Cohesion and the given-new contract

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Cohesion and the given-new contract

by

Elizabeth Rose Hostert

A Thesis Submitted to the
Graduate Faculty in Partial Fulfillment of the
Requirements for the Degree of
MASTER OF ARTS

Major: English

Approved:

In Charge of Major Work

For the Major Department

For the Graduate College

Iowa State University
Ames, Iowa

1987
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INTRODUCTION

Recently in journals of composition, authors have proposed that student writers be taught to follow the Given-New Contract, a theory of language organization. The Given-New Contract describes how writers should position given information, information referring to an antecedent referent, in sentences.

All of the authors recommend that student writers be taught to place given information in the initial position of declarative sentences. For example, Houlette and Paige state that in "John bought some bread today," the given information should be "John" (9). However, Houlette and Paige also point out that some sentences do have given information in their final position because of their grammatical structure. One example provided by the authors is "It worried Frank that I came," in which the given information follows "that" (15-16).

Another recommendation of authors promoting the Given-New Contract is that student writers be taught, in general, to provide given information with a referent in the sentence immediately preceding. For example, Holloway states that students struggling to write complex explanations may find it helpful to visualize their paragraphs as sentences structured like A-B, B-C, C-D, D-E, E-F, as is demonstrated by the following paragraph:

Teachers should explain their requirements more carefully.

When they don't students often read much more material than
necessary because they aren't sure what will be required of them. Students can't afford to waste time like this. (Holloway 208)

The given information in the second sentence "they" refers to "teachers" in the previous sentence, and "students" in the third sentence also has a referent in the preceding sentence.

Holloway does point out exceptions to this organization. For example, Holloway suggests that the given information in descriptive or narrative paragraphs repeats the overall theme or some aspect of it. For example:

The house could be seen for miles around. It stood on a bluff overlooking the city and its windows flashed golden when the sun set in the evening. The twin turrets that jutted upwards on each corner gave the aura of a fortress. (209)

Holloway suggests that this paragraph has an A-B, A-c, A-D structure: "it" in sentence two and "the twin turrets" in sentence three represent given information and refer to "house" in sentence one.

According to the proponents of the theory, the benefit of teaching the Given-New Contract is that student writers will produce texts perceived as cohesive, i.e., texts which aid comprehension because readers perceive relationships between the text's sentences. For example, Kent has developed a method for teaching the Given-New Contract which, he proposes, will improve the cohesiveness of student writers' paragraphs. Houlette and Paige have created sentence combining exercises
based on the contract to help students learn to add information to readers' memory (10). Holloway suggests that an understanding of the Given-New Contract can help student writers test their sentences for continuity and clarity (209), and Vande Kopple asserts that teaching students to produce certain patterns of given information in paragraphs will make student essays more readable and memorable (56).

The authors' belief that student writers should be taught to follow the Given-New Contract is grounded on studies in reading comprehension. Psycholinguistic research discussed in the literature review shows 1) that sentences facilitate comprehension when they contain given information in a position predicted by the contract, and 2) that the distance of given information from its referent influences comprehension. However, because such research analyzes reading, not writing, it does not provide sufficient grounds for the assumptions of authors such as Vande Kopple that writers produce texts perceived as cohesive by following the contract, and that the way writers follow the contract affects the degree to which a reader finds a text cohesive.

To investigate the assumptions of an increasing amount of pedagogy based on the Given-New contract, I analyzed a group of university student compositions judged to be well organized and thus cohesive by two composition teachers, determining whether the majority of sentences contained given information in a position predicted by the contract and by psycholinguistic research conducted on the contract. This analysis was undertaken to determine whether the writers of texts perceived as
cohesive follow the Given-New Contract. Then, I compared these essays with a second group rated lower in organization to determine whether the percent of sentences following the contract and/or the distance of given information from its referent distinguished the higher rated essays from the lower rated. The goal of the study was to provide information about the usefulness of teaching students to follow the contract.

Introduction to the Given-New Contract

The Given-New Contract is a theory of language organization that is based on the principle that language is a cooperative enterprise. Although it was developed by Herbert Clark and Susan Haviland to describe a social contract governing oral communication, the same contract has application to written communication. The Given-New Contract is an implicit agreement between writers and readers about how given and new information should appear in sentences. Given information has a prior referent within a text and enables readers to integrate new information. New information is information that readers do not know; it constitutes the message of a sentence. In the following example, the given information in sentence two is "she," and the new information is "X was searching for a squirrel."

1) The collie circled the tree.
2) She was searching for a squirrel.

"She" in sentence two refers to "the collie" in sentence one.

To play their role in the Given-New Contract, writers try to make the structure of their sentences congruent with their knowledge of their
readers' mental world. So writers syntactically convey information they believe their readers already know as given and convey what they believe their readers do not know as new (Clark and Haviland 4).

In general, declarative sentences distinguish given information from new through sentence position. The initial position in a sentence (the slot preceding the predicate) conveys given information, and the final position (the predicate) conveys new. In the following example, the initial position of sentence two conveys "the squirrel" as given, even though the information does not refer to anything in sentence one.

1) The collie circled the tree.

2) The squirrel ran up the tree.

Consequently, the second sentence violates the Given-New Contract.

Two exceptions to the given-new information structure of declarative sentences are the cleft and extraposed constructions. Through their grammatical structure, these constructions change the preferred information structure of declarative sentences from given-new to new-given. In the cleft construction, new information is marked by a nonreferential "it" plus a form of "to be," and given information is marked by "who" or "that" (Celce-Murcia and Larsen-Freeman 406). For example, "It was the collie who chased the squirrel" marks "it was the collie" as new information and "who chased the squirrel" as given.

The extraposed construction marks information following a nonreferential "it" as new and the subject complement, which has been shifted to the end of the sentence, as given. "It surprised the collie that the
squirrel escaped" conveys "it surprised the collie" as new information and "that the squirrel escaped" as given.

What a sentence marks as given and new information is inherent in its structure and does not change with what readers do or do not know (Clark and Haviland 3). A sentence will establish information as known if its author follows the Given-New Contract’s Maxim of Antecedence.

Maxim of Antecedence: Try to construct your utterance such that the listener [reader] has one and only direct antecedent for any given information and that is the intended antecedent.

(Clark and Haviland 4)

An antecedent is information readers have acquired from a text. When information in a sentence matches an antecedent in the readers’ memory, that information is given for readers. For example, consider the following sentences.

1) The yellow car raced down the street.
2) It was followed by a police car.

The information in the given position of sentence two is known information because the pronoun ("it") refers to an antecedent that readers just acquired from sentence one.

When sentences conform to the Maxim of Antecedence, they help readers to efficiently perform the Given-New Strategy. Unlike the Given-New Contract, which is a theory of language organization, the Given-New Strategy is a three-step method for language comprehension.
The Given-New Strategy

Step 1. Readers isolate given and new information in the current sentence.

Step 2. They search their memory for a direct antecedent that matches the given information precisely.

Step 3. They integrate new information into their memory by attaching it to the antecedent in step 2. (Clark and Haviland 5)

The Maxim of Antecedence and its influence on readers' Given-New Strategy can be explained using the following example.

1) Something is yellow.

2) It is the car that is yellow.

To comprehend "It is the car that is yellow", readers first separate the information marked as given "that is yellow" from the new "it is the car." The information marked as given can be described as the address of the place in the readers' memory where the new information should be stored (Glatt 90). Readers will associate "that is yellow" with the antecedent "yellow" because they just stored this antecedent in their memory. So readers will also integrate the new information "it is the car."

By following the Given-New Contract's Maxim of Antecedence, writers enable their readers to efficiently complete their Given-New Strategy. However, writers can violate the maxim and still communicate their message if their violation is intentional and overt (Clark and Haviland...
5). Through an intentional violation, writers imply a relationship that is not explicitly stated.

1) Dean has a Ph.D.

2) Wayne is smart too.

Readers will be unable to associate any part of the second sentence with information they acquired from the first. But the readers will still assume that the author is being cooperative, and they will try to perform the Given-New Strategy. To do so, they form an indirect antecedent from their general knowledge and build an inferential bridge between the sentences, such as "all Ph.D.s are smart" (Clark and Haviland 6-7).

On the other hand, if writers unintentionally violate the Maxim of Antecedence, they obstruct their readers' Given-New Strategy (Clark and Haviland 5).

1) Dean has a Ph.D.

2) The chairman of the department, the pastor, and Wayne congratulated him.

Comprehension of sentence two will be slowed because readers will be able to identify "the chairman of the department, the pastor, and Wayne" as given information, but they will not be able to locate an antecedent for this information. So they will hold the new information in their memory until they locate given information (him). Comprehension is less than optimal when readers must hold unprocessed information in their memory (Clark and Haviland 13).
Violations of the Maxim of Antecedence can even block the readers' Given-New Strategy.

1) Dean and Wayne have Ph.D.s.

2) He is a boor.

Integration of these sentences will be impossible because readers will not be able to determine who "he" refers to.

In short, when writers violate the Maxim of Antecedence unintentionally, they slow or even break down communication. When they violate it intentionally, they imply information at the cost of slowing their readers' comprehension. When they follow the Maxim of Antecedence, marking as given a constituent which has a referent in the text, they follow the Given-New Contract and enable their readers to comprehend information efficiently.
LITERATURE REVIEW

Research regarding the Given-New Contract can be divided into two parts: 1) psycholinguistic research which focuses on how the distribution of given and new information influences comprehension and 2) research which investigates how writers actually distribute given and new information. Most of the research conducted on the contract is psycholinguistic, investigating two aspects of given information: a) its position in declarative sentences and b) the distance between it and its referent.

Only one study was found on how writers followed the Given-New Contract. It was conducted by Weissberg, who analyzed how writers of scientific texts followed the contract.

The results of these two approaches to studying the Given-New Contract have implications for evaluating the cohesiveness of writers' texts. These implications are discussed in the summary of the literature review.

The Given-New Contract--The Reader

The information structure of declarative sentences

Psycholinguistic research involving the Given-New Contract examines the information structure of two types of declarative sentences: 1) declarative sentences in which given information occurs first and new later in the sentence, and 2) declarative sentences in which new
information precedes given because of the sentences' grammatical structure. Declarative sentences which mark information through sentence position have a given-new information structure. The given-new information structure is shown to be the distribution readers comprehend and retain better by Glatt, Vande Kopple, and Roen and Haseltine.

Glatt's and Vande Kopple's studies are based on Functional Sentence Perspective, one of the theories which are the foundation for the Given-New Contract. This approach was developed by the Prague School of Linguists to analyze the semantic parts of a sentence which have a communicative function. According to the approach, a sentence has two main parts. These parts have been given different names by different theorists: topic and comment, theme and rheme, presupposition and focus (Vande Kopple 50-51). Although the names convey slightly different meanings, they will be referred to as topic and comment throughout the rest of the literature review.

The topic is what a sentence is about; its function is to convey given information. The comment is what is said about the topic; its function is to convey new information. Although the constituents are semantic, not grammatical, the topic is usually associated with the subject and other information occurring before the predicate, and the comment is usually associated with the predicate (Clark and Clark 31-35). For example, the topic in "On Monday, the library opens at 9:00." is "On Monday, the library", and the comment is "X opens at 9:00."
Glatt's study shows that sentences in which the topic conveys given information and the comment conveys new are easier to comprehend. In the study, Glatt gave twenty college freshmen a list of sentence pairs in which she varied the relationship between given information and the topic. For example:

1) The surprise play was forgotten by the team.
2) They could have saved the game last night. (99)

The topic of the second sentence "they" is given information because it refers to "the team" in sentence one.

Glatt also presented sentence pairs like the following:

1) The surprise play was forgotten by the team.
2) The game could have been saved by them. (99)

In this case, the comment, not the topic, of sentence two conveys given information: "them" refers to "the team" in sentence one.

After presenting the sentence pairs to the subjects, Glatt gave them a multiple choice recognition test in which the first sentences of the original sentence pairs were followed by four sentences, one of which was the second sentence of the original sentence pair. The subjects were instructed to circle which of the four sentences they remembered reading in the original sentence pairs. The study's results show that sentences are easier to remember in which the given information and the topic coincide.

Unlike Glatt, Vande Kopple constructed entire paragraphs in which he varied the relationship of the sentences' topics and given information.
He presented these paragraphs in five readability and three retention tests to large numbers of randomly selected high school students. Like Glatt's findings, Vande Kopple's show that readers retain more information from paragraphs in which given information, rather than new, coincides with the topics. Furthermore, the results indicate that readers judge these paragraphs easier to read.

Roen and Haseltine also investigated whether the order of given and new information in sentences improves comprehension. Their research focused on the effects text linguists' revisions, such as changes in the Given-New Contract, schemata, reference, lexical cohesion, and cohesive conjunctions, have on the comprehensibility of expository texts. The material for their study was original and revised versions of two passages taken from a high school history textbook. To revise the passages so that they conformed to the Given-New Contract, Roen and Haseltine tied sentences containing only new information to the preceding text with given information. The four passages were presented to ninety-two high school students who wrote free recall protocols of each passage. The subjects recalled more propositions (idea units) from the passages revised to follow the Given-New Contract than they did from the original passages. Thus, the finding supports Glatt's and Vande Kopple's finding that readers recall more information from sentences in which given information precedes new.

Like the researchers discussed so far, Hornby found that subjects expect the initial position of a sentence to convey given information and
the final position to convey new. However, Hornby's study also shows that grammatical structure as well as sentence position determines what subjects consider given or new in a sentence. Hornby's study investigates the relationship between the topic-comment distinction, the subject-predicate distinction, and word order. He created a task which required subjects to select one of two pictures to go with a simple English sentence. Pairs of pictures were shown depicting persons performing an action on an inanimate object. The pictures in each pair were similar but differed in some details. As participants looked at a pair of pictures, they listened to a sentence that described generally what was depicted, but was incongruent with each one in some way. Their was to choose the picture that the sentence was about. For unmarked sentences, such as passive or active sentences, Hornby predicted that subjects would choose a picture based on the information in the initial position of the sentence. For example, for a pair with an Eskimo building an igloo and an Indian building a tepee and the sentence "The igloo is being built by the Indian," Hornby expected subjects to choose the picture of the Eskimo building the igloo because the initial constituent of the sentence referred to this picture.

For marked sentences, cleft constructions, Hornby predicted that subjects would choose the picture based on the final constituent of the sentence. Thus, for the pair of pictures described above, Hornby hypothesized that the subjects would choose the picture of the Eskimo building the igloo if they heard the cleft construction "It is the Indian who is building the igloo."
The results of Hornby's study support his predictions. Hornby concludes that the given-new distinction as well as the topic-comment distinction are independent of the subject-predicate distinction and word order. His study shows that grammatical structure can change the interpretation of information as given or new in declarative sentences. So, the results suggest that new information is expected to precede given in the cleft construction.

Clark and Haviland suggest further evidence that readers expect cleft constructions to have a new-given information structure. They created sentence pairs in which one sentence provided a context for the other sentence, a cleft construction. The cleft construction either marked information that referred to the preceding sentence as given, or it marked new information as given.

a) Olivia kissed Oscar somehow. It was on the ear that Olivia kissed Oscar.

b) Someone kissed Oscar on the ear. It was on the ear that Olivia kissed Oscar. (15)

Clark and Haviland claim the (a) sequence seems acceptable to readers in general because the information marked as given is given information: "that Olivia kissed Oscar" refers to "Olivia kissed Oscar." They also claim the (b) sequence seems awkward because both the information marked as given and that marked as new contain given information; both "it was on the ear" and "that Olivia kissed Oscar" have a referent in the preceding sentence. According to Clark and Haviland, intuitions of
awkwardness are evidence that cleft constructions inherently have a new-given information structure.

In three studies, Carpenter and Just monitored how quickly subjects integrated sentences with what they had already read. Like Hornby and Clark and Haviland, Carpenter and Just found that new information is expected to precede given in cleft constructions. Furthermore, Carpenter and Just's studies show that cleft constructions with a new-given information structure facilitate subjects' comprehension. For example, in one study, they examine how subjects relate the information structure of a cleft and a pseudo-cleft construction to an extralinguistic context by showing a picture of a person to the study's participants and then presenting a cleft or pseudo-cleft construction which described the position of the depicted person relative to another person.¹ The sentence either conveyed the depicted person as given or as new. Constructions which marked the person as given took less time for the participants to integrate.

As Houlette and Paige point out, another sentence with a new-given information structure is the extraposed construction in which the information following "it" is the new information, and the shifted complement, the given. Thus, the extraposed construction "It worried

¹In the pseudo-cleft construction, given information follows a wh-word and new information follows a form of the verb "to be." The pseudo-cleft construction "Who the boy led was a girl" places "who the boy led" in a given position and "X was a girl," in a new position. The pseudo-cleft construction has a given-new information structure.
Frank that I came" marks "It worried Frank" as new and marks "that I
came" as given (15). Although the extrapolated construction's information
structure has not been empirically analyzed, Houlette and Paige claim
that its information structure can be analyzed by analogy with the cleft
construction's because of their similar grammatical forms.

The distance of given information from its referent

Besides looking at the information structure of declarative
sentences, psycholinguists have examined how the proximity of given
information to its referent influences comprehension. A study conducted
by Carpenter and Just shows that the distance of given information from
its referent has a significant impact on subjects' processing time. They
constructed paragraphs which told a simple story. One of the paragraph's
sentences had given information with a referent in the topic sentence.
The distance between this target sentence and the topic sentence was
varied by inserting filler sentences between them. The paragraphs were
presented to the study's participants, who were instructed to judge
whether each sentence was consistent with something that had gone on
before. The results of the study suggest that the time readers take to
make this decision increases with the number of sentences intervening
between the target sentence and its referent.

Rather than researching how the distance of given information from
its referent influences reading time, Hupet and Le Bouedec investigated
how this proximity affects recall. Specifically, Hupet and Le Bouedec
examined how listeners integrate information from individual sentences
into complex ideas by manipulating the presentation order of seven sets of French sentences. Each set was made up of interrelated sentences which formed a complex idea. The sets of sentences were presented in three ways. In group one, the sentences were presented in logical order, so that each sentence referred to the preceding one. In group two, the sentences were presented in a mixed orderly condition: the first seven sentences of each set was presented first, followed by the second seven sentences, then by the third, and finally by the fourth seven sentences. The third order of presentation was random, so that no two sentences from the same set were presented consecutively. The sentences were presented on tape, and the study's participants were told that the sentences could be combined to form complex ideas. The participants remembered the most information from the group of sentences which were presented in a logical sequence. Thus, the findings provide further proof that the distance of a sentence's given information from its referent influences comprehension—the closer the given information is to its referent, the better the recall of the sentence.

Although he did not study how the distance of given information from its referent affected comprehension, Kieras proposes a strategy called the chunking hypothesis which explains Carpenter and Just's and Hupet and Le Bouedec's results. The chunking hypothesis is an extension of the Given-New Strategy. While the Given-New Strategy explains how readers integrate individual sentences, the chunking hypothesis explains how readers integrate paragraphs. Kieras's explanation of the chunking hypothesis follows:
As each proposition comes in, an attempt is made to integrate it by adding to the appropriate already integrated set of propositions, which as a group comprises a single chunk of information. Sentences with at least one given referent, identifying the appropriate chunk, would be processed this way. For a sentence with only new referents, this integration could not be performed, and the unintegrated proposition would have to be stored as a separate chunk, increasing the total number of chunks being held. The bad paragraph orders have many new sentences and thus entail maintaining several separate chunks for a time. In contrast, the good orders establish a single chunk at the outset and just add each subsequent proposition to this single chunk. (25)

The Given-New Contract—The Writer

Weissberg conducted a study based on the work of Danes, a Functional Sentence Perspectivist. Danes proposed three patterns of topic development for scientific writing based on the topic-comment distinction: 1) the constant topic in which each sentence topic refers to the preceding sentence topic, 2) the simple linear progression in which each sentence topic refers to the preceding sentence comment, and 3) the hypertheme in which the topic of each sentence is different but is derived from the same overriding theme.

The objective of Weissberg's study was to verify that scientific writers produced paragraphs that followed Danes's patterns of topic
development. To achieve this objective, Weissberg analyzed sixty paragraphs from published experimental research reports in agriculture, biology, and engineering. He used the cohesive devices of repetition, synonymy, pronoun reference, and summative expressions to determine whether the topic portion of the paragraphs' sentences conveyed given information.

Weissberg found that 347 of the 458 sentences analyzed contained given information in their topics. In other words, most of the sentences had a given-new information structure. He also found that forty-eight of the sixty paragraphs followed one of Danes's models or a mix of the models. Most of these paragraphs contained sentence topics which referred to information in the preceding sentence. Thus, the sentences' given information was usually located next to its referent.

However, Weissberg also found that almost one quarter of the sentences produced by the scientific writers contained new information in their topics. These sentences violated the Maxim of Antecedence which states that information marked as given must refer to information in the readers' memory. If what the sentence conveys as given is not, the sentence is more difficult for readers to comprehend because they have no cue as to which antecedent in their memory they must attach the sentence's new information.

Why did scientific writers produce a significant number of sentences which violated the Maxim of Antecedence? Weissberg explains that readers' perception of a text's cohesiveness depends as much on the
readers' knowledge and experience as it does on the distribution of given
and new information in sentences. For example, when readers cannot
recall a direct antecedent for information in the given position of a
sentence, they use their general knowledge and experience to integrate
the sentence by inferring a bridge between the information marked as
given and what they already read.

In Weissberg's words:

The high incidence of intersentential links requiring bridging
reinforces Carrell's assertion (1982) that the reader's own
background and knowledge of the subject are just as crucial to
comprehending a written text as are any surface features of
cohesion. Although cohesion has been reported to be an important
element in good writing (Witte and Faigley 1981), it should not
be assumed that students will necessarily produce readable texts
simply by scattering a certain proportion of repeated words or
anaphoric pronouns in the topic portions of their sentences
(495).

Summary

The findings of psycholinguistic research suggest that writers
produce texts perceived as cohesive 1) by placing given information
before new in declarative sentences, unless the sentences are cleft or
extraposed sentences, and 2) by writing sentences which have a referent
in the preceding sentence.
However, the implications that the psycholinguistic research discussed in the literature review have for writing have not been fully investigated. The implication that writers produce texts perceived as cohesive by following the Given-New Contract is supported by Weissberg's study. Further research of writing from different genres could confirm the implication. Also, this implication would be supported by research showing that the number of sentences which conform to the contract and the distance of the sentences' given information from its referent distinguishes essays perceived as cohesive from those perceived as less cohesive.

Another implication of psycholinguistic research that research of written communication has not investigated is whether cleft and extraposed constructions actually have a new-given information structure. Psycholinguistic research suggests writers produce such constructions, but infrequently do so because the preferred information structure of declarative sentences is given-new.

Third, psycholinguistic research suggests that writers of texts perceived as cohesive place given information next to its referent because this proximity improves comprehension. However, research has not investigated the proximity of given information to its referent in texts of more than one paragraph. For example, research has not analyzed how the first sentence of a paragraph relates to the preceding text. The first sentence of a paragraph may refer to information prior to the preceding sentence because it is often a topic sentence relating the
A good topic sentence, a one sentence summary of the paragraph's main point, acts as a signpost pointing in two directions: backward toward the thesis of the essay and forward toward the body of the paragraph" (Hacker 35).
PURPOSE OF STUDY

The purpose of this study was to determine whether writers produce compositions that readers perceive as cohesive by following the Given-New Contract. The data for the study are fifty university student compositions which were evaluated with the ESL Composition Profile (see Appendix). Because the Profile's organization score includes the descriptor cohesion, this score provided information about the evaluators' perception of the essays' cohesiveness. An excellent to very good organization score was given to twenty-six of the essays (heretofore the excellent essays). It is assumed that the raters perceived these essays to be cohesive (one characteristic of a well-organized essay). A good to average score was given to twenty-four (the good essays). The raters' perception of the cohesiveness of these essays is not known since the scoring procedure did not include listing of areas of weakness within the general category of organization.

Specifically, the study investigates whether the majority of the sentences in the excellent essays in fact follow the Given-New Contract, and whether these essays follow the contract differently than do the good essays.

The questions addressed by the study follow.

1. Did the writers of the excellent essays follow the Given-New Contract?
2. Did the authors of the excellent essays follow the Given-New Contract in ways suggested by the psycholinguistic studies cited in the literature review?
   a. How frequently did the writers produce sentences with given-new and new-given information structures?
   b. How close did the writers position given information relative to its referent? Do the first sentences of the essays' paragraphs have the same relationship to their referents as the other sentences have?

3. Did the writers of the excellent essays follow the Given-New Contract in a greater percentage of their essays' sentences than did the writers of the good essays?

4. If the authors of the excellent compositions followed the Given-New Contract in the same or fewer percentage of sentences as the authors of the good compositions, did the writers of the excellent essays position given information closer to its referent than did the other writers?
METHOD

Material

Originally, the data for this study were essays by 108 ESL writers because the study had been constructed to investigate how ESL writers follow the Given-New Contract. In addition to these essays, fifty essays by native writers of English were collected to provide a standard for how writers of English follow the contract. Both groups of essays were collected in the same manner, i.e., they were written on the topic and evaluated by the raters discussed below. However, because of a need to limit the scope of the study, only the essays by the native writers were analyzed for their information distribution. The advantages and disadvantages of using the native essays, despite the study's change in focus, is explained in "Retrospective Changes in Study."

Fifty native speakers of English enrolled in three sections of English 105, the second semester of two in Iowa State University's freshman composition program, wrote for fifty minutes about the following topic:

Suppose that there is a fire in your residence (either at ISU or at home). You have time to grab only one item (inanimate) as you run out the door. What would you take and why would you take it?
Be sure to describe the item in enough detail that the reader will understand exactly what it is. Then explain its value and significance to you.

The resulting compositions ranged from one to two pages.

The compositions were evaluated by eight ESL composition instructors, and each composition was evaluated by two raters. They used the ESL Composition Profile, a 100 point holistic scale divided into five parts: content, organization, vocabulary, language use, and mechanics. Each part is further broken down into four mastery levels: excellent to very good, good to average, fair to poor, and very poor. Each component level is characterized by descriptors which focus the evaluators' attention on aspects of composition affecting the degree to which a writer successfully communicates his message.

The ESL Composition Profile provided a way to judge the evaluators' perception of the essays' cohesiveness because the Profile's organization level contains the descriptor cohesion. Although the organization score is influenced by other descriptors, it provided a more accurate way to judge the evaluators' perception of the essays' cohesiveness than the total score which was influenced by many more characteristics of the compositions, such as content and mechanics.

The two organization scores assigned by the raters were averaged. Of the fifty compositions, twenty-six had an organization score in the excellent to very good range, and twenty-four scored good to average in organization.
Procedure

In analyzing the sentences of the fifty compositions, I followed a two-step procedure for each sentence. First, if the sentence was declarative, I identified its information structure. Although questions, imperatives, or exclamations would influence the essays' cohesiveness, non-declarative sentences were not analyzed because the research forming the basis of my analysis focused only on the declarative sentence. Second, I determined whether the information in a given position in the sentence was, in fact, given information. If it was, I noted the location of the given information's referent.

The information structure of a sentence could take one of two forms: the given-new construction or the new-given construction. The given-new construction conveys given and new information through sentence position: information preceding the predicate is marked as given, and information in the predicate is marked as new. For example:

Mary Lee/ was elected Governor by the Republican voters.
The information preceding the slash is in the given position.

The new-given construction distinguishes given information from new through its grammatical structure. It is realized as a cleft or extraposed construction.

cleft  It is Mary Lee/ who is Governor.
extraposed  It surprised Mary Lee/ that she became Governor.
The given position in these sentences follows the slash.
After identifying the information in the given position of the sentence, I then determined whether this information was given. Information was labelled as given if it explicitly referred to information in a preceding sentence, as represented by the cohesive devices discussed in Halliday and Hasan, Cohesion in English.

The first category of cohesive devices I checked for was lexical. Lexical cohesive devices take three forms: repetition, synonymy, and superordination. Repetition includes use of the same or closely related word (text/text, text/textbook). A synonym is a different word for the same referent (essay/composition). A superordinate describes a more general or specific category of the referent (text/A Tale of Two Cities, A Tale of Two Cities/text, the texts/A Tale of Two Cities, Little Women, The Once and Future King).

The second type of cohesive device I searched for was nominal substitution of "one" or "same" for the referent (one/the text). For example: "The red textbook will be used in English 419. The same will be used in English 500."

The third category I searched for was reference, which takes two forms: pronoun reference, including subject and object pronouns (it/the text), and demonstratives (this/the text), which include "this", "that", "these", "those", "there", and "then".

In addition to identifying the form of the given information, I noted the location of the given information's referent. To do this, I scanned backwards through the sentences immediately preceding the
sentence's given information. Sometimes, the sentence contained two forms of given information with separate referents or one form of given information with two referents. In both cases, I chose the referent closest to the given information. Although such sentences had two referents, the sentences' relationship to their referents was not ambiguous, i.e., the sentences did not violate the Given-New Contract. Sentences with ambiguous reference would not have been counted as following the Given-New Contract.

If the sentence did not contain given information in a position predicted by the contract, the sentence violated the Given-New Contract's Maxim of Antecedence which states that information marked as given should refer to information readers had previously acquired from the text.

After completing the two-step procedure for each sentence, I recorded: 1) whether the sentence was a new-given construction, a given-new construction, or a violation of the Maxim of Antecedence, and 2) whether the given information's referent was located in the preceding sentence, within the paragraph, or outside of the paragraph. These locations were selected, in part, from Weissberg who analyzed the relationship of given information to its referent within paragraphs and found that given information usually referred to the topic sentence or the preceding sentence. Instead of paragraphs, compositions were analyzed in this study, so the possible locations for referents were expanded.
The steps for analyzing how a sentence follows the Given-New Contract may be easier to understand through a brief illustration. The following paragraph was taken from an excellent composition.

(1) Should a fire rage through my home, the one thing that would be saved is the quilt covering my bed. (2) This quilt was handstitched by my grandmother who is seventy-nine. (3) By hand-stitching, I don't mean topstitching. (4) No sewing machine touched any part of the quilt. (5) Because of this, she labored over the quilt for a year-and-a-half.

The first sentence of the paragraph conveys only new information because it has no linguistic context and so does not have a referent. In my study, the opening sentences of the compositions were not analyzed.

Sentence two is a given-new construction. It is also a passive sentence, so the object "this quilt" is marked as given information, while "X was handstitched by my grandmother who is seventy-nine" is marked as new. The information marked as given is given information: "this quilt" repeats "the quilt" in line one. The referent for the given information is located in the preceding sentence.

Sentence three is also a given-new construction. "By handstitching, I" is marked as given, and "X don't mean topstitching" is marked as new. The given information in sentence three is located in the adverbial: "handstitching" repeats "handstitched" in the preceding sentence.

Sentence four is a violation of the Maxim of Antecedence. Its information structure is that of the given-new construction: "no sewing
machine" is marked as given, and "X touched any part of the quilt" is marked as new. However, the information marked as given has no referent within the text, so to process this sentence, readers must infer that topstitching is done by a sewing machine.

Like sentences two and three, sentence five is a given-new construction: "Because of this, she" is marked as given, and "X labored over the quilt for a year-and-a-half" as new. The information in the given position contains two forms of given information. The demonstrative "this" refers to the entire preceding sentence "No sewing machine touched any part of this quilt," and the pronoun "she" refers to "grandmother" in sentence two. The referent for "this" is closer, so the referent location for the given information in sentence five is the preceding sentence.

Data Analysis

After I analyzed each composition, I tallied 1) the number of sentences following the Given-New Contract, 2) the number of given-new and new-given constructions, and 3) the locations of the declarative sentences' referents.

In each of the twenty-six excellent essays, I calculated the percentage of sentences following the Given-New Contract based on the number of declarative sentences (excluding the opening sentence). The twenty-six percentages were averaged to determine the mean percentage of sentences following the contract in the excellent essays. Then, for each excellent essay, I calculated the percentage of given-new and new-given
constructions in the sentences following the Given-New Contract. The mean percentage for all twenty-six essays was calculated to learn the frequency with which both constructions appeared in these compositions. Also, and for each excellent essay, I calculated the percentage of each of the three referent locations. The mean three percentages were then calculated to determine how close the sentences' given information were to their referents. Also, the mean percentage of the referent locations for the given information in paragraphs' first sentences and for the given information in the other declarative sentences were calculated to determine if the paragraphs' first sentences differed from the other declarative sentences in this respect.

In each of the twenty-four good essays, I also determined the percentage of sentences following in the Given-New Contract and the percentage of referent locations. These percentages were also averaged to determine the mean percentage of sentences following the Given-New Contract and the mean percentage of each of the three referent locations. These means were compared through t-tests to those of the essays rated higher in organization to determine 1) whether the authors of the good essays followed the contract as frequently as writers of the excellent essays, and 2) if so, whether the authors of the good essays followed the contract in the same way as the authors of the other essays.
RESULTS AND CONCLUSIONS

The study's findings follow and, where applicable, are related to those of other research.

Findings

1. Did the writers of the excellent essays follow the Given-New Contract?

The average percentage of declarative sentences in the twenty-six excellent essays was 98.5%; the other 1.5% were questions, imperatives, or exclamations.

The average percentage of declarative sentences which had given information in a position predicted by the contract was 82%, while the average percentage which did not was 18%. The range of sentences which followed the contract in the essays is illustrated by the following Box and Whisker diagram, a method for summarizing data which provides information about the center and spread of data and is resistant to the presence of outlying data values.
Figure 1. Box and Whisker diagram illustrating range of percentages for sentences following the Given-New Contract in excellent essays.
The box in a Box and Whisker diagram represents the middle 50% of the data values measured: the box's center line indicates the median value of the sample, the bottom line indicates the median of the lower half of the sample, and the top line represents the median of the upper half. Thus, the box in figure 1 shows 1) that the median percentage of declarative sentences which followed the contract in an essay was 84%, and 2) that in 50% of the essays, 73% to 92% of the declarative sentences had given information in a position predicted by the contract.

The "whiskers" (lines extending from the box) in a Box and Whisker diagram represent the most extreme data values of a sample. So the lowest percentage of declarative sentences which followed the contract in the essays was 43%, and the highest percentage was 100%.

As the box and whiskers in figure 1 illustrate, the study's findings, in general, support Clark and Haviland's claim that writers follow the Given-New Contract.

The findings that 18% of the analyzed sentences did not conform to the contract shows that the essays were rated high in organization even though they contained sentences which would take longer to comprehend because they were not explicitly linked to other sentences through their information structure. For example, readers of the following sentences must perceive the figurative link between "special moments captured by a camera" and "pictures."

One important item that could never be replaced was the small photo album that had a few pictures of those who are very dear to me. Special moments captured by a camera could never be replaced.
The finding supports Carrell's assertion that readers comprehend a text through their knowledge of the text's subject, as well as through the text's cohesive features (quoted in Weissberg 495).

2. Did the authors of the excellent essays follow the Given-New Contract in ways suggested by the psycholinguistic studies cited in the literature review?

a. How frequently did the writers produce sentences with given-new and new-given information structures?

The percentage of given-new and new-given information structures in each of the excellent essays was calculated from the number of sentences following the contract. The average percentage of sentences with a given-new information structure in the excellent essays was 99.1%, and the average percent of sentences with a new-given information structure was .9%. This finding, like those of psycholinguistic research, suggest that the given-new information structure is the preferred information structure of declarative sentences.

The .9% of the sentences which had a new-given information structure was made up of two cleft and two extraposed constructions. Excluded from these sentences were one cleft and one extraposed sentence which were considered given-new constructions because they were introduced by a clause containing given information. For example, the following cleft construction, which begins a new paragraph in the composition it was taken from, has the given information "I" and "jewelry" in its given position and in its introductory clause.
1) Each of these gifts [of jewelry] means a lot to me, and each of these gifts are housed in my silver jewelry box. 2) Although I do love jewelry, it would not be the actual items that I would miss most if fire were to take them.

b. How close did the writers position given information relative to its referent? Do the first sentences of the essays' paragraphs have the same relationship to their referents as the other sentences have?

The average percentage of sentences with a referent in the preceding sentence was 80%, within the paragraph was 14%, and outside the paragraph was 6%. The findings show that the majority of sentences were located next to their referents. Such proximity aided comprehension in studies conducted by Hupet and Le Bouedec, who found that recall was improved when a sentence's given information was located next to its referent, and Carpenter and Just, who found that the closer a sentence's given information was to its referent, the faster readers comprehended the sentence.

Even the sentences which referred to information prior to the preceding sentence indicated that the writers were more likely to place a sentence's given information close to its referent rather than far from it. Of the sentences which referred to information within the paragraph, 71% had a referent located three sentences away, 17% had a referent located three sentences away, and only 12% referred to information four or more sentences away. Also, of the sentences which referred to information outside the paragraph, 76% had a referent in the preceding paragraph. 22% had a referent located two paragraphs away, and the remaining 2% had a referent located three paragraphs away.
Like the other sentences following the contract, the first sentence of the essays' paragraphs usually referred to information in the preceding sentence, as is shown in Table 1.

Table 1. Percentage of referent locations for given information in paragraphs' first sentences and in other sentences

<table>
<thead>
<tr>
<th>Location of Given Information</th>
<th>Location of Referent</th>
<th>Location of Referent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Preceding Sentence</td>
<td>Prior to Preceding Sentence</td>
</tr>
<tr>
<td>Initial Sentence of Paragraphs</td>
<td>59</td>
<td>41</td>
</tr>
<tr>
<td>Other Sentences</td>
<td>85</td>
<td>15</td>
</tr>
</tbody>
</table>

More importantly, the table shows that nearly three times as many of the paragraph's first sentences had a referent located beyond the preceding sentence as the other declarative sentences. This result may be explained by the traditional function of the initial sentence of a paragraph: to relate the paragraph's topic not only to the preceding sentences, but also to the subject of the entire text.

Approximately the same percentage of the paragraphs' first sentences and of the other declarative sentences did not follow the contract: 16% of the paragraphs' initial sentences and 18% of the other sentences. Unlike other sentences, a paragraph's first sentence probably violates the contract because it traditionally introduces a new topic.
3. Did writers of the excellent essays follow the Given-New Contract in a greater percentage of their essays' sentences than did the writers of the good essays?

As already mentioned, the number of sentences following the contract in each essay was derived from the number of declarative sentences. Non-declarative sentences (questions, imperatives, and exclamations) were not analyzed. The percentage of non-declarative sentences probably did not distinguish essays rated high in organization from those rated lower, for a low mean percentage of non-declarative sentences occurred in both levels of essays: 1.5% in the excellent essays and 4% in the good essays.

The percentage of declarative sentences which conformed to the Given-New Contract in the two groups of essays was compared through the t-test, a statistical test for the comparison of two means (see Table 2).

Table 2. Results of t-tests comparing mean percentages of declarative sentences following the Given-New Contract

<table>
<thead>
<tr>
<th>Organization Score</th>
<th>Number of Essays</th>
<th>Mean % of Sentences Following Given-New Contract</th>
<th>Standard Deviation</th>
<th>Pooled Variance</th>
<th>T-value</th>
<th>D.F.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent to Very Good</td>
<td>26</td>
<td>.8208</td>
<td>.141</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good to Average</td>
<td>24</td>
<td>.8629</td>
<td>.091</td>
<td></td>
<td>-1.43</td>
<td>48</td>
<td>.159</td>
</tr>
</tbody>
</table>
As the table shows, the authors of essays with the higher organization score followed the Given-New Contract less frequently than those with the lower organization score. However, the t-test results indicate there is no significant difference in the frequency with which the two groups of writers followed the contract.

This conclusion is further supported by the following Box and Whisker diagrams. The extreme range of the percentages of sentences following the Given-New Contract, illustrated by the whiskers, is wider for the excellent essays: 43% to 100% of the sentences in the excellent essays versus 67% to 100% of those in the good. Yet as the boxes illustrate, a similar percentage of sentences in the middle 50% of the excellent and good essays followed the contract: 73% to 92% of the sentences in the majority of excellent essays and 80 to 92% of those in the majority of the good. The median percentage of sentences following the contract, represented by the center lines of the boxes, are also similar in the two levels of essays: 84% in the excellent essays and 88% in the good.

4. If the authors of the excellent compositions followed the Given-New Contract in the same or fewer percentage of sentences as the authors of the good compositions, did the writers of the excellent essays position given information closer to its referent than did the other writers?

The t-test was also used to compare how the two groups of writers followed the Given-New Contract. Specifically, the t-test compared the
Figure 2. Box and Whisker diagram illustrating range of percentages for sentences following the Given-New Contract in good and excellent essays.
frequency with which the writers produced sentences with a referent in
the preceding sentence (Table 3), not within the preceding sentence but
within the paragraph (Table 4), and outside of the paragraph (Table 5).

Table 3. Results of t-tests comparing the mean percentages of
declarative sentences with referent in preceding sentence

<table>
<thead>
<tr>
<th>Organization Score</th>
<th>Number of Essays</th>
<th>Mean % of Sentences With Referent in Preceding Sentence</th>
<th>Standard Deviation</th>
<th>Pooled Variance</th>
<th>2-tail T-value</th>
<th>D.F.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent to Very Good</td>
<td>26</td>
<td>.7958</td>
<td>.148</td>
<td>- .34</td>
<td>48</td>
<td>.738</td>
<td></td>
</tr>
<tr>
<td>Good to Average</td>
<td>24</td>
<td>.8087</td>
<td>.120</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As the means in Table 3 indicate, the majority of sentences in both
levels of essays referred to information in the preceding sentence. T-
tests of the means show that there was no significant difference in the
percentage of sentences with a referent in the preceding sentence.

Far fewer of the sentences in both groups of essays had a referent
not within the preceding sentence but within the paragraph, as Table 4
shows.

The t-test of the means reported in Table 4 shows that there was no
significant difference in the percentage of sentences with a referent
within the paragraph for the two levels of essays.
Table 4. Results of t-tests comparing mean percentages of declarative sentences with referent within paragraph

<table>
<thead>
<tr>
<th>Organization Score</th>
<th>Number of Essays</th>
<th>Mean % of Sentences with Referent Within Paragraph</th>
<th>Standard Deviation</th>
<th>Pooled Variance</th>
<th>T-value</th>
<th>D.F.</th>
<th>2-tail Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent to Very Good</td>
<td>26</td>
<td>.1438</td>
<td>.201</td>
<td>1.21</td>
<td>48</td>
<td>.232</td>
<td></td>
</tr>
<tr>
<td>Good to Average</td>
<td>24</td>
<td>.09</td>
<td>.087</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Likewise, between the essay levels, there was no difference in the percentage of sentences with a referent outside the paragraph. As Table 5 indicates, very few sentences in both groups of essays referred to information outside the paragraph.

Table 5. Results of t-tests comparing mean percentages of declarative sentences with a referent outside paragraph

<table>
<thead>
<tr>
<th>Organization Score</th>
<th>Number of Essays</th>
<th>Mean % of Sentences with Referent Outside Paragraph</th>
<th>Standard Deviation</th>
<th>Pooled Variance</th>
<th>T-value</th>
<th>D.F.</th>
<th>2-tail Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent to Very Good</td>
<td>26</td>
<td>.0604</td>
<td>.189</td>
<td>-.97</td>
<td>48</td>
<td>.336</td>
<td></td>
</tr>
<tr>
<td>Good to Average</td>
<td>24</td>
<td>.1013</td>
<td>.084</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The significance of the results reported in the three preceding tables is that they show that the authors of essays rated excellent to very good did not position given information closer to its referent than did the authors of essays with the lower organization score.

Discussion of Findings

The study's findings support Clark and Haviland's theory and suggest that writers, in general, follow the Given-New Contract in ways suggested by psycholinguistic research discussed in the literature review. Specifically, the study found that the authors of essays rated excellent to very good in organization placed given information in a position predicted by the contract in the majority of the sentences they produced. Most of these sentences had given information in their initial position, and very few had given information in their final position. Also, referents of sentences which conformed to the contract, including the initial sentence of paragraphs, were most frequently located in the immediately preceding sentence.

These findings might suggest that the raters perceived these essays as cohesive because the writers followed the Given-New Contract. However, this implication is contradicted by the results of t-tests which showed there was no difference in the percentage of sentences which conformed to the contract and the proximity of the sentences' given information to its referent in essays rated excellent to very good in organization and essays rated good to average in organization. These
results imply that the distribution of given information in the essays had no direct influence on the essays' organization scores.

One reason that the essays' organization scores were not affected by the way the writers followed the contract may be that the organization score is influenced by other descriptors, such as expression, clearness of ideas, support for ideas, succinctness, and logical sequencing. Although cohesion is also a descriptor, it may not have been the descriptor responsible for lowering the essays' organization scores.

Another reason could be that writers of all ability levels regularly follow the Given-New Contract. In the study, fifty writers of essays ranked in two organization levels placed given information in a position predicted by the contract in the majority of their essays' sentences, with the exceptions of an essay in which 43% of the sentences conformed to the contract and another in which 50% conformed to the contract. Although the analyzed essays all received relatively high organization scores, the percent of sentences following the contract in these essays might have been similar to the percent in essays rated even lower in organization, had such essays been analyzed. Consequently, if all writers naturally follow the contract, the percentage of sentences following the contract in essays would have no impact on evaluation.

A third reason may be that evaluators considered the essays' coherence, rather than the essays' cohesion, when they rated the essays' organization. According to Witte and Faigley, who analyzed the cohesiveness of essays rated high and low in overall quality, coherence differs
from cohesion in the following way: "Cohesion defines those mechanisms that hold a text together, while coherence defines those underlying semantic relations that allow a text to be understood and used" (202).

Witte and Faigley describe a coherent text as one that fits its context—that meets the demands of subject matter, occasion, medium, and audience (202).

Coherence and cohesion seem to have a cause and effect relationship: a coherent text may be considered cohesive even if it does not contain cohesive links, as is demonstrated by the following example from an essay rated excellent to very good in organization:

Whenever I've had a bad day of classes, come back from a test with an overwhelming desire to drop out of school, or had to spend a rainy day inside watching television, I usually pack up my ball and shoes and head for the gym or park. Shooting baskets gives me a feeling of easiness.

"Shooting baskets" does not explicitly refer to the preceding sentence, but readers will perceive a relationship between the sentences because they will infer that the ball the author packed was a basketball which would be used to shoot baskets.

The cause and effect relationship between coherence and cohesion seems to be one-way because a text containing sentences linked by given information may not be regarded as cohesive if the text is not coherent. This relationship is illustrated by the following example from an essay rated good to average in organization which discusses reasons why the
author would save computer programs from a fire. Given information in the paragraph is underlined.

1) The programs represent all the time and effort that I had spent in writing them. 2) I may not gain the same insight to a problem at two o'clock in the morning. 3) That idea intrigued me and brought on a host of other ideas. 4) If lost, I would have to waste time in backtracking and redeveloping all that I already accomplished.

Although the paragraph follows the Given-New Contract, it is not coherent because its focus becomes less clear with each sentence. From sentence one to sentence two, the focus shifts from writing programs to problems, presumably with writing programs. Sentence three shifts the readers' perspective from the topic of the paragraph to the writing process of the author, who is considering further reasons for saving the programs from a fire. In sentence four, the focus shifts back to the topic of the paragraph; however, the erroneous relationship between the adverbial and the sentence subject further interferes with the paragraph's coherence. The lack of coherence makes the paragraph seem incohesive, despite the fact that the sentences are linked by given information. The two preceding examples suggest that coherence may have influenced the organization scores of the essays in the study more than cohesion.
Teaching Implications

The chief implication the study's findings have for teaching students to follow the Given-New Contract is that instructors should not expect that such instruction will enable students to produce texts which readers will regard as cohesive. As explained in the discussion of the findings, essays containing sentences linked by the Given-New Contract may not seem cohesive, while essays violating the contract may.

In fact, the findings suggest that instructors may not want to teach students to follow the contract until research conclusively proves what writers need instruction in how to follow it. If writers naturally place given information in a position predicted by the contract and by psycholinguistic research, then instruction in the Given-New Contract may not be the best use of class time.

If instructors do wish to teach students to follow the Given-New Contract, it must be emphasized that following the contract is secondary to producing a coherent text, as Witte and Faigley point out.

... coherence conditions--conditions governed by the writer's purpose, the audience's knowledge and expectations, and the information to be conveyed--militate against prescriptive approaches to the teaching of writing. ... Just as exclusive focus on syntax and other formal surface features in writing instruction probably will not better the overall quality of college students' writing, neither will a narrow emphasis on cohesion probably produce significantly improved writing. (202)
Moreover, as suggested by Holloway, student writers will have difficulty following the contract if they are unable to follow coherence conditions.

Once one determines a controlling idea, focus, or method of developing a paragraph, that purpose should guide our choice of sentence structure and many of the words we build into that structure. How often have we recognized that a student with a fuzzy idea about his or her controlling idea for an essay writes in vague or fuzzy sentences, too? Once we have worked out a clear thesis statement with that student, the rest of the paper, its pattern of development and its individual sentences fall into place. This is because the student now has a clear idea of a theme and focus; and that he or she now recognizes more easily what is the old and what is the new information that is to be presented in each sentence. (210)

As this excerpt suggests, instruction in the Given-New Contract, or any instruction in cohesion, must be presented with instruction in how to produce coherent texts.

Suggestions for Further Research

One suggestion for further research results from a shortcoming of my study, which is that the organization score on the ESL Composition Profile provided evidence of the evaluators' perception of the essays' cohesiveness. Although the organization score was the closest indicator
of cohesion on the Profile, the score was not an ideal indicator because it was influenced by other factors, such as expression and clarity of ideas. This shortcoming could be overcome if the essays in another study were rated only for their cohesiveness.

Also, further research could investigate how writers of essays written in the third person follow the contract. In this study, the topic for the essays required students to write about an object they would take if there was a fire in their home. Most of the students wrote essays in the first person, and, consequently, "I" was the given information in many of the sentences in the essays, as is demonstrated by the following paragraph from an essay rated excellent to very good in organization (Given information is underlined).

The smoke creeping under my bedroom door awakened me. As my mind became clearer, I realized what was happening. Slowly opening the door, I looked outside. I opened the closet door, and I filled my arms with as many of the boxes as I could, until finally there were no more. I raced outside with my treasure, boxes and boxes of slide and print photographs.

If the essays' topic had required students to write in the third person, the given information in the essays' sentences might have shown that what given information refers to has a greater impact on evaluators' perception of an essay's cohesiveness than how close given information is to its referent. Such a finding is suggested by a study conducted by Witte and Paigley, who investigated how Halliday and Hasan's taxonomy of
cohesive ties were used by writers of essays rated high and low in overall quality. Witte and Faigley found that better writers use cohesive devices to elaborate and extend a topic, while poorer writers repeatedly use the same cohesive information and so less frequently develop essay topics. Similar findings might be discovered in a study investigating how writers follow the Given-New Contract.

Another suggestion for further research into the Given-New Contract is to analyze essays with a wider range of scores. Perhaps my study would have found that writers of different ability levels followed the contract differently if the study had compared essays rated below average in organization with essays above average, rather than comparing two levels of essays rated from average to above average.

Retrospective Changes in Study

When I learned of the Given-New Contract in an advanced communications course, I wanted to make it the subject of my master's thesis. Originally, I wanted to compare how ESL writers of essays rated high in cohesion followed the Given-New Contract with how ESL writers of essays rated lower followed it. To do this, I collected 108 ESL compositions that ESL instructors rated using the ESL Composition Profile (see Appendix). In addition to these compositions, I collected 50 compositions written by native speakers of English. These were also evaluated by the ESL instructors. The reason I included the native compositions in my study was that I wanted a standard of comparison for ESL compositions.
I believed the native compositions would provide a norm for how these students follow the contract. This norm had to be established because so little research focuses on how writers follow the contract.

When I began to analyze my data, I found that my research was complicated because I was addressing not one research question but two: 1) Do ESL writers of essays rated high in cohesion follow the Given-New Contract differently than ESL writers of essays rated low in cohesion? and 2) Do native writers follow the Given-New Contract? To simplify my analysis, I addressed only the second question in the study because it seemed the logical first step to investigating how ESL writers follow the contract.

The data I used in the study were the 50 native compositions I collected for my original research question. The data were appropriate for my study's new focus for several reasons. First, the essays were expository compositions, a form of writing that the intended audience for the thesis, composition instructors, would find pertinent to their instruction. Second, the essays were written by students in a freshman composition course. How these writers follow the Given-New Contract would be of particular interest to ESL composition instructors because these are who ESL students are compared with in required composition courses. Third, if the essays showed that native writers followed the Given-New Contract, the essays would provide the basis for future research of my original question. In this case, I would be able to use the 108 ESL compositions I collected.
These reasons defend my selection of data. But, in retrospect, I believe there were some problems with the choice. One problem, already mentioned, was that the organization score on the ESL Composition Profile is influenced by descriptors other than cohesion, so this score was not the best indicator of the evaluators' perception of the essays' cohesiveness.

Another problem was that the organization scores for the essays may have been higher than they deserved. While the evaluators did not know the name or nationality of the authors of the essays they were rating, they may have overrated the native essays because they compared favorably in terms of language use and fluency with ESL compositions. This conclusion is supported by the large number of essays that received an excellent to very good rating in organization.

A third problem with the data was the number of essays: 50 essays was a small sample. A larger sample would yield results with more validity.

So, if I conducted the study again, I would try to eliminate the present study's problems by 1) giving only native compositions to the evaluators, 2) asking the evaluators to rate the essays for cohesion only, and 3) analyzing a greater number of essays.

Despite the shortcomings of the study, it was worthwhile because it is one of the first studies which investigates how writers follow the Given-New Contract and because it found no significant differences in the following of the Given-New Contract between essays rated differently in
organization. This finding suggests that further research of composition should investigate the Given-New Contract before further composition pedagogy is based on the theory.
WORKS CITED


Vol. 1.


ACKNOWLEDGEMENTS

I would like to express my gratitude to those who helped make the completion of this thesis possible. First of all, the Human Subjects Review Committee must be thanked for human subjects certification, which permitted my analysis of the study's data. Second, my committee members are to be recognized for their advice: Dr. Helen Ewald and Dr. Charles Glatz. Dr. Roberta Abraham, my major professor, deserves special thanks. Also, I would like to thank a former committee member, Dr. Thomas Wheelock, for his help with constructing the study. Third, I would like to thank Dr. Fred Lorenz for his help with the statistical analysis. Fourth, Dr. Thomas Kent deserves thanks for his explanation of several points in his article "Paragraph Production and the Given-New Contract." Also, Dean Martens must be thanked for the use of his computer, and Judith Jarboe for typing my thesis. Finally, I would like to thank several people for their support: Kevin Carpenter; Erick Hovey; my parents, Mary Lee and Louis Hostert; and my family.
APPENDIX

(Jacobs et al. 30)
## ESL COMPOSITION PROFILE

<table>
<thead>
<tr>
<th>SCORE</th>
<th>LEVEL</th>
<th>CRITERIA</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-27</td>
<td>EXCELLENT TO VERY GOOD:</td>
<td>knowledgeable + substantive + thorough</td>
<td>development of thesis + relevant to assigned topic</td>
</tr>
<tr>
<td>26-22</td>
<td>GOOD TO AVERAGE:</td>
<td>some knowledge of subject + adequate range +</td>
<td>limited development of thesis + mostly relevant to topic, but lacks detail</td>
</tr>
<tr>
<td>21-17</td>
<td>FAIR TO POOR:</td>
<td>limited knowledge of subject + little substance + inadequate</td>
<td>development of topic</td>
</tr>
<tr>
<td>16-13</td>
<td>VERY POOR:</td>
<td>does not show knowledge of subject + non-substantive + not pertinent + OR not enough to evaluate</td>
<td></td>
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</tbody>
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<table>
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<tr>
<th>CONTENT</th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>20-18</td>
<td>EXCELLENT TO VERY GOOD:</td>
<td>fluent expression + ideas clearly stated/</td>
<td>supported + succinct + well-organized + logical sequencing + cohesive</td>
</tr>
<tr>
<td>17-14</td>
<td>GOOD TO AVERAGE:</td>
<td>somewhat choppy + loosely organized but main</td>
<td>ideas stand out + limited support + logical but incomplete sequencing</td>
</tr>
<tr>
<td>13-10</td>
<td>FAIR TO POOR:</td>
<td>non-fluent + ideas confused or disconnected + lacks</td>
<td>logical sequencing and development</td>
</tr>
<tr>
<td>9-7</td>
<td>VERY POOR:</td>
<td>does not communicate + no organization + OR not enough</td>
<td>to evaluate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th></th>
<th></th>
<th></th>
</tr>
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<tbody>
<tr>
<td>20-18</td>
<td>EXCELLENT TO VERY GOOD:</td>
<td>sophisticated range + effective word/idiom</td>
<td>choice and usage + word form mastery + appropriate register</td>
</tr>
<tr>
<td>17-14</td>
<td>GOOD TO AVERAGE:</td>
<td>adequate range + occasional errors of word/idiom</td>
<td>form, choice, usage but meaning not obscured</td>
</tr>
<tr>
<td>13-10</td>
<td>FAIR TO POOR:</td>
<td>limited range + frequent errors of word/idiom</td>
<td>form, choice, usage = meaning confused or obscured</td>
</tr>
<tr>
<td>9-7</td>
<td>VERY POOR:</td>
<td>essentially translation + little knowledge of English vocabulary, idioms, word form + OR not enough to evaluate</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VOCABULARY</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>25-22</td>
<td>EXCELLENT TO VERY GOOD:</td>
<td>effective complex constructions + few errors</td>
<td>of agreement, tense, number, word order/function, articles, pronouns, prepositions</td>
</tr>
<tr>
<td>21-18</td>
<td>GOOD TO AVERAGE:</td>
<td>effective but simple constructions + minor problems</td>
<td>in complex constructions + several errors of agreement, tense, number, word order/function, articles, pronouns, prepositions but meaning not obscured</td>
</tr>
<tr>
<td>17-11</td>
<td>FAIR TO POOR:</td>
<td>major problems in simple/complex constructions +</td>
<td>frequent errors of negation, agreement, tense, number, word order/function, articles, pronouns, prepositions and/or fragments, run-ons, deletions</td>
</tr>
<tr>
<td>10-5</td>
<td>VERY POOR:</td>
<td>virtually no mastery of sentence construction rules + dominated</td>
<td>by errors + does not communicate + OR not enough to evaluate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LANGUAGE USE</th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>EXCELLENT TO VERY GOOD:</td>
<td>demonstrates mastery of conventions +</td>
<td>few errors of spelling, punctuation, capitalization, paragraphing</td>
</tr>
<tr>
<td>4</td>
<td>GOOD TO AVERAGE:</td>
<td>occasional errors of spelling, punctuation, capitalization,</td>
<td>paragraphing but meaning not obscured</td>
</tr>
<tr>
<td>3</td>
<td>FAIR TO POOR:</td>
<td>frequent errors of spelling, punctuation, capitalization,</td>
<td>paragraphing + poor handwriting + meaning confused or obscured</td>
</tr>
<tr>
<td>2</td>
<td>VERY POOR:</td>
<td>no mastery of conventions + dominated by errors of spelling,</td>
<td>punctuation, capitalization, paragraphing + handwriting illegible + OR not enough to evaluate</td>
</tr>
</tbody>
</table>

| TOTAL SCORE | READER | COMMENTS |