Monitoring the Structure of Meaning in Beginners' ESL Prose

Asha Tickoo

Beginners' ESL prose is characteristically both oversegmented and inappropriately segmented with respect to information structure, posing a unique type of challenge to readers attempting to process such texts. This article examines whether this unconventional form of information segmentation results in violation of certain information-packaging constraints that ordinarily ensure that readers can easily identify the macrostructure (van Dijk, 1980; Renkema, 1993) of the text. Comparison of 20 descriptive essays written by ESL beginners with the prose of skilled writers suggests that four constraints on information packaging are needed to facilitate the identification of macrostructure. Evidence is presented of the absence of these constraints in beginners' prose, and it is demonstrated that revising a sample essay to incorporate these constraints results in easier recognition of its macrostructure. These findings suggest that the fragmentation problem in beginners' ESL prose may be overcome if learners are made aware of the notion of macrostructure and taught to conform to the four organizational constraints that ensure its accessibility.

Introduction

Beginners' ESL prose is often difficult to read and comprehend for a variety of reasons. As every ESL/EFL teacher knows, syntactic and lexical errors or awkwardness frequently obscure ESL writers' intended meanings. Less well understood, however, is the role played by another major factor affecting text processibility, namely the idiosyncratic way in which ESL students package or "segment" the individual kernels of information that they are trying to express. Specifically, written texts produced by beginner-level ESL students are characteristically both *oversegmented* and *inappropriately segmented*. As this article explains, the use of unconventional forms of information segmentation may hinder the application of certain information processing constraints that ordinarily assist the reader to identify easily the *macrostructure* (van Dijk, 1980; Renkema, 1993) of the text.

The following passage, written by an ESL student in a beginners' course in writing at a two-year college in the United States, serves to illustrate the notions of macrostructure and information segmentation.

Sample 1: A Helpful Person

Van is my helpful person. He come from Vietnam. He speaks Vietnamese and Chinese. He speaks English very well. He is tall. He has dark eyes. He always respect to people. He lives with his family at 1925 N 18 Street PA 19145. He has two brothers and one sister. His sister is eighteen years old. I met him in school. I know him for six months. He teaches me how to drive. I usually go to shopping with him. Last Saturday, I went to shopping with him. He bought a lot of clothes. He bought a jacket and shirt. He spent two hundred dollars. After shopping, I had dinner with him. I had a nice day with him. He is my best friend. He always teaches me how to play baseball.

This passage presents a good deal of information about the person described, but it fails to grasp the reader's attention or get across what the writer is really trying to say because the informational units are packaged into individual sentences that are strung together in a more or less random sequence. No attempt is made to connect the semantic units, much less to organize them in such a way that supporting ideas are subordinated to a manageable number of main concepts. This simplistic compartmentalization of information into separate units is an example of oversegmentation, whereas the failure to organize concepts in any kind of hierarchical fashion illustrates what could be called inappropriate segmentation. Such textual weaknesses make it difficult for the reader to "tune into" the overall semantic content of the passage, thus hindering text processibility. Putting this another way, the reader is prevented from easily identifying the passage's macrostructure, "the structure of meaning which makes it clear what does and what does not belong to the nucleus of the content" (Renkema, 1993, p. 57). As explained below, skilled writers employ a well-defined set of organizational constraints to assist the reader in perceiving the intended macrostructure. The author of the sample passage fails to make use of these organizational constraints, and the result is a prose passage that is characteristically fragmented, monotonous, and ineffective in conveying the intended meaning.

In this article I describe a set of four constraints on content organization that enhance the effective signaling of macrostructure in texts, and I show that these are typically violated by inexperienced ESL writers. These constraints were induced from an examination of 20 descriptive essays written by college-level ESL students in the 12th week of a one-semester beginners' course in writing. I also demonstrate that the incorporation of these organizational constraints into one of the descriptive essays, randomly selected, facilitates easier access to its macrostructure. Finally, I extrapolate from these findings to suggest some general implications for teaching.

Clarifying the Problem

Text Fragmentation as a Macro-Level Problem

To date there have been two principal types of analysis of text connectedness in L2/FL prose: (a) the analysis of textual cohesion, and (b) the analysis of textual coherence. In the first of these, researchers have gauged the connectedness of L2/FL prose by examining the overt marking (lexical or syntactic) of intersentential and interclausal relationships (Carrell, 1982; Connor, 1984; Evenson, 1985; Fahenstock, 1983; Indrasuta, 1988; Johns, 1980; Lagerqvist, 1980; Lieber, 1980; Lindeberg, 1985; Reid, 1992; Scarcella, 1984; Tommola, 1982; Ventola & Mauranen, 1991). Obviously, the proper use of overt cohesive devices requires knowledge of how to segment the informational whole, for example, how to divide the information into main and supporting ideas, how to assign similar status to parallel ideas. Unfortunately, researchers examining cohesion in L2/FL writing focus merely on identifying missing cohesive markers. They do not address the underlying problem facing inexperienced ESL writers in the first place, namely, how to organize and package textual information to facilitate access to its intended macrostructure.

In the second type of textual analysis, the study of coherence or semantic text-connectedness, the relevance of a phrase, sentence, or larger segment of text to its preceding context is examined (Bardovi-Harlig, 1990; Cerniglia, Medsker, & Connor, 1990; Clyne, 1987; Connor & Johns, 1990; Connor & Farmer, 1985, 1990; Connor & Kaplan, 1987; Connor & Lauer, 1985; Connor & McCagg, 1983; Egginton, 1987; Enkvist, 1978, 1985, 1990; Hinds, 1983; Johns, 1986, 1990; McCagg, 1990; Schneider & Connor, 1991; Wikborg, 1990; Witte, 1983a, 1983b). As the passage in sample 1 illustrates, however, the fragmentation of beginners' ESL writing does not result from a failure to be relevant or coherent. Again, the problem seems to be an inability to organize text in such a way that macrostructure is easily identified.

In recent years a smaller but emerging body of research has focused on differences in the structure of the content of different genres of text to account for weaknesses in student writing and to serve as a criterion for writing assessment (Connor, 1987; Martin & Rothery, 1986; Tirkkonen-Condit, 1985, 1986). Like studies of cohesion and coherence, however, such research endeavors have failed to recognize the problems faced by novice ESL writers in segmenting information appropriately to make macrostructure easily accessible to the reader.

Identifying Macrostructure.

In explaining how readers identify macrostructure in well-constructed prose, Renkema (1993) suggested that they rely on three crucial macrorules, which he calls the Deletion Rule, the Generalization Rule, and the Construction Rule.

The first of these, the Deletion Rule, excludes from the nucleus of content those semantic propositions that are irrelevant (compare 2 & 3) to the interpretation of key propositions (compare 1a) in the discourse (compare 1).

- 1. A cat, carrying a bird of strange, bright plumage in its mouth, jumped in through the open window.
- 1a. A cat jumped in through the open window.
- 2. It had a bird in its mouth.
- 3. The bird had strange bright plumage.

In processing the meaning of sentence 1, the reader does not attribute equal status to all the information encoded within it. The main clause 1a is interpreted as the key proposition, whereas 2 and 3 are "deleted" from consideration as main ideas and relegated to supporting semantic status, as explained in greater detail below.

Next, the Generalization Rule derives a generalization (compare 5) from the details specified in two or more propositions in the discourse (compare 4).

- 4. Some people lay sprawled out on the beach. Others built sandcastles. Still others munched on snacks and watched the gentle rise and fall of the water.
- 5. People enjoyed themselves at the beach.

This rule, then, allows the reader to generalize a set of related ideas into a single superordinate concept, with the initial ideas remaining as individual instances of this main concept.

Finally, the Construction Rule enables the construction of a single proposition (compare 9) from the informational sum of two or more other propositions (compare 6, 7, & 8).

- 6. He walked gingerly to the edge of the pool.
- 7. He raised his arms and leaned over the edge.
- 8. And then in one powerful thrust forward, he leapt into the clear blue water.
- 9. He dived into the pool.

This rule resembles the previous rule insofar as a type of generalization is the result. In this case, however, the generalized interpretation in 9 is derived by combining the sequence of ideas in 6, 7, and 8. The separate actions denoted by these three sentences are not discrete instances of the final generalization; rather, they are fused together by the reader to create a mental construction of the generalization.

These three rules are essential to the identification of textual macrostructure. In processing any text the experienced reader subconsciously rejects subordinate ideas from consideration as key information (the Deletion Rule), generalizes from sets of congruent ideas to create superordinate concepts (the Generalization Rule), and fuses together sequences of connected ideas to construct other superordinate concepts (the Construction Rule). Now it stands to reason that these rules for identifying macrostructure will be difficult to apply if the text is not properly organized. Compare, for example, 1 (repeated below) with 1*. As noted above, the information in 1 is organized in such a way that the syntax signals what is core information and what is not. The subordinate information lies in the embedded clause (not underscored) in 1, indicating that it is deletable in the identification of the macrostructure (stated in 1a, repeated below). This is not the case in 1*. Because the organization in 1* does not help the reader to separate the key information from the noncore information, the Deletion Rule cannot be applied, so the nucleus of the message is hard to perceive.

- 1. A cat, carrying a bird of strange, bright plumage in its mouth, *jumped in through the open window.*
- 1*. A cat appeared in the window. It had a bird in its mouth. The bird had strange bright plumage. The cat jumped in.
- 1a. A cat jumped in the open window.

Although this example is limited to a single rule, the Deletion Rule, appropriate packaging of information is essential in enabling the reader to apply all three macrorules. The question here is, just what does "appropriate packaging" consist of? The next section addresses this important issue.

Four Constraints on Content Organization

In this study the problem of inappropriate information segmentation was examined in 20 descriptive essays. These were written by students in the 12th week of a one-semester beginners' course in writing offered by the intensive English facility of a two-year college in the US. The students had been in the US for less than 18 months at the time these essays were written. Seventeen students were in their early 20s, and three were middle-aged. Most of them had some years of schooling; some had completed high school, and two of the three mature students had received a college education in their homeland. Their L1s were Vietnamese, Malyalam, Russian, and Spanish.

The course aimed to teach the students simple descriptive writing. Each week they did in-class writing assignments on topics set by the instructor in at least two out of the three one-hour sessions. Overt instruction dealt almost exclusively with basic sentence grammar, and revisions of first drafts of written assignments focused on the correction of grammatical mistakes.

To serve as data for the present investigation, 20 student essays were selected and analyzed. These essays were written in the same one-hour class period in the 12th week of the course. All the essays examined were first drafts, so the students had no opportunity to edit or revise their work. By comparing these essays with samples of descriptive prose by skilled writers such as Gilbert Highet, Barry Hoktua Lopez, John Cicardi, and David Mc-Cullough, I was successful in identifying four constraints on content organization that are necessary to ensure easy application of the three macrorules and hence straightforward access to the macrostructure.

Constraint 1

The breakdown of the informational whole of the text must be into the major logical components of macrostructure (and the major subcomponents, if any, of these logical components).

This is because independent units in the text are salient (i.e., assumed as important to the macrostructure) at the point of their occurrence, unless they can be interpreted as expansions of preceding units. When the syntactic organization reflects the logical components of macrostructure, these logical components become salient in the text. When the breakdown fragments these logical components (oversegmentation), then each fragment becomes independently salient in the text, and as a consequence the logical makeup of the macrostructure is not signaled. This is illustrated below in the comparison between 10a and 10b.

- 10a. Chang sat behind me in the first grade. He was my favorite classmate. Thirteen years ago, I left my birthplace. Ten years ago, I left my country. I never expected to see Chang again. Then last year I got a letter from him. What a surprise!
- 10b. Chang sat behind me in the first grade, and he was my favorite classmate. But thirteen years ago, I left my birthplace and ten years ago, my country, so I never expected to see Chang again. Then last year I got a letter from him. What a surprise!

The sentential distributions of 10a and 10b are given in 10c and 10d respectively.

- 10c. 1. Chang sat behind me in the first Grade.
 - 2. He was my favorite classmate.
 - 3. Thirteen years ago, I left my birthplace.
 - 4. Ten years ago, I left my country.
 - 5. I never expected to see Chang again.
 - 6. Then last year I got a letter from him.
 - 7. What a surprise!
- 10d. 1. *Chang* sat behind me in the first grade and he *was my favorite classmate.*
 - 2. But thirteen years ago, *I left* my birthplace and ten years ago, my country, *so I never expected to see Chang again.*
 - 3. Then last year I got a letter from him.

4. What a surprise!

Assuming that 10e below is the intended macrostructure, 10b/d facilitates easy access to 10e because it formally marks the three logical components listed beneath it. This is indicated by the underlined portions of sentences 1, 2, and 3 in 10d.

10e. *I suddenly and unexpectedly heard from my long-lost friend, Chang.* Logical components of 10e:

> Chang was my favorite childhood friend. I was separated from him for many years. I unexpectedly heard from him.

The following simple, three-step application of the Construction and Deletion Rules to 10d generates 10e:

- Step 1: Sentence 4 is deleted (Deletion Rule)
- Step 2: The three remaining core sentences are conjoined, with redundant information (marked in parentheses, below) deleted:
 Chang (sat behind me in the first grade and he) was my favorite friend, but (thirteen years ago) I left (my birthplace and ten years ago) my country so I never expected to see Chang again; then last year I got a letter from him.
- Step 3: Applying the Construction Rule to this generates a concise rendition of the nucleus of content in 10e.

In 10a/c, in contrast, the sentences do not signal the logical components of 10e. Given a text of this sort, the reader has to *work out* the sentential distribution exemplified in 10b/d to arrive at the key components of macro-structure. With these in hand, he or she can then apply the Deletion and Construction Rules in the manner specified above, to derive 10e, but of course the process is more arduous. Unfortunately, inexperienced ESL writers typically err in this direction, violating Constraint 1 to the point where their prose is harder to interpret than it should be.

Constraint 2

The breakdown of the informational whole must, in general, be such that successive independent units do not instantiate the same logical component.

When independent units instantiate the same logical component, each is independently salient and thus construed as equally salient in the text. This results in a marked text structure—"text as list," illustrated in 11.

11. (a) Sufferers of migraine have a one-sided headache. (b) They have sensitivity to light. (c) They sometimes have retinal distress. (d) And they seldom respond to over-the-counter drugs.

In this passage each separate sentence qualifies as problem instantiation, an appropriate organizational scheme. However, this marked text development pattern is frequently inappropriate, as in 12a, where the listing is ineffective in conveying the three logical components (London is a major capital, London is beautiful, I love London).

12a. My Favorite City

London is the capital of England. Some people say it is the capital of the world. It has many gardens. It has many monuments. It is beautiful. I love it more than any other city in the world.

As 12b illustrates, the intended macrostructure is much clearer when successive instantiations of the same logical components are represented by conjoined structures.

12b. My Favorite City

London is the capital of England, some would say of the world. It has many gardens and monuments, and is clean and beautiful. I love it more than any other city in the world.

Texts produced by inexperienced ESL writers often resemble 12a, violating Constraint 2 because they contain multiple independent instantiations of single logical components of macrostructure. The usual result, as a comparison of 12a and 12b reveals, is obscurity of macrostructure.

Constraint 3

Information units must unambiguously convey either a logical component of macrostructure or an expansion of a preceding logical component.

As illustrated in 13, ambiguity as to the status of an information unit will interfere with proper identification of macrostructure.

- 13. 1. I like to do many things in my free time.
 - 2a. I like my friends.
 - 2b. I like to go out with my friends.
 - 2c. One of the things I like to do is go out with my friends.
 - 3. We go out on Friday evenings and drink and dance.

In 13, which compresses three different textual options, sentence 2a is less easily construed as an expansion of the logical component expressed in sentence 1 than is 2b or 2c. Clearly, neither 2b nor 2c tells us something entirely new (on the concept of given-new information status, see Chafe, 1976; Clark & Haviland, 1977; Halliday, 1967; Halliday & Hasan, 1976; Horn, 1978; Kuno, 1972, 1974, 1978, 1979; Prince, 1979, 1981). These sentences merely exemplify the preceding statement, and therefore qualify as expansions of that prior logical component. Sentence 2a, however, conveys substantially newer information; it certainly does not seem to exemplify the preceding statement. Because of this it does not readily qualify as an expansion of 1, but on the other hand it does not seem to be sufficiently different from 1 to qualify as an entirely independent logical component. Its status as either expansion of sentence 1 or independent logical component is, therefore, ambiguous, making the passage harder to interpret. This sort of error is typical of inexperienced ESL writers, who often violate Constraint 3. By failing to represent unambiguously a proposition as either independent logical component or expansion of a preceding logical component, they obscure the intended macrostructure.

Constraint 4

When the information breakdown properly links logical components of macrostructure, the overt representation of the relationships that hold between logical components (or subcomponents of these) eases access to macrostructure.

For example, compare 2b with 2a in 14. The significance of 2a is unclear because it contains no overt links to 1, a weakness that is rectified in 2b. Clearly the longer the succession of unmarked interconstituent relationships, the greater are the processing difficulties for the reader.

- 14. 1. Most people are inclined to serve their own interests.
 - 2a. The ability to serve others is prized.
 - 2b. Hence the ability to serve others is prized.

Inexperienced ESL writers typically violate Constraint 4 by failing to represent overtly the relationships that hold between successive logical components.

The Full Picture

The impact of Constraints 1-4 on information processing is illustrated above using short, one-paragraph passages. In these single-paragraph texts the breakdown of the informational whole into the logical components of macrostructure is generally signaled sententially. First, the independent sentence marks a logical component (Constraint 1). In effective prose successive independent sentences are not instantiations of the same logical component unless the marked-list structure is intended and appropriate (Constraint 2). Each sentence unambiguously codes either a logical component or its expansion (Constraint 3). And when macrostructure is properly coded, the overt representation of intersentential relationships facilitates easier macrostructure identification (Constraint 4).

Constraints 1-4 are also realized, however, at higher levels of organization in texts of more than one paragraph in length. In such texts each paragraph (rather than each sentence) signals a principal component of macrostructure, with the subcomponents of the main components being marked by the independent sentences of the paragraph. Paragraph division, that is, is monitored to mark the logical makeup of macrostructure, and the sentential breakdown of an individual paragraph is constrained to signal the logical makeup of an individual component of macrostructure. All four constraints hold at both sentential and suprasentential levels of organization.

In what follows I analyze a longer ESL essay (Sample 1, presented at the beginning of this article) to demonstrate that one or more of the above-described constraints are violated both at the sentential and suprasentential levels of organization. I also show that modifying this prose selection to make it conform to these constraints (as in Sample 1a below) makes the macrostructure more readily accessible.

Sample 1: A Helpful Person

1) Van is my helpful person. 2) He come from Vietnam. 3) He speaks Vietnamese and Chinese. 4) He speaks English very well. 5) He is tall. 6) He has dark eyes. 7) He always respect to people. 8) He lives with his family at 1925 N 18 Street PA 19145. 9) He has two brothers and one sister. 10) His sister is eighteen years old. 11) I met him in school. 12) I know him for six months. 13) He teaches me how to drive. 14) I usually go shopping with him. 15) Last Saturday, I went to shopping with him. 16) He bought a lot of clothes. 17) He bought a jacket and a shirt. 18) He spent two hundred dollars. 19) After shopping, I had dinner with him. 20) I had a nice day with him. 21) He is my best friend. 22) He always teaches me how to play baseball.

Sample 1a: A Helpful Person

Van is my helpful person. 2) He come from Vietnam and he speaks Vietnamese and Chinese. 3) He also speaks English very well. 4) He is tall and has dark eyes, and he is always respectful to people. 5) He lives with his family at 1925 N 18 Street PA 19145, and he has two brothers and one eighteen year old sister.

1) I met Van in School and have known him for six months.

1) Van teaches me how to drive. 2) I also usually go shopping with him. 3) Last Saturday I went shopping with him. 4) He bought a lot of clothes, including a jacket and a shirt, and he spent two hundred dollars. 5) After shopping, I had dinner with him. 6) On the whole, I had a nice day with him. 7) He really is my best friend. 8) He even tries to teach me how to play baseball. Sample 1 was written by an L1 speaker of Vietnamese, who was in his early 20s. Sample 1a is the same essay modified to conform to the above-stated Constraints 1-4.

The following macrostructure can reasonably be assigned to Samples 1 and 1a:

My helpful person is Van. He is from Vietnam, speaks three languages, is handsome and personable and a member of a large Philadelphia household. I met him six months ago at school. He helps me in all sorts of ways and spends quality time with me.

This comprises three logical components, stated below along with their key constituents:

I. description of helpful person:

- 1. who he is
- 2. where he comes from and what languages he knows
- 3. that he knows English
- 4. appearance and identifying personality traits
- 5. where and with whom he lives

II. where and when I met him

III. what he does for me or with me

- 1. is teaching me to drive
- 2. goes shopping with me
- 3. (expansion—last Saturday's shopping)
- 4. (expansion-bought clothes)
- 5. after shopping
- 6. comment on last Saturday's shopping
- 7. (expansion on Van as best friend)
- 8. (expansion on Van as best helper)

Sample 1 fails to uphold Constraint 1. There is no attempt at paragraphing to signal the key logical components of macrostructure (specified above), nor does the sentential distribution capture the constituent structure (delineated above) of each of these logical components. In 1a, on the other hand, the text is divided into paragraphs matching up with the key logical components of macrostructure, and in each paragraph the sentential breakdown is monitored to mark the constituent structure of each logical component. To clarify this, paragraphs and sentences are numbered in the version of Sample 1a below, to indicate the marking of logical components and their subcomponents.

Sample 1a (showing the distribution of logical components and subcomponents)

I. 1. Van is my helpful person.

- 2. He come from Vietnam and he speaks Vietnamese and Chinese.
- 3. He also speaks English very well.
- 4. He is tall and has dark eyes, and he is always respectful to people.
- 5. He lives with his family at 1925 N 18 Street PA 19145 and he has two brothers and one 18 year old sister.
- II. 1. I met Van in school and have known him for six months.
- III.1. Van teaches me how to drive.
 - 2. I also usually go shopping with him.
 - 3. Last Saturday I went shopping with him.
 - 4. He bought a lot of clothes, including a jacket and shirt, and he spent two hundred dollars.
 - 5. After shopping, I had dinner with him.
 - 6. On the whole, I had a nice day with him.
 - 7. He really is my best friend.
 - 8. He even tries to teach me how to play baseball.

Constraints 2, 3, and 4 are also violated in Sample 1. In violation of Constraint 2, the successive sentences 5, 6, and 7 in Sample 1 independently instantiate the same attribute. These are, therefore, conjoined in 1a (see sentence 4, paragraph I). Repeated instantiations of a single attribute are also found in sentences 16 and 17 of sample 1, and these are therefore conjoined in 1a (see sentence 4, paragraph III). Constraint 4 is violated in Sample 1, as the linking word also is missing between sentences 13 and 14. This word is therefore introduced in 1a (see sentence 2, paragraph III). Last, in violation of Constraint 3, the status of sentence 20 as expansion or independent logical component is ambiguous. Unambiguous status as expansion is, therefore, signaled overtly by the use of on the whole in 1a (see sentence 6, paragraph III). This qualifying phrase marks the proposition as non-new in the discourse, suiting the fact that it is already implied by the preceding statements. The same ambiguity of status is also apparent in 21. This is rectified in 1a by the use of the adverbial really (see sentence 7, paragraph III), which helps to mark it as non-new information through the addition of emphasis. Finally, sentence 22 also violates Constraint 3 by failing to signal its non-new status in the text. The word even replaces always in 1a to indicate the appropriate information status of this proposition (see sentence 8, paragraph III).

As a result of the changes incorporated into Sample 1a, all four constraints are upheld, and consequently the logical components of macrostructure, along with the subconstituents of these components, are clearly marked. This facilitates easy access to macrostructure by application of the Deletion, Generalization, and Construction Rules: While sentence 1 of paragraph 1 is retained in the macrostructure, the Construction Rule is applied to sentences 2, 3, 4, and 5 to arrive at the second sentence of the macrostructure. The Construction Rule is also applied to the conjoined propositions of the single sentence in paragraph 2 to arrive at the single-proposition sentence 3 of the macrostructure. Following this, the Deletion Rule is applied to eliminate the non-new information from the collection of sentences 1-8 of paragraph 3. Sentences 3, 4, 5, 6, and 7, which all contribute non-new information, are therefore deleted. After this the Generalization Rule is applied to the remaining new sentential propositions 1, 2, and 8 generating sentence 4 of the macrostructure. This straightforward application of the macrorules cannot be carried out in Sample 1, which is simply an unstructured collection of all the informational segments that comprise the text. The reader must process these laboriously, first to discern the logical components themselves, and then to apply the three macrorules in order to arrive at the macrostructure.

Implications for Teaching

This analysis demonstrates that inexperienced ESL writers violate four constraints on content organization that ensure efficient macrostructure signaling in text:

- 1. They often fail to mark the logical components of macrostructure, and the subcomponents (if any) of these.
- 2. They often generate multiple independent instantiations of single logical components, even when they are not constructing the marked-list structure.
- 3. They are often unable to disambiguate between logical components and expansions of logical components.
- 4. They often do not overtly mark the relationships that hold between logical components, and between their subcomponents, if these exist.

There are two conceivable reasons for their frequent violations of these four constraints. First, because appropriate information packaging requires fairly good control over syntax, it is possible that ESL learners' limited repertoires of syntactic options prevent them from conforming effectively to the constraints. A second possibility, however, is that these learners are not aware of, much less familiar with, the constraints themselves. Although it is obviously true that limited syntax poses limitations to their writing performance, two pieces of evidence suggest that their problems stem also, and perhaps more crucially, from ignorance of the actual organizational constraints.

First, many of the packaging needs of these writers would be met by the use of simple sentence conjoining. But although they do in fact know simple conjunctions (e.g., and and but), they constantly fail to use these to facilitate appropriate information segmentation. This suggests that the problem is not primarily a lack of knowledge of English syntax. Rather, it is ignorance of the nature of macrostructure and how to signal its logical components through appropriate packaging of information.

è,

The second piece of evidence to suggest that these learners have not acquired the organizing principles of English prose is that those who fail to package information effectively at the level of the sentence invariably fail also to use paragraphing to mark the higher level of information organization. Only two of our 20 students attempted a paragraph-level organization of their essays. Were sentence-level organization missing where paragraphing was appropriate, we might conclude that the absence of the requisite syntactic knowledge was indeed the problem. But because successful packaging is in general not achieved at either level, it seems reasonable to conclude that the common underlying principles of effective information organization remain to be assimilated into their linguistic repertoires, or their English competences at least.

In the light of this conclusion, it is not surprising that our 12-week program emphasizing overt instruction of simple grammar resulted in an acceptable mastery of this grammar but not of content organization. Skill at the latter generally remains unaffected by such programs, in spite of the deliberate emphasis they may place on "real" writing and on providing ample opportunities for practice.

Krashen's (1982) hypothesis of a dichotomy between acquisition and learning previously influenced our classroom instructors to shy away from too much overt instruction "about language" and to try to create an environment in which natural acquisition (in Krashen's sense) could occur. The growing realization that learners exposed to this type of instruction often develop a certain level of fluency without reaching an acceptable level of grammatical accuracy has subsequently encouraged our teachers to devote some attention to grammar instruction, although this is the exceptional practice in an instructional mode that is still designed mainly to foster "acquisition." The data of this study seem to suggest that overt instruction has a more significant role to play in ESL classrooms than has hitherto been envisaged. With respect to skill at information segmentation, the learners in our beginners' ESL class certainly did not seem to "acquire" what they had not been explicitly taught.

If the novice ESL writer in our program is successfully to write a simple descriptive essay by semester's end, rather than merely stringing together single-clause sentences, overt instruction must give as much attention to content-organizing principles as to sentence grammar. Furthermore, it must do this in a way that demonstrates (a) that sentences in well-structured text are not merely grammatical units, but also informational units—logical components, or subcomponents, of macrostructure; and (b) that every grammatical sentence does not qualify as a successful information unit. Accordingly, grammar should be introduced in its functional capacity, and as grammatical knowledge is incremented it should always be accompanied by an understanding of how it adds to the learner's developing skills as a text generator.

To rectify the oversegmentation and inappropriate segmentation that are typical of much ESL writing, beginners must be made conscious of the notion of macrostructure and of the four constraints described above. Although the identification of the classroom strategies needed to do this is beyond the scope of this study, this raising of consciousness can in general be accomplished through exercises and activities designed to help ESL students to recognize the constraints and to conform to them in their writing. The following teaching suggestions may be helpful to ESL instructors wishing to implement such a program; further research in this area is needed, however, to generate a specific set of classroom strategies.

- Beginners should practice identifying macrostructure and its logical components (and possibly subcomponents) in simple samples of descriptive prose by skilled writers. They should be asked to notice the sentential and/or paragraph marking of these logical components (and subcomponents). Sentences as information units—logical components should be contrasted with sentences as merely grammatical units, and students should appreciate the role of simple syntactic means of conjunction and embedding in sentences that qualify as successful information units.
- 2. Beginners should become aware of the effect produced by multiple independent instantiations of the same logical component, both when this procedure is appropriate (in the marked-list structure) and when it is inappropriate. They should learn how to use simple means of sentence conjunction to avoid undesirable multiple instantiation.
- 3. Beginners should be made aware of the difference between logical components of macrostructure and the expansion of logical components, and they should be instructed on simple ways of overtly signaling the expansion of preceding logical components.
- 4. Beginners should also be made aware of the need to mark overtly the relationships between logical components, and should be given a simple set of lexicosyntactic means to enable them to do this.

In such a program of instruction, content-organizing principles are given primacy of place in the teaching curriculum, and the syntax is learned as a tool to facilitate the marking of this organization. An affective benefit of this approach, one that is certainly not inconsequential, is that recognition of the functional role of sentence grammar may provide students with a strong motivation to master it. Otherwise, syntax tends to remain essentially peripheral to writing exercises, merely a codification of what appear to students to be quite arbitrary rules.

Acknowledgments

I am very grateful to Patrick Mathews, Richard Kidd, and the anonymous reviewers for their very helpful comments. I also wish to thank Richard Kidd for his extensive help in preparing the final draft of this article for publication.

The Author

Asha Tickoo is an assistant professor in the Department of English Language and Literature, Hong Kong Baptist University. Her research interests include second language writing, interlanguage pragmatics, and world Englishes.

References

Bardovi-Harlig, K. (1990). Pragmatic word order in English composition. In U. Connor & A.M. Johns (Eds.), Coherence in writing: Research and pedagogical perspectives (pp. 43-67). Arlington VA: TESOL.

Carrell, P.L. (1982). Cohesion is not coherence. TESOL Quarterly, 16, 479-488.

- Cerniglia C., Medsker, K., & Connor, U. (1990). Improving coherence using computer-assisted instruction. In U. Connor & A.M. Johns (Eds.), *Coherence in writing: Research and pedagogical perspectives* (pp. 227-241). Arlington, VA: TESOL.
- Chafe, W. (1976). Givenness, contrastiveness, definiteness, subjects, topics and point of view. In C. Li (Ed.), *Subjects and topics* (pp. 25-55). New York: Academic Press.
- Clark, H., & Haviland, S. (1977). Comprehension and the given-new contract. In R. Freedle (Ed.), Discourse production and comprehension (pp. 1-40). Hillsdale, NJ: Erlbaum.
- Clyne, M.G. (1987). Cultural differences in the organization of academic texts: English and German. *Journal of Pragmatics* 11, 211-247.
- Connor, U. (1984). A study of cohesion and coherence in ESL students' writing. *Papers in Linguistics: International Journal of Human Communication 17*, 301-316.
- Connor, U. (1987). Argumentative patterns in student essays: Cross-cultural differences. In U. Connor & R.B. Kaplan (Eds.), Writing across languages: Analysis of L2 text (pp. 57-71). Reading, MA: Addison-Wesley.
- Connor, U., & Farmer, M. (1985). The teaching of topical structure analysis as a revision strategy: An exploratory study. Paper presented at the American Educational Rsearch Association Conference, Chicago.
- Connor, U., & Farmer, M. (1990). The teaching of topical structure analysis as a revision strategy for ESL writers. In B. Kroll (Ed.), Second language writing. Research insights for the classroom (pp. 126-139). New York: Cambridge University Press.
- Connor, U., & Johns, A.M. (Eds.). (1990). Coherence in writing: Research and pedagogical perspectives. Arlington, VA: TESOL.

Connor, U., & Kaplan, R.B. (1987). Writing across languages: Analysis of L2 texts. Reading, MA: Addison-Wesley.

- Connor, U., & Lauer, J.M. (1985). Understanding persuasive essay writing: Linguistic/ rhetorical approach. TEXT, 5, 309-326.
- Connor, U., & McCagg, P. (1983). Cross-cultural differences and perceived quality in written paraphrases of English expository prose. *Applied Linguistics* 4, 259-268.
- Egginton, W.G. (1987). Written academic discourse in Korean: Implications for effective communication. In U. Connor & R.B. Kaplan (Eds.), Writing across languages: Analysis of L2 text (pp. 153-168). Reading, MA: Addison-Wesley.
- Enkvist, N.E. (1978). Coherence, pseudo-coherence and non-coherence. In J.O. Ostman (Ed.), Semantics and cohesion (pp. 109-128). Abo, Finland: Abo Akademi Foundation
- Enkvist, N.E. (Ed.). (1985). *Coherence and composition: A symposium*. Publications of the Research Institute of the Abo Akademi Foundation 101. Abo, Finland: Abo Akademi Foundation.

- Enkvist, N.E. (1990). Seven problems in the study of coherence and interpretability. In U. Connor & A.M. Johns (Eds.), *Coherence in writing: Research and pedagogical perspectives* (pp. 23-43). Arlington, VA: TESOL.
- Evensen, L.S. (1985). Connectors in student writing: A methodological note. NORDTEXT Newsletter, 4, 1-6.
- Fahenstock, J. (1983). Semantic and lexical coherence. *College Composition and Communication*, 34, 400-416.
- Halliday, M.A.K. (1967). Notes on transitivity and theme in English. Part 2. Journal of Linguistics 3, 199-244.
- Halliday, M.A.K., & Hasan, R. (1976). Cohesion in English. London: Longman.
- Hinds, J. (1983). Contrastive rhetoric: Japanese and English. Text 3(2), 183-195.
- Horn, L. (1978). Presuppositions, theme et variations. Unpublished manuscript.
- Indrasuta, C. (1988). Narrative style in the writing of Thai and American students. In A.C. Purves (Ed.), Writing across languages and cultures. Issues in contrastive rhetoric (pp. 206-226). Newbury Park, CA:Sage.
- Johns, A.M. (1980). Cohesion in business discourse. ESP Journal, 1, 35-44.
- Johns, A.M. (1986). Coherence and academic writing: Some definitions and suggestions for teaching. *TESOL Quarterly*, 20, 247-265.
- Johns, A.M. (1990). L1 composition theories: Implications for developing theories of L2 composition. In B. Kroll (Ed.), Second language writing: Research insights for the classroom (pp. 24-36). New York: Cambridge University Press.
- Krashen, S. (1982). Principles and practice in second language acquisition. Oxford, UK: Pergamon.
- Kuno, S.(1972). Functional sentence perspective: A case study for Japanese and English. Linguistic Inquiry, 3, 269-320.
- Kuno, S. (1974). Lexical and contextual meaning. Linguistic Inquiry, 5, 469-477.
- Kuno, S. (1978). Generative discourse in America. In W. Dressler (Ed.), *Current trends in textlinguistics* (pp. 275-294). Berlin & New York: de Gruyter.
- Kuno, S. (1979). On the interaction between syntactic rules and discourse principles. Unpublished manuscript.
- Lagerqvist, M. (1980). *Time connectors in native and non-native narrative texts*. Unpublished manuscript. Department of English, University of Lund, Sweden.
- Lieber, P. (1980). Cohesion in ESL students' expository writing: A descriptive study. Unpublished doctoral dissertation, New York University.
- Lindeberg, A. (1985). Cohesion, coherence patterns, and ESL essay evaluation. In N.E. Enkvist (Ed.), Coherence and composition: A symposium (pp. 67-92). Abo, Finland: Abo Akademi Foundation.
- Martin, J.R., & Rothery, J. (1986). What a functional approach can show teachers. In B. Couture (Ed.), Functional approaches to writing: Research Perspectives (pp. 241-265). Norwood, NJ: Ablex.
- McCagg, P.(1990). An investigation of inferencing in second language reading comprehension. Unpublished doctoral dissertation, Georgetown University.
- Prince, E.F. (1979). On the given-new distinction. In W. Hanks, C Hogbauer, & P. Clyne (Eds.), Papers from the fifteenth regional meeting of the Chicago Linguistic Society (pp. 267-278). Chicago, IL: University of Chicago Press.
- Prince, E.F. (1981). Toward taxonomy of given-new information. In P. Cole (Ed.), Radical pragmatics (pp. 223-255). New York: Academic Press.
- Reid, J. (1992). A computer text analysis of four cohesion devices in English discourse by native and nonnative writers. *Journal of Second Language Writing* 1(2), 79-108.
- Renkema, J. (1993). Discourse studies: An introductory text book. Amsterdam/Philadelphia: John Benjamins.
- Scarcella, R. (1984). Cohesion in the writing of native and non-native English speakers. Unpublished doctoral dissertation, University of Southern California.

TESL CANADA JOURNAL/*LA REVUE TESL DU CANADA* VOL. 16, NO. 1, WINTER 1998

- Schneider, M., & Connor, U. (1991). Analyzing topical structure in ESL essays: Not all topics are equal. *Studies in Second Language Acquisition* 12, 411-427.
- Tirkkonen-Condit, S. (1985). Argumentative text structure and translation. *Studia Philological Jyvaskylaensia*, 18. Jyvaskyla, Finland: Kirjapaino Oy, Sisasuomi.
- Tirkkonen-Condit, S. (1986). Text type markers and translation equivalence. In J. House & S. Blum-Kulka (Eds.), *Interlingual and intercultural communication* (pp. 95-114). Tübingen, Germany: Gunter narr Verlag.
- Tommola, J. (1982). English connectors and Non-native performance. In J. Tommola & R. Ruusuvuori (Eds.), *AFINLAN vuosikirja* (pp. 69-87). Turka, Finland; AFINLA.
- Van Dijk, T. A. (1980). Macrostructures: An interdisciplinary study of global structures in discourse, interaction, and cognition. Hillsdale, NJ: Erlbaum.
- Ventola, E., & Mauranen, A. (1991). Non-native writing and native revising of scientific articles. In E. Ventola (Ed.), *Functional and systemic linguistics: Approaches and uses* (pp. 457-492). Berlin: Mouton de Gruyter.
- Wikborg, E. (1990). Types of coherence breaks in Swedish student writing: Misleading paragraph divisions. In U. Connor & A.M. Johns (Eds.), Coherence in writing: Research and pedagogical perspectives (pp. 131-150). Arlington, VA: TESOL.
- Witte, S.P. (1983a). Topical structure and revision: An exploratory study. *College Composition and Communication*, 34, 313-341.
- Witte, S.P. (1983b). Topical structure and writing quality: Some possible text-based explanations of readers' judgments of students' writing. Visible Language 17, 177-205.