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OBSTACLES AND OPPORTUNITIES: SENTENCE COMBINING IN ADVANCED ESL

At many colleges, advanced English as a Second Language students enroll in regular basic writing courses or visit the Writing Center, particularly at small schools like Colby College that do not have an ESL program or faculty trained in ESL. Until very recently, texts and materials appropriate for the particular needs of this group of students have been scarce, so six years ago I began using sentence combining in the course of a somewhat random and sometimes desperate search for useful materials. To my surprise, it worked. I was surprised at the effectiveness of this technique because I have always been convinced that no one learns to write by doing exercises on manufactured sentences. Yet the advanced ESL students in my classes became engaged with the sentence combining, they testified that it was helpful, and their writing improved. Although I cannot say that their writing improved directly and solely because of sentence combining, the exercises may have been of indirect benefit by acting as catalysts in the language acquisition process. Moreover, the most beneficial effects of sentence combining may occur in advanced ESL students' attitude toward acquiring English.

The international students at Colby are a small group, rarely more than fifteen arriving each year, of whom only a third usually elect to take advantage of the extra help in writing offered by the Writing Center. In some semesters their language abilities are similar enough to form a class in which the interaction among students stimulates more rapid progress than a tutorial achieves. Sometimes, however, the students' needs are so different that individual tutorials are necessary. The Colby inter-

© Journal of Basic Writing, Vol. 6, No. 2, 1987

DOI: <u>10.37514/JBW-J.1987.6.2.07</u> 60

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national students are a very cosmopolitan group in two senses. There homes range from Iceland to Ghana to China to Iran, and most of them come from urban, wealthy, educated families. Landing in Waterville, a small, rather uncosmopolitan city in central Maine, causes not only a language shock but an intense culture shock as well. Since the group of second language students is so small, no special academic program exists for these students beyond an international student advisor and the services of the Writing Center.

Most of Colby's international students have studied English for six or eight years and have scored at least 600 on the Test of English as a Foreign Language (TOEFL) exams, the exams most colleges use to evaluate international applicants. They are clearly advanced students of the language. Although they are often shy in conversation when they first arrive, they are usually adept in speech within three or four months. They are frankly insulted by the suggestion that they take any "remedial" course. They are, after all, skilled in reading and writing their native languages. Yet many of them flounder in the required Freshman Composition course. Their previous study of English has almost without exception concentrated on grammar and translation, with some conversation. Rarely have they composed in English at all. It is with this group of advanced ESL students that sentence combining has proved beneficial.

When I decided to try sentence combining with these students, the first text I used was Strong's Sentence Combining: a Composing Book. In the open-ended combinations of the first part of Strong's book, the students tended to use only the structures they were comfortable with, those which they had already acquired. Thus, the open exercises did not seem to advance students' knowledge but did illustrate the level of language which the students had achieved. The second section of this book, which involves directed embedding in multilevel sentences, did help students use more complex syntax. Self-consciously at first, they began to use structures like participles and absolutes in their writing. Familiarity with the more complex syntax also helped them with their reading. One student announced: "I'm finding it easier to read my economics book after doing these exercises." Sternglass suggests that sentence combining helps reading by giving students practice in "chunking," building more meaning into phrases and clauses that are short enough to be held in short-term memory while the reader "build[s] the conceptual bridges among them that are necessary for reading comprehension" (326). To push students into manipulating syntax which they had not yet acquired. I looked for a book that would offer more direction without totally eliminating the open-ended combinations, which have the advantages of illustrating rhetorical options and of encouraging play with language. For the past three years I have been using The Writer's Options: Combining to Composing by Daiker, Kerek, and Morenberg. With more advanced students I have also recently been using sentence combining exercises of the restricted modeling form, such as those found in Four Worlds of Writing by Lauer et al. because they offer more variety and complexity than those in other texts.

While working on the sentence combining exercises in these texts, students also write frequent original compositions. On an individual basis they may do extra work on particular structural problems; articles and sequence of tenses are the most common. The most advanced students also work explicitly on rhetoric in Approaches to Academic Reading and Writing by Arnaudet and Barrett. I do not use a rhetoric in writing courses with native-speaking students, but the prescribed rhetoric of the American academic community is different from that of the universities of many of the ESL students. American academic rhetoric favors a relentlessly linear argument using certain modes of logic, as a glance at the table of contents in any rhetoric text will illustrate. Kaplan has pointed out that in other cultures different modes of arguments are acceptable. More recently, Purves has continued the argument for cultural as well as disciplinary discourse communities. ESL students gain confidence by working explicitly in a prescribed rhetorical form which may be further from their usual modes of thinking and writing than it is for native speakers of English and products of American school systems.

Whenever ESL students at any level do sentence combining, they read their combinations aloud, a step I am convinced is essential to help them internalize rhythms of the deeply embedded syntax. The syntax needs to become part of the inner voice that mediates in writing. If I have a class rather than tutorials, we can compare combinations in discussions that lead to understanding of rhetorical purpose and effect. Students choose different combinations for a reason, and a change in syntax is a change in meaning. Using discussions to make these differences explicit helps students to form a connection between exercises and meaning, which, as I will argue below, is the bridge from learning language to acquisition of language.

A typical example of growth in both syntactic fluency and overall quality of writing comes from a French student, an economics major who studied at Colby for his junior year. When I first met Henri, I asked him to write spontaneously, in class for twenty minutes, about his first hours on campus. He wrote, in part:

When I arrived here, I had been surprized by the campus. Before to come I had seen pictures. But last tuesday was a sunny day and it gave to the place wonderful colors.

I met since the first minute my roommate. He is a senior. I helpt him in his job. (R.A.). First thing I did after having cleaned my things up, was to walk around the buildings. I went to the fieldhouse. I hoped to meet a coach. One of the track field team. In the secretary office I met a physical education professor. He took my name, address and specialty and told me that I had to keep in contact with the department. . . .

Three months later, after some limited sentence combining mainly on relative clauses and nominals, some work in rhetorical patterns of English academic prose, and considerable writing and revising of papers on his own topics, I asked Henri to write about a poster of a meditative chimpanzee that hangs on the wall of the Writing Center. Again, this excerpt was written in class, without preparation on the topic:

Sometimes the Nature gives us the impression of sadness; on the poster of the chimpanzee, different meanings of body language translate this feeling of sadness.

First the facial expression of the little black monkey shows us a state of mind when the animal does not understand what is going on around it. An opened mouth can also express the surprise, but the sadness of its eyes confirmes the impression of "non-hope" attitude. . . .

The hands and feet of this body give us the impression of a being frustrated, the union of all the members in a little square in the front could be interpreted as a body tied by a lack of something we do not see on the picture. . . .

Not only are the sentences more deeply embedded than those in his first writing, but the paper is focused, has a sense of purpose, and a more confident voice. "First the facial expression of the little black monkey shows us a state of mind when the animal does not understand what is going on around it" is a sentence that I suspect could not have been written in September. When I pointed out these passages to Henri to illustrate his improvement, he immediately brightened and said, "Well, it is because of all those little sentences you had me put together!"

Although many advanced ESL students have made progress similar to Henri's, I cannot prove that these gains in syntactic fluency are due to sentence combining alone. These students are simultaneously immersed in many other social and academic language situations that accelerate their acquisition of English during their first few months in the United States. However, all of the students in this study have said that sentence combining has helped them to write and read more fluently. Although my conclusions are based on experience with a small sampling of students and much of my evidence is anecdotal, those of us who work closely with students on the very personal business of writing are learning to listen to and value such evidence.

When I decided that the Colby advanced ESL students needed more than just a kindly tutor and I started a discouraging search for materials, I tried sentence combining with considerable misgivings. My first obstacle was my own bias. As Rose points out, sentence combining is not a new method for English teachers. I have always perceived the using of sentence combining as the teaching of grammar rather than the teaching of writing. The exercises are like those in traditional grammar texts which present two short sentences with the direction to combine them using an adverb clause or an appositive or a participle. Unlike traditional exercises, however, sentence-combining exercises do move students away from drill and toward the rhetorical contexts of language because they emphasize combining blocks of ideas rather than segments of syntax. Nevertheless, sentence-combining exercises are couched in manufactured language rather than in the students' own language, and I still believe that manipulating textbook language is an obstacle to the development of writing abilities. Writing is making meaning. Growth in writing and thinking occurs through engagement with one's own meanings. Thus, while sentence combining may help students improve their syntactic fluency, the students still need to do extensive composing and revising.

The second obstacle that discouraged me from using sentence combining is that research has been conflicting and inconclusive. In 1969 Mellon conducted the first major study of the efficacy of sentence combining. Mellon's subjects gained in syntactic fluency but not in overall writing quality. O'Hare in 1973, and later Daiker, Kerek, and Morenberg in 1978, detected growth in both syntax and overall quality, but Ney in 1976 found no gains even in syntactic fluency among the students using sentence combining in his study.

These studies are subject to the limitations of unavoidable variables such as differences in amount of practice, ages of subjects, skills of teachers, and criteria for judging overall writing quality. Hake and Williams, illustrating another variable, found that the effects of sentence combining are markedly different for "competent" writers than for "incompetent" writers. They also challenge the usually accepted value of longer T-units ("T-unit" is a label for an independent clause and all its related constituents) suggesting that "smaller is better" (86). Faigley (293) and Witte (176) further question the value of the T-unit as a measure of writing quality, pointing out that it is task-related. An individual writer will use, for example, different lengths of T-units for descriptive writing than for persuasive writing. At the extremes, cookbooks differ from bureaucratic prose (Faigley 294). Witte questions the stability of the Tunit length for an individual even in similar tasks, especially if the writer is inexperienced (176).

Researchers and teachers hoped that exercises in embedding would speed up the development of syntactic fluency. Hunt's studies indicate, however, that children will acquire the ability to consolidate clauses developmentally without being taught the transformational rules, though not everyone achieves the same level of proficiency, of course. Moreover, as Duckworth points out, studies of cognitive development in areas other than writing suggest that development cannot be speeded up by controlled practice.

Thus, experimental evidence would not convince most writing teachers to place much confidence in sentence combining. The sentencecombining studies I have cited so far were all performed on native speakers, however, and advanced ESL students differ linguistically from native speakers. They are developmentally mature users of their native languages, but immature users of English. They lack both competence and confidence in English, and exercises in syntax seem to be useful for them. They are also old enough, decentered enough, to be able to consciously examine their own linguistic processes. Yet studies of sentence combining with ESL students are not encouraging. A recent study with advanced ESL students, conducted by Perkins and Hill at Southern Illinois University, concludes that "the advanced ESL classroom is no place for [sentence combining]" (13). Not only did the subjects fail to improve substantially their overall writing ability, but their scores on a "Test of Ability to Subordinate," a test which explicitly measures the ability to combine sentences, were no higher than those of the control group. These researchers report that results of the other studies of sentence combining with ESL students are similarly disappointing (5). Even if it is argued that the length of time spent on sentence combining is too short or the test situation too stressful for ESL students, the experimental evidence certainly does not encourage ESL teachers to devote much class time to sentence combining.

A third obstacle to my choosing sentence combining as a method of teaching writing to second-language students is that it contradicts the implications of theories of language acquisition, both first and second language. Language acquisition theorists (Chomsky; R. Brown; Krashen) distinguish between *learned* behavior and *acquired* behavior. Learning is a conscious search for rules and their applications; acquisition occurs subconsciously. Learning, when successful, occurs within a relatively short time; acquisition is developmental and slow. Learning is imposed from outside the person; acquisition is a growth of existing structures within the person in response to the environmental situation. As Krashen has pointed out, language is *learned* when the student consciously learns the rules of syntax and applies them in practice. Language is *acquired* when a student is engaged in making *meaning* out of the language around him or her and arrives at a subconscious understanding of formal grammatical structure in the process (10). The important distinction is that the goal of the learner is syntax while the goal of the acquirer is meaning (21). Those of us who have struggled with a foreign language know that the sense of mastery comes only when we can communicate in that second language without stopping to think of learned rules.

While a first language is acquired developmentally, a second language is usually learned in school. Most foreign language texts present the grammar of the language from the seemingly simple to the seemingly complex, covering only a small part of the language. Class work focuses on error correction and on translation. The student is always looking at the surface of language, thinking of rules and lexical meanings rather than the meaning of the text. Even when adult learners of English as a second language apply themselves to learning the grammatical rules with good will and often with pressing professional motivation, they learn the language, not acquire it, if they are limited to the rule-oriented school environment. They speak hesitantly because they must consciously process their meaning through rules before it reaches utterance. They write awkwardly because they compose in their native languages and then translate.

Teaching language through rule-learning assumes that with knowledge of the rules and effective practice, learning will transform into acquisition. Krashen argues, however, that this transformation does not occur, that true acquisition of a second language will occur only "when the acquirer understands input containing a structure that the acquirer is 'due' to acquire" (84). His concept is similar to Vygotsky's "zone of proximal development" (84-91). Krashen insists that it is crucial that people find *meaning* in the language input in order to acquire it (21), just as they did in their first languages. The role which Krashen sees for grammatical rules is presented in his Monitor Theory. When adult second language users have time to examine their language consciously, as when writing it, they can use known rules for self-correction (89-104). For example, if learners know the rule for forming the past participle, they could recognize that "I have learn the rule" should be corrected with the *-ed*. They would not, however, use the correct form consistently and fluently in speech until it was acquired.

If language acquisition depends upon a meaning-focused encounter with a new language rather than a conscious learning of grammar, and if knowledge of the rules and drill does not "turn into" acquisition, then sentence combining would not seem to be a useful activity for ESL students. While sentence-combining exercises involve using language rather than learning rules, they focus learners more on the making of syntax than on the making of meaning. Thus, sentence combining might improve the use of structures already acquired, but it would not lead directly to the acquisition of new structures.

If sentence combining does not lead to language acquisition, if it is contrary to my pedagogical biases, and if research does not support its effectiveness, then why does it help my advanced ESL students, according to my observations and to their testimony? I believe that the exercises succeed for several reasons and on several levels. Superficially, because they do not limit vocabulary, as many ESL texts do, and because they provide a richer context than the students are able to produce spontaneously, sentencecombining exercises expand the ESL students' vocabularies and give them more meaning to work with. Strong's book, especially, is full of the vernacular ESL students are hearing around them for the first time; and familiarity with colloquial language should increase their ability to find meaning, that essential condition for acquisition, in the English which surrounds them daily. Students try to figure out the meanings of strange words in the exercises for two reasons: first, they cannot combine the sentences without knowing what the words mean; and second, they are interested in the content of the exercises. Although some minimal rules are provided in the patterns, the process of combining the sentences requires students to focus on meaning, especially in the exercises that extend beyond two or three sentences. When we discuss the different combinations generated by students in a particular exercise, I find that ESL students in my classes have already considered differences in meaning that are created by alternate combinations. They can articulate convincingly their reasons for their choices, better perhaps than some native-speaking writers because the advanced ESL students are more conscious of language. Even though they are doing exercises, they are aware that the combinations they make affect meaning.

Proponents of sentence combining have changed their focus over the years from syntax to meaning. In 1969, Mellon insisted that sentence combining was a-rhetorical, that "the sentence-combining practice had nothing to do with the tgaching of writing" (79), and that it was no more reasonable to expect that proficiency in sentence combining would carry over into writing than that skill in grammar exercises would improve writing. The proceedings of the Second Sentence Combining Conference at Miami University, published in 1985, is entitled Sentence Combining: a Rhetorical Perspective. Rose sees sentence combining as a bridge between grammar and writing (491). Winterowd, who looks at sentence combining in the context of Krashen's theories about language learning and language acquisition, goes further and calls it a bridge between laboratory and workshop and hence between learning and acquisition (246).

When used as a bridge from syntax to meaning, then, sentencecombining exercises provide the opportunity for students to encounter language at the level of meaning, which Krashen insists is necessary for acquisition to occur. ESL texts with artificially controlled vocabulary and controlled compositions limit the students' opportunities to grapple with meaning. I believe, however, that the success of sentence combining occurs also at a deeper level, on the bridge from learning to acquisition. In the process of doing these exercises, students may recapitulate in some rough way the language acquisition process of the native speaker. The exercises present sentences which are at least close to kernel strings and which need complex embedding. The combining involves moving from deep structures through various transformations to different surface structures, which, though much oversimplified, is similar to the way in which we construct our first language. Students in my classes breeze right through the relative clause and participle sections of The Writer's Options (Daiker, et al.), presumably because these are structures they have already acquired. They begin to stumble on prepositional phrases, probably because of the extent to which prepositions are dependent on meaning. For example, "peculiar to the Americans" is very different in both its meanings from "peculiar in the Americans." When the ESL students encounter the absolute, they become visibly uncomfortable; it "sounds funny." The absolute, however, occurs often in academic writing, so students need to understand it and, eventually, use it. After working on structures like the absolute in sentence-combining exercises, students begin to recognize the structures in their reading long before they can use them spontaneously in their writing. Familiarity with new structures thus increases meaningful English language experience for ESL students and facilitates acquisition.

Still, as a bridge from syntax to meaning or as a recapitulation of the language acquisition process, students may acquire English *while* engaged in sentence combining, but I do not think they acquire it directly *because* of sentence combining. Sentence combining seems to act as a catalyst, a stimulus to acquisition but not a part of it. Language acquisition is not entirely cognitive, however, and at another level, sentence combining may have a more direct effect on the language student. Krashen maintains that adults' chief disability in acquiring a new language is not a decrease in Chomsky's "language acquisition device" but an increase in the "affective filter" (45), a rather sterile term for the stress and anxieties experienced in the learning situation and in the new culture, as well as other individual attitudes which may inhibit the acquisition of a new language. Affective pressures on ESL students range from ego strength to culture shock. Brown advances the hypothesis that "an adult who fails to master a second language in a second culture may for a host of reasons have failed to synchronize linguistic and cultural development" (139). In one direction, according to Brown, cultural insecurities inhibit the learner; and in the opposite situation, becoming comfortable in a culture before fully acquiring the language, may fossilize errors. In addition to cultural stress, much is also at stake in the individual egos of advanced ESL students, as it is in all students. Students I teach hate to make errors in their own essays. Often they say, "I knew that." They stiffen up and narrow the scope of their writing, limiting themselves to comfortable, already-acquired syntax, which slows down the acquisition process since they do not use new structures which they hear and read. When doing sentence-combining exercises, they are not so sensitive about the errors they make. Because they are not invested in the meanings of those sentences given to them from outside of themselves, they can manipulate them more freely and make the linguistic advances they are ready for more quickly.

Sentence combining can also relieve anxieties at a deeper level. By taking discrete bits of language, allowing them to break down into flux and even chaos, and finally succeeding in building a new sentence with new meaning—almost an artifact—ESL students experience some control over language at a time when most of their lives may seem out of control in the new social and academic culture. Such control restores a sense of competence, a deep psychological need for all of us (White 303). Thus, in a variety of ways, success at sentence combining may lessen the "affective filter" that Krashen refers to and allow the acquisition process to proceed.

Finally, sentence combining may have an effect on an attitude that is as much cognitive as affective. Advanced ESL students have been successful learners of English at home in their own cultural environments. Even if they prefer to learn English by studying rules, functioning in an English-speaking culture requires them to start acquiring language outside the classroom. They will have to use English spontaneously. The change from thinking about rules to the readiness to acquire English by focusing on meaning does not occur automatically. The students must change their mental and emotional stance entirely. The conscious secondlanguage rules already learned are not sufficient; the subconscious first language does not serve. If advanced ESL students are to acquire enough English to think in it and express themselves in it, they must let go of their focus on the rules. At this point, sentence combining again presents an opportunity that may overcome its obstacles. Although sentence combining is still "learning" behavior involving rules and will not cause language acquisition by itself, it may move ESL students toward the stance necessary for acquisition to occur, across an attitude bridge as well as a bridge from syntax to meaning. Their thinking about language may change from the application of rules to the construction of syntax which will carry their meanings.

Attitudes toward language may change because of the element of "play" in sentence combining. Mellon suggested that sentence combining belonged with the language-games part of an English curriculum: "I continue to see [sentence-combining games] in the upper elementary grades, given alone and apart from any formal grammar study, as a valuable addition to the arsenal of language-developing activities Moffett includes in his language arts program" (80). Moffett, nevertheless, is a vigorous critic of sentence combining. Recently, Weiss has looked at sentence combining as "play," by considering problem-solving "a kind of interiorized play" constructing order out of disequilibrium. Although Weiss does not talk about ESL students, her comment that "delight in connection making neutralizes the stress of composing" (218) accurately reflects the experience of the ESL students I teach.

Strong also brings sentence combining into the realm of play. He uses an analogy to Gallwey's *Inner World of Tennis*. Gallwey maintains that a tennis player must stop thinking about how to hit the ball and concentrate on the flow of movement and sensation of the total game; the successful player ignores the parts and focuses on the whole. Polanyi offers a vivid illustration of this interference: "If a pianist shifts his attention from the piece he is playing to the observation of what he is doing with his fingers while playing it, he gets confused and may have to stop" (56). Elbow is operating on the same theory when he insists that writers must turn off the editor as they compose, that editing and composing are two separate cognitive modes that interfere with each other. Strong believes that sentence combining will develop "automaticity" in syntax so that writers can concentrate on meaning (340-341). Thus, playing the game of sentence combining may help the advanced ESL student to make a similar shift in focus from learning to acquisition.

The "feeling" so often expressed by advanced ESL students that sentence combining helps them is not as fuzzy a response as it may seem at first. Students need to cross the linguistic bridge from syntax to meaning, the educational bridge from learning to acquisition, and the emotional bridge from timid reliance on the security of rule-learning to readiness for the risk of meaning-filled language encounters that will lead to acquisition. If sentence combining can act as the catalyst that starts the students across these bridges, then their "feeling" that sentence combining helps them is valid. Since academic language is a "second language" for basic writers, teachers of BW as well as teachers of ESL might find sentence combining worth considering as part of their writing programs.

- Arnaudet, Martin and Mary Ellen Barrett. Approaches to Academic Reading and Writing. Englewood Cliffs: Prentice, 1984.
- Brown, H. Douglas. *Principles of Language Learning and Teaching*. Englewood Cliffs: Prentice, 1980.

Brown, Roger. A First Language. Cambridge, MA: Harvard UP, 1973.

- Chomsky, Noam. Aspects of the Theory of Syntax. Cambridge, MA: MIT P, 1965.
- Daiker, Donald, Andrew Kerek, and Max Morenberg, eds. Sentence Combining: a Rhetorical Perspective. Carbondale: Southern Illinois P, 1985.
- ———. The Writer's Options: Combining to Composing. 2nd ed. New York: Harper, 1982.
- Duckworth, Éleanor. "Either We're Too Early and They Can't Learn It or We're Too Late and They Know It Already: the Dilemma of 'Applying Piaget." *Harvard Educational Review* 49 (1979): 297-312.
- Elbow, Peter. Writing with Power. New York: Oxford UP, 1981.
- Faigley, Lester. "Names in Search of a Concept: Maturity, Fluency, Complexity, and Growth in Written Syntax." College Composition and Communication 31 (1980): 291-300.
- Freedman, Aviva, Ian Pringle, and Janice Yalden, eds. Learning to Write: First Language/Second Language. London: Longman, 1983.
- Gallwey, W. Timothy. *The Inner World of Tennis*. New York: Bantam, 1979.
- Hake, Rosemary L. and Joseph M. Williams, "Some Cognitive Issues in Sentence Combining: On the Theory that Smaller is Better." Sentence Combining: a Rhetorical Perspective. Ed. Donald Daiker, et al. Carbondale: Southern Illinois P, 1985.
- Hunt, Kellogg. "Early Blooming and Late Blooming Syntactic Structures." Evaluating Writing. Ed. Charles R. Cooper and Lee Odell. Urbana, IL: NCTE, 1977.

Urbana, IL: NCTE, 1977. ———. Grammatical Structures Written at Three Grade Levels. Urbana, IL: NCTE, 1965.

Kaplan, Robert B. "Contrastive Rhetorics: Some Implications for the Writing Process." Learning to Write: First Language/Second Language. Ed. Aviva Freedman, et al. London: Longman, 1983. "Cultural Thought Patterne in Inter Cultural Education"

----. "Cultural Thought Patterns in Inter-Cultural Education." Language Learning 16 (1966): 1-20.

- Krashen, Stephen. Principles and Practice in Second Language Acquisition. Elmsford, NY: Pergamon, 1982.
- Lauer, Janice, Gene Montague, Andrea Lunsford, and Janet Emig. Four Worlds of Writing. New York: Harper, 1981.
- Mellon, John C. Transformational Sentence-Combining. Urbana, IL: NCTE, 1969.
- Moffett, James and Betty Jane Wagner. Student-Centered Language Arts and Reading, K-13. 3rd ed. Boston: Houghton, 1983.
- Moffett, James. Teaching the Universe of Discourse. Boston: Houghton, 1968.
- Ney, James. "The Hazards of the Course: Sentence-Combining in Freshman English." English Record 27 (1976): 70-77.

- O'Hare, Frank. Sentence Combining: Improving Student Writing Without Formal Grammar Instruction. Urbana, IL: NCTE, 1973.
- Perkins, Kyle and Beverly Hill. "Advanced ESL Composition: No Place for Sentence-Combining." Temple University Working Papers in Composition, 1985.

Polanyi, Michael. Personal Knowledge. Chicago: U of Chicago P, 1958.

- Purves, Alan C. "Rhetorical Communities, the International Student, and Basic Writing." Journal of Basic Writing 5 (1986): 38-51.
- Rose, Shirley. "Down from the Haymow: One Hundred Years of Sentence Combining." College English 45 (1983): 483-491.
- Sternglass, Marilyn. "Sentence-Combining and the Reading of Sentences." College Composition and Communication 31 (1980): 325-328.
- Strong, William. "How Sentence Combining Works." Sentence Combining: a Rhetorical Perspective. Ed. Donald Daiker, et al. Carbondale: Southern Illinois P, 1985.

———. Sentence Combining: a Composing Book. New York: Random, 1973.

- Vygotsky, Lev S. *Mind in Society*. 1935. Ed. Michael Cole, et al. Cambridge, MA: Harvard UP, 1978.
- Weiss, Monica, SSJ. "Sentence Combining as Play: Preparing for Insight." Sentence Combining: a Rhetorical Perspective. Ed. Donald Daiker, et al. Carbondale: Southern Illinois P, 1985.
- White, Robert. "Competence and the Psychosexual Stages of Development." The Causes of Behavior: Readings in Child Development and Educational Psychology. Ed. Judy F. Rosenblith and Wesley Allinsmith. Boston: Allyn and Bacon, 1966.
- Winterowd, Ross. "From Classroom Practice into Psycholinguistic Theory." Learning to Write: First Language/Second Language. Ed. Aviva Freedman, et al. London: Longman, 1983.
- Witte, Stephen. "The Reliability of Mean T-Unit Length: Some Questions for Research in Written Composition." *Learning to Write: First Language/Second Language*. Ed. Aviva Freedman, et al. London: Longman, 1983.