and redevelopment will appear to be happening effortlessly. For others, revision demands hard labor and sometimes several painful drafts. Some rework the drafts in their heads before they rewrite: others slowly rework pages as they go. From analyses of the revision strategies of experienced writers, it appears that the driving force behind revision is a sense of emphasis and proportion. As Sommers (1980) suggested, one of the questions most experienced writers ask themselves is "what does my essay as a whole need for form, balance, rhythm, and communication?" (p. 386). In trying to answer this question, writers proceed through revision cycles with sometimes overlapping and sometimes novel concerns. Initial revision cycles might be directed predominately at topical development; later cycles might be directed at stylistic concerns.

For most readers, revision is an unheard of experience. Observations of secondary students reveal that most readers view reading competency as the ability to read rapidly a single text once with maximum recall (Schallert & Tierney, 1982). It seems that students rarely pause to reflect on their ideas or to judge the quality of their developing interpretations. Nor do they often reread a text either from the same or a different perspective. In fact, to suggest that a reader should approach text as a writer who crafts an understanding across several drafts—who pauses, rethinks, and revises—is almost contrary to some well—established

goals readers proclaim for themselves (i.e., that efficient reading is equivalent to maximum recall based upon a single fast reading).

Suppose we could convince students that they ought to revise their readings of a text; would they be able to do it? We should not assume that merely allowing time for pausing, reflecting and reexamining will guarantee that students will revise their readings. Students need to be given support and feedback at so doing. Students need to be aware of strategies they can pursue to accomplish revisions, to get things restarted when they stall, and to compare one draft or reading with another. The pursuit of a second draft of a reading should have a purpose. Sometimes this purpose can emerge from conferencing or discussing a text with the teacher and peers; sometimes it may come from within; sometimes it will not occur unless the student has a reason or functional context for revision as well as help from a thoughtful teacher.

Monitoring

Hand in hand with planning, aligning, drafting and revising, readers and writers must be able to distance themselves from the texts they have created to evaluate what they have developed. We call this executive function monitoring. Monitoring usually occurs tacitly, but it can be under conscious control. The monitor in us keeps track of and control over our other functions. Our monitor decides whether we have planned, aligned, drafted and/or revised properly. It decides when one activity should dominate over the others. Our monitor tells us when we have done a good job and when we have not. It tells us when to go back to the drawing board and when we can relax.

The complexity of the type of juggling which the monitor is capable of has been captured aptly in an analogy of a switchboard operator, used by Flower and Hayes (1980) to describe how writers juggle constraints:

She has two important calls on hold. (Don't forget that idea.)

Four lights just started flashing. (They demand immediate attention or they'll be lost.)

A party of five wants to be hooked up together. (They need to be connected somehow.)

A party of two thinks they've been incorrectly connected. (Where do they go?)

And throughout this complicated process of remembering, retrieving, and connecting, the operator's voice must project calmness, confidence, and complete control. (p. 33)

The monitor has one final task-to engage in a dialogue with the inner reader.

When writers and readers compose text they negotiate its meaning with what Murray (1982) calls the other self--that inner reader (the author's first reader) who continually reacts to what the writer has written, is writing and will write or what the reader has read, is reading and will read. It is this other self which is the reader's or writer's counselor, and judge and prompter. This other self oversees what the reader and writer is trying to do, defines the nature of collaboration between reader and author and decides how well the reader as writer or writer as reader is achieving his or her goals.

A Summary and Discussion

To reiterate, we view both reading and writing as acts of composing.

We see these acts of composing as involving continuous, recurring and
recursive transactions among readers and writers, their respective inner

Insert Figure 1 about here.

Such an account of reading distinguishes itself from previous descriptions of reading and reading-writing relationships in several notable ways:

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- (1) Most accounts of reading versus writing (as well as accounts of how readers develop a model of meaning) tend to emphasize reading as a receptive rather than productive activity. Some, in fact, regard reading as the mirror image of writing.
- (2) Most language accounts suggest that reading and writing are interrelated. They do not address the suggestion that reading and writing are multi-dimensional, multi-modal processes--both acts of composing.
- (3) The phenomenon of alignment as integral to composing has rarely been explored.
- (4) Most descriptions of how readers build models of meaning fail to consider how the processes of planning, drafting, aligning and revising are manifested.
- (5) Previous interactional and transactional accounts of reading (Rosenblatt, 1978; Rumelhart, 1980) give little consideration to the transaction which occurs among the inner selves of the reader and writer.

What our account fails to do is thoroughly differentiate how these composing behaviors manifest themselves in the various contexts of reading and writing. Nor does it address the pattern of interactions among these behaviors across moments during any reading and writing experience. For example, we give the impression of sequential stages even though we believe in simultaneous processes. We hope to clarify and extend these notions in subsequent writings.

References

- Anderson, R. C., Pichert, J. W., & Shirey, L. L. Effects of the reader's schema at different points in time (Tech. Rep. No. 119). Urbana:

 University of Illinois, Center for the Study of Reading, April 1979.

 (ERIC Document Reproduction Service No. ED 169 523)
- Anderson, R. C., Reynolds, R. E., Schallert, D. L., & Goetz, E. T.

 Frameworks for comprehending discourse. American Educational Research

 Journal. 1977, 14, 367-382.
- Applebee, A. N. <u>The child's concept of story</u>. Chicago: University of Chicago Press, 1978.
- Birnbaum, J. C. The reading and composing behavior of selected fourth and seventh grade students. Research in the Teaching of English, 1982, 16(3), 241-260.
- Bruce, B. A social interaction model of reading. <u>Discourse processes</u>, 1981, 4, 273-311.
- Collins, A., Brown, J. S., Larkin, K. M. Inference in text understanding.

 In R. J. Spiro, B. C. Bruce, & W. F. Brewer (Eds.), <u>Theoretical issues</u>

 <u>in reading comprehension</u>. Hillsdale, N.J.: Erlbaum, 1980.
- Fish, S. Literature in the reader: Affective stylistics. New Literary History, 1970, 2(1), 123-162.
- Flower, L., & Hayes, J. R. A cognitive process theory of writing. College

 Composition and Communication, 1981, 32(4), 365-387.
- Freeman, M. How to read a philosophical text. Unpublished paper, Harvard University, 1982.

- Gibson, E. J., & Levin, H. The psychology of reading. Cambridge: M.I.T. Press, 1975.
- Gibson, W. Persona. New York: Random House, 1969.
- Goodman, K. S. Reading: A psycholinguistic guessing game. <u>Journal of the Reading Specialist</u>, 1967, 6, 126-135.
- Hay, A., & Brewer, W. F. Children's understanding of the narrator's point

 of view in prose. Urbana: University of Illinois, Center for the

 Study of Reading, 1982.
- Hayes, D., & Tierney, R. Developing readers' knowledge through analogy.

 Reading Research Quarterly, 1982, 17, 256-280.
- Iser, W. The implied reader: Patterns in communication in prose fiction

 from Bunyan to Beckett. Baltimore: John Hopkins University Press,

 1974.
- Jakobson, R., & Levi-Strauss, C. Les chats de Charles Baudelave. L'Homme, 1962, 2, 5-21.
- Lessing, D. <u>Introduction to The Golden Notebook</u>. New York: Bantam Books, 1973.
- Murray, D. <u>Learning by teaching</u>. Montclair, N.J.: Boynton/Cook Publishers, Inc., 1982.
- Murray, D. Teaching the other self: The writer's first reader. College

 Composition and Communication, 1982, 33, 140-147.
- Pichert, J. W. Sensitivity to what is important in prose (Tech. Rep. No. 149). Urbana: University of Illinois, Center for the Study of Reading, November 1979. (ERIC Document Reproduction Service No. ED 179 946)

- Rosenblatt, L. M. <u>Literature as exploration</u>, 3rd edition. New York:

 Noble & Noble, 1976 (originally published 1939).
- Rosenblatt, L. The reader, the text, the poem: The transactional theory

 of the literary work. Carbondale: Southern Illinois University

 Press, 1978.
- Rumelhart, D. Schemata: The building blocks of cognition. In R. J.

 Spiro, B. C. Bruce, & W. Brewer (Eds.), Theoretical issues in reading

 comprehension. Hillsdale, N.J.: Erlbaum, 1980.
- Sadoski, M. An exploratory study of the relationships between reported imagery and the comprehension and recall of a story. Reading Research Quarterly, in press.
- Schallert, D., & Tierney, R. J. <u>Learning from expository text:</u> The <u>interaction of text structure with reader characteristics</u>. Final report. National Institute of Education, 1982.
- Smith, F. Understanding reading. New York: Holt, Rinehart & Winston, 1971.
- Sommers, N. I. Revision strategies of student writers and experienced adult writers. College Composition and Communication, 1980, 31, 378-388.
- Spiro, R. J. Remembering information from text: The "state of schema" approach. In R. C. Anderson, R. J. Spiro, & W. E. Montague (Eds.),

 Schooling and the acquisition of knowledge. Hillsdale, N.J.:
 Erlbaum, 1977.

- Tierney, R. J., LaZansky, J., Raphael, T., & Cohen, P. Author's intentions and reader's interpretation. In R. J. Tierney, P. Anders, J. Mitchell (Eds.), <u>Understanding readers' understanding</u>. Hillsdale, N.J.: Erlbaum, in press.
- Tierney, R. J. Writer-reader transactions: Defining the dimensions of negotiation. In P. Stock (Ed.), Forum: Essays on theory and practice

 in the teaching of writing. Montclair, N.J.: Boynton/Cook, 1983.
- Tierney, R. J., & Mosenthal, J. The cohesion concept's relationship to the

 coherence of text (Tech. Rep. No. 221). Urbana: University of

 Illinois, Center for the Study of Reading, October 1981. (ERIC

 Document Reproduction Service No. ED 212 991)
- Tompkins, J. P. (Ed.), <u>Reader-response criticism</u>. Baltimore: John Hopkins University Press, 1980.
- Wolfe, T. Electric Kool-Aid Acid Test. New York: Bantam, 1977.

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Learning to Read Like a Writer by P. David Pearson & Robert J. Tierney and Writer-reader transactions: Defining the dimensions of negotiation by Robert J. Tierney. Special thanks go to Theresa Rogers and others, including A. Crismore, L. Fielding, J. Hansen, and J. Harste for their reactions to and help with the paper. Appeared in Language Arts, 1983, 60(5), 568-580.

It is not within the scope of the present paper to characterize the various mechanisms by which writers engage readers we would encourage our readers to examine different texts for themselves and some of the analytic schemes generated by Bruce (1981) and Gibson (1975) among others.

Figure Caption

Figure 1. Some components of the composing model of reading.

