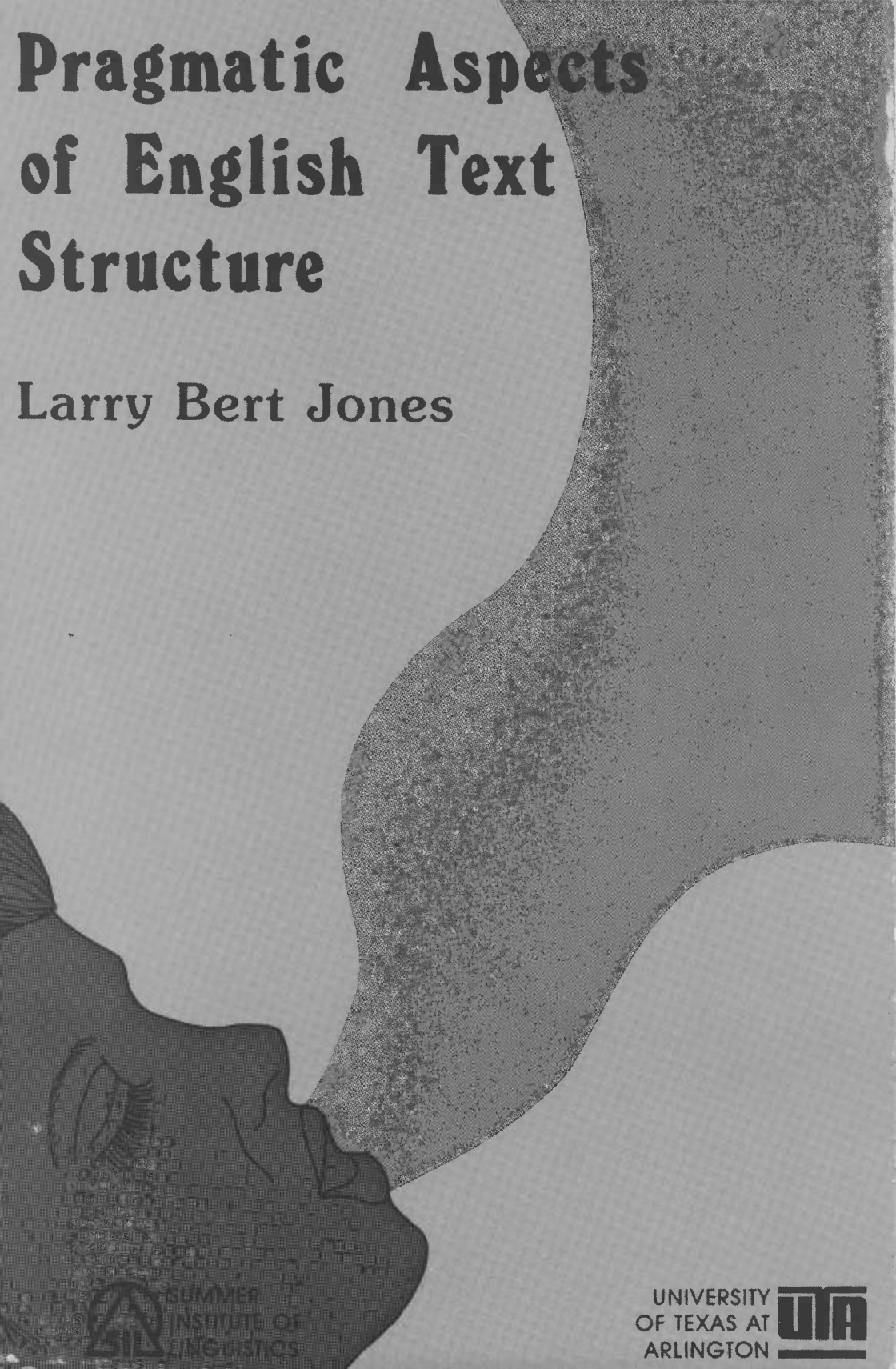
Pragmatic Aspects of English Text Structure

Larry Bert Jones



SUMMER INSTITUTE OF LINGUISTICS

UNIVERSITY OF TEXAS AT ARLINGTON

[blank]

PRAGMATIC ASPECTS
OF
ENGLISH TEXT STRUCTURE

SUMMER INSTITUTE OF LINGUISTICS

PUBLICATIONS IN LINGUISTICS

Publication Number 67

PRAGMATIC ASPECTS

OF

ENGLISH TEXT STRUCTURE

Larry Bert Jones

A PUBLICATION OF
THE SUMMER INSTITUTE OF LINGUISTICS
and
THE UNIVERSITY OF TEXAS AT ARLINGTON

1983

ISBN 0-88312-088-7
Library of Congress Catalog Card No. 82-62052

Cover design by Cheryl Bendele

Copies of this publication and other publications of the Summer Institute of Linguistics may be obtained from

Bookstore
Summer Institute of Linguistics
7500 W. Camp Wisdom Rd.
Dallas, TX 75236

Contents

List of Figures

Foreword

In any discourse the speaker/author makes assumptions, consciously or subconsciously, about the knowledge of the hearer/reader. These assumptions and their relation to discourse are a focus of current investigation and theorizing. But has theorizing regarding the structure of human knowledge matured to the point where, confronted with a given discourse, a text analyst can have a reasonable assurance that he has reconstructed the assumptions of the speaker/author? While this volume does not explicitly raise this question, it implies it and gives it an affirmative answer.

Aside from some preliminary matters in the Introduction and in Chapter 1, the meat of the book is found in chapters 2 through 4. Here Jones attempts to refine and extend the use of the "frame" as a basic unit in the structure of a person's knowledge, then puts frame and kindred notions to work in the analysis of text. Fortunately Jones does not assume overmuch regarding his "reader's foregrounded frame" in regard to this subject. Rather, he provides many examples to illustrate his analysis.

In general this volume is a contribution to the *pragmatics* of discourse, i.e., the study of the communication situation and relations between speaker/author and hearer/reader. As such, this volume should be of value to editors, speech writers, teachers of rhetoric and composition, and the like. Furthermore the author believes that it "could have a significant impact on the philological interpretation of various texts," such as ancient Greek medical writings and medieval literature.

Virgil L. Poulter
University of Texas at Arlington

Robert E. Longacre
Summer Institute of Linguistics and University of Texas at Arlington

[blank]

Acknowledgments

In the production of any work of this type, one incurs many debts of gratitude, far more than can be adequately recognized and repaid in the acknowledgments. Those persons mentioned have had an effect both direct and prominent on the shape of this study. I trust that those not explicitly mentioned, whose contributions I also highly value, will accept here my deep thanks for their help.

I am grateful to those who gave permission to quote portions of their works in this study: to Ann Ayre, of the National Cancer Cytology Center for an excerpt from one of her letters (pp. 82, 110); to St. Martin's Press for an extended excerpt from E. D. Phillips' *Aspects of Greek Medicine* (pp. 63, 84, 86, 93, 95, 100–1, 102, 107); to W. L. Freeman and Company for quotations from two *Scientific American* articles—"Land-based Intercontinental Ballistic Missiles" by Bernard T. Feld and Kosta Tsipis (pp. 84, 96–97, 104) and "Primeval Galaxies" by David L. Meier and Rashid A. Sunyaev (pp. 91, 95, 105–6, 108, 111); to Hill & Wang, Inc. (a division of Farrar, Straus & Giroux, Inc.), for material from the revised edition of *Jonathan Edwards,* edited by Clarence Faust and Thomas H. Johnson (pp. 81, 86, 94, 96, 99–100, 107); and to C. Shannon Morgan and the Society of Biblical Literature for Morgan's entire article, "When Abiathar Was High Priest (Mark 2:26)" (pp. 126–28), which originally appeared in the *Journal of Biblical Literature.*

I wish to thank Kenneth Pike, Stephen Wallace, Marvin Mayers, Lenore Langsdorf, and Calvin Rensch, professors at the University of Texas at Arlington, for their careful criticism and commentary on drafts of the manuscript. Their suggestions have been helpful and have enabled me at many points to improve the overall quality of this study.

I extend my deep appreciation to Professor Robert Longacre of the University of Texas at Arlington for his constant encouragement and advice throughout my graduate student years. His life, as a scholar and as a personal friend, has been exemplary to me of that integration of great intellect and spiritual and moral commitment which is highly

esteemed, but rarely attained. His investment of time, thought, and care in my development as a scholar is deeply appreciated.

I cannot express enough my gratitude for the helpful comments, faithful, accurate typing, patient proofreading, and tireless errand-running of my wife, Linda. Without her love, encouragement, and innumerable personal and professional sacrifices, this study would not have been possible. The study is rightly, deservedly, and happily dedicated to her.

Finally, heartfelt thanks are extended to my family and friends who prayed for the completion of this work, and to the One who answered their prayers. The work, from start to finish, has depended on their faithfulness, and His.

April 7, 1980

Introduction

0.1 Situation as It Affects Communication

This is a study of some of the effects of the communication situation on written English discourse. I call those aspects of English discourse which are in some way affected by the communication situation the *pragmatic aspects* of English text structure.[1]

That the situational context of an utterance often affects aspects of its form and content was something most of us probably learned as young children. For example, children who are trained to address adults as *Sir, Ma'am, Mr. X,* and *Mrs. Y,* or to discuss certain private, family matters only at home are actually learning that the style and content of utterances should be influenced by the communication situation.

In the adaptation of a person's speech patterns to the communicative context both the semantic content and the grammatical structure of an utterance may be affected. Thus, knowing what sort of topics are appropriate to conversation in an after-church coffee hour, or choosing one's words carefully when speaking to a touchy boss could be examples of adapting the semantic content of an utterance to the communication situation. On the other hand, the employment of a construction like *the girl to whom I'm married* in formal contexts versus *the girl I'm married to* in informal contexts is an example of the adjustment of grammatical structure in keeping with the communication situation.

This study focuses on one dimension of the communication situation, the message-sender's assumptions regarding the message-receiver, and examines the effects of these assumptions on the grammatical and semantic structure of English written texts.

0.2 On the Nature of Assumptions in Communication

Human communication depends on assumption making. If people were not able to make assumptions regarding those to whom they speak, almost any attempt at communication would quickly break

down into a shambles. Without the use of assumptions, most messages would be so laden with prefacing material, functioning to make explicit all of the cultural and experiential knowledge normally assumed in conversation, that normal communication would become impossibly cumbersome.[2]

In many ways, the function of assumptions in communication is analogous to the function of a base of ground in building. In constructing a house, everything that a builder does, from laying the foundation to putting the last shingle in place, ultimately rests on some natural base of ground, be it rocks, sand, clay, etc. Without that base of ground a builder would have nowhere to lay the foundation and construct the house. Similarly, everything that we actually do in communicating, from filling in certain background details to giving the punchline of a joke, rests on a base of assumptions. Without that base, communication becomes a task akin to building a castle (or a house) in the air.

Many of the assumptions commonly made by message-senders are assumptions about the *knowledge* of the message-receiver. What the message-sender assumes his receiver knows often has a significant impact on the form and content of his message.

One of the most basic assumptions that a sender normally makes in sending a message via language is that the receiver knows the language in which the message is sent. In other words, except for a few off-norm situations,[3] a sender's use of a certain language to communicate a message presupposes that the receiver knows that language.

Another common assumption which a sender makes in language communication is that his receiver knows the particular vocabulary items used in his message. While at times the sender may define certain vocabulary items for his receiver, by and large he assumes that the words he uses to express his message are part of his receiver's knowledge.

Besides a knowledge of language and vocabulary, a sender also normally assumes that his receiver has a certain amount of knowledge about various facts, items, events, etc., as these relate to the content of his message. Thus, one American speaking to another American is likely to assume that his hearer has knowledge of the items and events which are especially well known in American culture—items such as New York City and the White House, and events such as Christmas and Presidential elections. Besides such assumptions regarding the cultural milieu of the communication situation, the speaker is likely to make certain assumptions about his hearer's knowledge of the universe of discourse. For instance, in the case that the topic of conversation is the U.S. economy, the speaker will probably make some estimate of how much his hearer knows about economics and business in general, i.e., what his hearer knows about the workings of the stock market,

about the laws of supply and demand, about inflation, recession, depression, etc. The shape of the speaker's message will doubtless be affected by these assumptions.

While a speaker's assumptions about his hearer's knowledge have some noticeable effect on the structural aspects of his verbal message, this type of effect may be more conspicuous in a written work. It seems to me that the grammatical and semantic structures of a written text may be influenced more markedly by author assumptions due to the absence of feedback in the communication situation.

In most types of language communication situations there is some opportunity for the message-receiver to communicate to the sender whether he has understood the message or not: normally via either visual responses such as facial expression in a face-to-face situation, or verbal responses in a situation where conversational turn-taking is appropriate. This verbal and/or visual signaling of understanding or misunderstanding is what I call *feedback.*

Speakers can often interpret these feedback responses even as they are speaking and adjust their assumptions and the shape of their message accordingly. In the normal communication situation of writing, however, there is no opportunity for an author to receive such feedback from his reader in time to adjust his discourse in light of it.[4] Rather, the author must make all of the relevant assumptions about his reader's knowledge (in essence, developing a mental image of him), and write his discourse accordingly, without the opportunity for confirming or contrary feedback. Because of this lack of feedback, I hypothesize that an author's assumptions about his reader's knowledge have an especially strong impact on the grammatical and semantic shape of a text. Young, Becker, and Pike (1970:179) write in this regard, "It is important to remember that the writer addresses his discourse not to the reader as he 'really is' but to the image of the reader that he has developed in his own mind. It is not who the reader is but who the reader thinks he is that counts."

0.3 Scope of the Study

This study is bounded by several limitations. First, the analysis examines the relationships between the structure of discourse and only one feature of the communication situation—the assumptions of an author about the knowledge of his reader. Doubtless, other aspects of the communication situation also affect the grammatical and semantic structure of English texts, but I leave their analysis to other studies.

Secondly, the data of the study has been circumscribed carefully. The study treats only *English* texts; I have chosen to make an in-depth analysis of author assumptions in just one language, English, rather

than looking superficially at a number of languages. However, I anticipate that this work will be applicable to the analysis of other languages as well.

Further, the study treats only English *written* texts. As mentioned previously, the effects of author assumptions on the grammatical and semantic structures of written texts seem especially clear, due to the lack of feedback in the communication situation of writing.

Finally, the study focuses on English written *nonfiction* texts. This limitation is necessary because certain characteristics of fictional literature tend to obscure and complicate an analysis of the relations between author assumptions and discourse structure. I draw here on the work of Pratt (1977), who has made an in-depth analysis of the relations between the communication situation and literary discourse, using both sociolinguistic (à la Labov) and speech act (especially Gricean) models. In her excellent discussion, Pratt identifies two features of literary discourse (which in her treatment seems essentially equivalent to fictional discourses)[5] that pose potential problems for the analysis of author assumptions in that type of discourse: the occurrence of what Pratt (following Grice) calls "flouting" and the use of a fictitious speaker in a text.

"Flouting" is the violation of one of the basic rules of human communication[6] for the purpose of achieving an effect or communicating extra meaning. For example, one of these basic rules is that generally one's message should be neither more nor less informative than is required in the situation (Grice 1975:45). To flout by violating this rule, a person in a conversation could use words which he/she expected that the hearer will not know, in order to give an impression of education and expertise in a certain field.

Flouting occurs frequently in published fictional texts in English. For example, when an author begins a story *in medias res*, that is, starting in the middle of the action, he is breaking one of the rules of human communication. More specifically, starting a story in the middle of the action makes the author's communication less informative than is required, since his reader does not have the background knowledge (usually supplied later in the story) to completely understand the words and actions in such a start. Of course, such cases of flouting are normally interpreted by a reader as creating the effect of getting him into the action quickly.

A fictional text may also differ from a nonfictional one in that the former type of text often includes fictitious speakers. The use of a fictitious speaker in a text (such as Huck in Mark Twain's *Huckleberry Finn*, or Marlow in Conrad's *Lord Jim*) allows an author an increased opportunity to violate the rules of human communication (i.e., to flout) to achieve various literary purposes. Pratt (1977:203) in discussing the phenomena of fictitious speakers and flouting, suggests that a reader

must interpret a text that has a fictitious speaker twice with respect to violations of rules of communication—once to determine how the fictitious speaker is obeying or violating the rules and what he is trying to accomplish by so doing, and then again to determine what the real author is trying to communicate by means of the fictitious speaker's violations.[7] Thus, a fictitious speaker multiplies the opportunities for flouting in a fictional text.

The use of flouting and fictitious speakers is especially associated with fictional texts. They complicate the analysis of author assumptions in a fictional text. As a result, fictional texts have been excluded from the data of this study. The study will focus on nonfictional texts, such as articles from professional journals, textbooks, and news reports, in which the use of flouting and fictitious speakers is severely limited.[8]

0.4 Underlying Assumptions of the Study

Even granted the limited scope of the study as outlined in the previous section, the examination of author assumptions about the knowledge of the reader is an unmanageably large topic due to the enormous variables involved in the communication situation of writing. Individual differences among authors, the varying influences of editors, etc., all affect the structure of written texts in such a way as to make their analysis extremely complex. In order to reduce this complexity, I have made certain underlying assumptions about the nature of normal written texts and the communication situation of writing.

The first assumption I have made, related to the discussion in section 0.3, is that the author of each text in my study has followed the Gricean Cooperative Principle; that is, the author has tried to be meaningful and cooperative in his communication with his reader. I have assumed that lying and other forms of deceit, as well as intentionally irritating or frustrating the reader, are not part of the texts in this study. Rather, a given written text is assumed to represent an author's honest attempt to convey a certain message to a specific type of reader.

Another assumption of this study is that the choices an author makes concerning the shape of his text are meaningful choices. Thus, the use of one type of grammatical construction in a text instead of other grammatically appropriate constructions at that point is assumed not to be a matter of mere random variation but one of meaningful (though not necessarily conscious) choice. As Longacre (1976:296) has put it, "choice of one surface structure against another is a meaningful option on the part of the speaker." Further, it is assumed that this principle applies to the present semantic content of a text as well as its grammatical structure. In other words, if a certain bit of information is included in a text, it is assumed that the author intended to communicate that information to his reader. Thus, I am assuming that whatever

other conscious or unconscious motivations an author may have in including certain information as part of his text, at least one motivation, and a fairly prominent one at that, is the simple fact that he wanted to communicate that information to the reader.

The third assumption that I make concerning the nature of written texts has to do with an author's conception of his reader. Even though it is obvious that in reality readers of varying backgrounds and abilities read a published written work, I assume that in the production of his text an author normally writes to a conceptualized, *uniform reader,* who is conceived as having certain general characteristics, including a certain amount of knowledge about the topic of the text. Thus, in this study I refer to the reader of a text in the singular, meaning the author's concept of his uniform reader. I refer to the readers of a text, plural, generally only in the off-norm cases in which the text clearly indicates that it was addressed to more than one type of conceptualized reader.

Finally, certain assumptions are made concerning some of the factors that affect the shape of a written text. Other factors besides an author's choices, such as editors exercising their own judgment and following standard formats, are involved in the production of a written text. Since the influences of editors and author are tightly interwoven in a text and are almost impossible to unravel, I have assumed for the purposes of this study that texts mostly reflect the assumptions of the author concerning the knowledge of the reader and that editing has not skewed or obscured these reflections.

0.5 Synopsis of the Study

Chapter 1 sets a broad theoretical base for the study of pragmatic aspects of text structure in the form of a system for categorizing types of communication situations that may affect the structure of discourse differently. The system is represented by a distinctive-feature matrix having four features (face to face, use of the vocal-auditory channel, turn taking, and spontaneity), yielding sixteen different types of communication situations. One significant implication of this typology of communication situations is a more systematic way of selecting and limiting data for analysis. This system has been applied in choosing the data for this study.

Chapter 2 develops the general theoretical framework needed for the study of relations between author assumptions and the structure of discourse. The framework is presented as a basic apparatus for the description of human knowledge structures. The notion of *frame,* borrowed largely from the work of scholars in the fields of artificial intelligence and psychology, as well as from the work of some European textlinguists, figures prominently in this model. The usefulness of the model is seen in later chapters in the analysis of author

assumptions about the knowledge of the reader in various example texts.

The forms of first mention references in English reflect author assumptions about the reader's knowledge, and this is the subject of chapter 3. The function of definite articles, indefinite articles, and proper names are discussed in this regard. Also a brief section on the use of technical terms as an indicator of author assumptions is included.

Chapter 4 is a treatment of the topic of author comments in discourse. Author comments within a text are rich sources of information regarding assumptions that the author has made concerning the knowledge of his reader. This chapter discusses four basic types of author comments (explanatory, opinion, incidental, and thematic) and identifies the various grammatical and lexical structures that mark them. Further, I outline a methodology for interpreting author comments with regard to assumptions about the reader's knowledge.

Finally, in chapter 5, I extrapolate a set of principles for analyzing the author assumptions reflected in the structure of texts. Some possible applications of this study in other fields are then suggested, and the study is concluded with the analysis of a complete English text using the principles mentioned earlier in the chapter.

It is my hope that this study of some pragmatic aspects of English text structure will serve as a stimulus for further research in the pragmatics of monolog discourse.

Notes to Introduction

1. This use of the term *pragmatic* is related to the term *pragmatics* as it is used in the discipline of semiotics, where *pragmatics* means the study of the relations of signs and symbols to their users. By *pragmatic* I mean having to do with the communication situation.

2. The close relationship between assumptions and efficient communication has been suggested by the historian and philosopher of science Thomas Kuhn (1970). According to Kuhn, when a field of scholarship embodies considerable diversity, and very few common assumptions are held, then the primary means of communicating the progress of research is the book, in which the researcher attempts "to build his field anew, starting from first principles and justifying the use of each concept introduced" (1970:19–20). On the other hand, when a field evolves to the point of becoming a science, and has a considerable body of assumptions that virtually all its practitioners hold (Kuhn calls this

body of assumptions a paradigm), the basic mode of communicating research findings changes from books that any educated person can understand to short articles comprehensible only to those who share the accepted assumptions. As Kuhn noted, "No longer will his [the scientist's] researches usually be embodied in books. . . .Instead they will usually appear as brief articles addressed only to professional colleagues, the men whose knowledge of a shared paradigm can be assumed and who prove to be the only ones able to read the papers addressed to them"(1970:20).

3. One such off-norm situation would be when a person visits an area where a language foreign to him is spoken. In such a case, rather than assuming that his language is known by the receiver, a sender may use his own language to discover whether his receiver knows it or not.

4. An author can, of course, adjust his discourse in light of reader feedback by letting someone read the manuscript before publication, or by taking reader feedback into account in a second edition of the written work. Another situation in which immediate feedback may occur is when persons write notes to one another in public gatherings such as lectures or classes. This latter off-norm situation is treated in more detail in chapter 1.

5. In the course of her argument for treating literary texts as language data basically similar to natural, spontaneous language texts, Pratt rejects a distinction between fiction and nonfiction as part of the definition of literature. However, some of the features which Pratt attributes to literary discourse seem to be limited to fictional works, or at least are severely restricted in their occurrence outside of fiction (see, for example, the discussion of flouting and the use of fictitious speakers in this section). Furthermore, all of the examples Pratt uses to illustrate these features are from works which normally would be considered fictional.

Thus, it seems to me that while Pratt prefers not to allow the use of the fiction-nonfiction distinction in the definition of literature, this distinction nonetheless may be valid as an explanation for certain peculiarities in the distribution of various discourse features.

6. Grice (1975:45) refers to these rules collectively as the "Cooperative Principle" of communication. There are four basic rules or "maxims" which together constitute the Cooperative Principle: the maxims of Quantity, Quality, Relation, and Manner. The maxim of Quantity states that a conversational contribution should be neither more nor less informative than is required. The maxim of Quality asserts that one should not say something which one believes to be false, or for which one lacks adequate evidence. The maxim of Relation says that contributions to a conversation must be relevant. The maxim of Manner states that contributions should be brief and orderly, and avoid ambiguity and obscurity.

7. The interpretation of the violations of the fictitious speaker and the underlying purpose of the author may be different in that only the real author can be assumed to be intentionally flouting when a violation occurs. A fictitious speaker can flout, but he can also lie, be uncooperative, forget to tell relevant information, etc. (Pratt 1977:198).

8. Some types of narrative nonfiction, such as biographies, may allow limited use of flouting.

1 A Taxonomy of Communication Situations

1.0 Introduction

The classification of types of texts is a necessary corollary to discourse analysis, in that different types of texts exhibit different structural regularities. Longacre (forthcoming) has proposed a useful taxonomy of text types, categorizing texts as either narrative, expository, behavioral, or procedural. I propose to supplement such a scheme with a taxonomy of communication situations,[1] which facilitates the categorization of texts according to the situation in which they were constructed. The system I propose—called the *communication situation taxonomy*—is outlined in this chapter. In this system, each communication situation type is distinguished from other types on the basis of the presence or absence of four situational features.

The taxonomy is intended to be a universal, etic classification system, useful in classifying texts from different languages according to the communication situation in which they occur. The taxonomy may also be emic[2] for American English in that all of the communication situations of the taxonomy occur in American culture and there is preliminary evidence that each of the situations engenders structural distinctions in English utterances. Of course it is not to be assumed or expected that the taxonomy is emic for all languages, in that not all of the situations occur in a given culture, and not all languages will make structural distinctions between utterances occurring in each different communication situation. However, the taxonomy should be useful to linguists as a methodological tool for arranging and analyzing discourse data.

1.1 The Need for a Taxonomy of Communication Situations

In recent years various linguists have developed systems for the classification of discourses in order to account for structural differences between various texts. For example, Robert Longacre (1976:200, 1977,

and forthcoming) has argued strongly that each type of discourse contains different structural features. Longacre contends, "Serious discourse analysis is, therefore, impossible without taking such structural variation into account. It is useless to look in a particular discourse for features which are not found in the sort of discourse which that exemplifies. Useful rules can be worked out only in the domain of a particular type" (1977:1). The basic system Longacre (forthcoming) proposes uses the combinations of two features, agent orientation (a.o.) and contingent temporal succession (c.s.), with positive or negative values to define four basic discourse types: narrative (+a.o., +c.s.), procedural (–a.o., +c.s.), expository (–a.o., –c.s.), and behavioral (+a.o., –c.s.). Further subcategories are obtained by including the features +/– tension and +/– projected time in the scheme.[3]

For example, H. McArthur (1979) has provided support for such a scheme of discourse types in his analysis of the Mayan language Aguacatec. McArthur showed that in Aguacatec the verb aspects which characteristically mark foregrounded and backgrounded information vary according to type of discourse. Thus, to mention two of McArthur's examples, foregrounded information in Aguacatec tends to be marked in expository discourse by the continuous aspect, and in procedural discourse by the incomplete-indefinite aspect.

However, there is increasing evidence that some additional classificatory scheme is needed to account for structural differences in utterances that stem from the communication situation in which they occur. For example, the frequency and complexity of explanatory comments in the context of an utterance is affected by whether that utterance is constructed in a face-to-face situation or not. Consider Richard Yorkey's advice to those wishing to present papers at a professional meeting: "By looking at the audience, you may sometimes recognize the signs of doubt, confusion, or misunderstanding. You may want to briefly digress from your text to elaborate, explain, or clarify a point" (1979:31). Here Yorkey has emphasized an effect of the face-to-face situation on the structure of a prepared oral discourse; that is, the speaker is at liberty to extemporize if he senses from his audience's reactions that he has not been clear, or has assumed too much background knowledge. On the other hand, an author of a written work, or the speaker of a radio program, both non-face-to-face situations, must assume the reader or hearer has a certain amount of background knowledge. The explanatory comments of such a non-face-to-face discourse will be consistent with those assumptions. Therefore, explanatory comments are handled differently in face-to-face and non-face-to-face situations.

Further, the form of an utterance, i.e., whether it is spoken or written, affects its linguistic structure. For example, there are many

nuances and attitudes communicated by intonation in a spoken utterance which must be encoded in some other way in a written utterance, e.g., by additional description, punctuation, italics, etc.

While some differences between utterances that are planned and those that are spontaneous may be described as a difference between competence and performance,[4] others should be attributed to a difference in the situation surrounding those utterances.

For example, Elinor O. Keenan (1977) catalogs several contrastive features of what she calls "planned" versus "unplanned" discourse, a distinction basically the same as my nonspontaneous versus spontaneous discourse. One of these features is the fact that unplanned spontaneous discourses tend to rely on the communication situation to establish clear reference to items more than planned discourses do (1977:16). In other words, unplanned discourses often contain ambiguous references, which can only be understood by referring to the immediate context in which the utterance was made, e.g., a particular boy on the scene referred to as *he* or *him*. Another feature Keenan mentions is that planned discourses tend to contain more complex syntactic structures, those learned in the latter stages of language acquisition, than unplanned discourses (1979:23). Keenan further observes that planned discourses often contain paraphrases for referring to the same referent, while unplanned discourses tend to repeat the same lexical item to refer to the same referent (1977:27). These types of differences seem to be attributable to the presence or absence of spontaneity in the communication situation.

Further, Voegelin (1960) has argued for a distinction between what he called "casual" and "noncasual" utterances on the basis of cultural criteria. In particular, noncasual utterances differ from casual utterances in that, first, the occurrence of noncasual utterances tends to be restricted in terms of time and place; second, "there is wide general agreement among persons-in-the-culture in judging appropriateness of noncasual utterances" (Voegelin 1960:61); and third, formal training and practice do not contribute as much to proficiency in casual utterances as these factors do in noncasual ones (1960:61–62). This is further evidence supporting a distinction between spontaneous and nonspontaneous utterances.

Yet another aspect of the communication situation that shapes the structural form of an utterance is turn taking. Utterances spoken in the context of turn taking, that is, utterances which form part of a dialog differ structurally from utterances constructed when turn taking is inappropriate, that is, in monolog.[5]

For example, Labov and Fanshel (1977) have examined characteristics of conversational narratives given in the context of therapeutic counseling sessions. One of the basic ways in which such natural monologs differ from dialog utterances is in constituent structure.

Conversational narrative monologs have several possible grammatical slots[6] which distinguish them from ordinary dialog utterances. For example, conversational narratives may begin with some sort of an "abstract" (Labov and Fanshel 1977:106) which summarizes the point of the narrative, why it is being told, e.g., *I really had an exciting time at the football game yesterday.* Also conversational narratives may include an "orientation" slot which contains information regarding the time, place, and major participants of a narrative (ibid.), e.g., *Last summer, Monte and I went to the Rockies.* Both the abstract and orientation slots signal the beginning of a monolog narrative to the listener.[7]

Labov and Fanshel also suggest that a characteristic constituent of adult narratives is the "evaluation," which contains the central, most important events in the narrative (in their terms, the events which make the narrative "reportable"). This slot of the narrative frequently is highlighted for the listener by means of a slow-down in the pace of the action, perhaps accomplished in part by an increase in background information. Intensifiers and paraphrasing also contribute to the special marking of the evaluation section.[8] Finally, they discuss a slot occurring at the end of a natural narrative, called "coda," which communicates to the listener closure of the monolog and a resumption of normal turn-taking rules. Pratt (1977:51) and Longacre (1976:214) have found similar constituents in literary texts and formal oral monologs, respectively. However, none of these slots occur as normal constituents of utterances in dialog.

1.2 Distinctive Features of the Communication Situation Taxonomy

Lyons (1977:637) in analyzing the phenomenon of deixis, has proposed a theoretical construct called the "canonical situation of utterance," which "involves one-one or one-many, signalling in the phonic medium along the vocal-auditory channel, with all the participants present in the same actual situation able to see one another and to perceive the associated nonvocal paralinguistic features of their utterances, and each assuming the role of sender and receiver in turn." From Lyons's notion of the canonical situation of utterance, I have abstracted three features, whose collective presence seems to characterize the canonical situation of utterance: a face-to-face encounter (*face*), use of the vocal-auditory channel (*voc*), and turn taking (*turn*). I have added a fourth feature, spontaneity (*spon*) to these three and call the system they define the *communication situation taxonomy,* in that the various combinations of their presence or absence (indicated by a plus (+) or minus (–) respectively) define different communication situations.[9]

A communication situation that has the feature [+ face] is characterized in part by the fact that all the participants of the communication in

that situation can see one another well enough to recognize the various kinesic movements and facial expressions that their interlocutors produce, and to have assurance that their own movements and expressions are seen and interpretable. A communication situation with the feature [– face] is characterized by the fact that the participants in the encounter cannot see one another to this extent.

The feature [+ voc] indicates that the participants in a communication situation, when functioning as senders, use their vocal apparatus as the primary mechanism for this role in the communication, and when functioning as receivers, use their auditory apparatus. [– Voc] indicates that the participants use some mechanisms other than vocal-auditory ones as the primary means of language communication.

The feature [+ spon] is characteristic of situations in which language communication between participants is essentially uncontrolled and not planned in advance. On the other hand, [– spon] is characteristic of situations in which language communication is controlled, closely monitored, and often planned in advance by the participants.[10]

Finally, the feature [+ turn] applies to situations in which two or more participants have the theoretical opportunity to make more or less equal communication contributions immediately following the preceding contribution.[11] That is, all participants have roughly equal access to the floor in a situation having the feature [+ turn]. Conversely, [– turn] applies to those situations in which all participants in the communication do not have roughly equal access to the floor, or are restricted from responding immediately, and thus one speaker gains unique uninterrupted control of the floor and all other participants assume the role of receivers during this time.

Different combinations of these features identify various communication situations of frequent occurrence. The four possible combinations of the features [face] and [voc] distinguish the various media through which language communication occurs. [+ Face] and [– voc] together describe an aspect of the normal verbal communication medium between people, part of what Lyons called the canonical situation of utterance. [– Face] and [+ voc] characterize telephone or radio communication. [– Face] and [– voc] describe the communication medium of writing, and [+ face] and [– voc] identify the most unusual communication medium, in which participants are face to face but use some means other than the vocal-auditory channel to conduct language communication. Sign language between the deaf would match this type of communication medium, as would written notes passed between children in a school classroom.[12] Figure 1.1 is a distinctive-feature matrix defining the different types of media.

	Normal verbal communication	Telephone communication	Sign language	Writing
Face	+	-	+	-
Voc	+	+	-	-

Figure 1.1 Four types of media in language communication, characterized by their distinctive features.

Similarly, the four possible combinations of the features [spon] and [turn] distinguish various types of interaction in communication situations. For example, [+ spon] and [+ turn] describe everyday conversational interaction. The features [+ spon] and [– turn] describe the interaction in a casual monolog, as in the sharing of a personal experience on the spur of the moment. [– Spon] and [– turn] characterize planned monolog, as in the delivery of a public address or the writing of a book. Finally, [– spon] and [+ turn] characterize an unusual interactional pattern, in which turns are taken but the situation is controlled and at times planned. Many types of interviews would seem to fit this description, as would a schoolteacher leading a class by asking questions to which the students respond. Figure 1.2 is a distinctive-feature matrix defining the four types of interaction.

	Conversation	Casual monolog	Planned monolog	Interview
Turn	+	-	-	+
Spon	+	-	-	-

Figure 1.2 Four types of interaction in language communication, characterized by their distinctive features.

All four types of interaction and all four types of media can be combined to give sixteen possible communication situation types predicted by this system.[13] See figure 1.3 for a complete distinctive-feature matrix of communication situations predicted by the communication situation taxonomy, and the types of utterances that occur in each communication situation.

		Normal conversation	Casual verbal monolog	Formal interview	Planned verbal monolog	Sign lang.[14] conversation	Sign lang. casual monolog	Sign lang. formal interview	Sign lang. planned monolog
Medium defining	Face	+	+	+	+	+	+	+	+
	Voc	+	+	+	+	–	–	–	–
Interaction defining	Spon	+	+	–	–	+	+	–	–
	Turn	+	–	+	–	+	–	+	–

(continued)		Telephone conversation	Telephone casual monolog	Telephone interview	Radio[15] planned monolog	Morse code[16] dialog	Letter-writing[17] or diary	Written short-answer test[18]	Written literature
Medium defining	Face	–	–	–	–	–	–	–	–
	Voc	+	+	+	+	–	–	–	–
Interaction defining	Spon	+	+	–	–	+	+	–	–
	Turn	+	–	+	–	+	–	+	–

Figure 1.3 A distinctive-feature matrix of the communication situation taxonomy, with the types of utterances which occur in them.

1.3 Discussion of the Communication Situation Taxonomy

The communication situation taxonomy as presented above accounts for the normal situations in which language communication occurs. However, human communication is so complex a phenomenon that no taxonomy can hope to capture all its intricacies and variations in a single formalism. Therefore, I discuss here certain of the variables and irregularities of human communication which the taxonomy as presented does not highlight.

Two variations from the norms of communication to which the communication situation taxonomy does not give focal attention are those situations in which different participants perceive the features of a situation differently, and those situations whose features seem to lie between the poles of presence (+) and absence (–).

Examples of the first variation, in which participants differ as to their perception of the features of a situation, include the case of television communication. In television communication, since the speaker cannot see or interact with his audience, to some extent he perceives the communication situation as [– face]. The audience, on the other hand, can see the speaker, and therefore may perceive the situation as [+ face]. In these cases, both the speaker and the hearer in the situation adjust their communication to take into account their interlocutor's perception of the situation. The speaker on television still uses facial expressions and kinesic movements to help communicate his point, because he knows that the television watcher can see him, even though he cannot see the television watcher. Likewise, the television watcher does not normally applaud or give catcalls to respond to the television speaker, because he knows the speaker cannot see or hear him, even though he can see the speaker.

These observations concerning mixed perceptions of a communication situation suggest that each communication situation is perceived in two ways by each participant in the communication: his perception of his own situation, which affects his reception of messages; and the interpretation of his interlocutor's situation, which affects his sending of messages. All communication situations are perceived in these two ways, even though in the norm there is a match between them.

A further observation about this dual functioning of the communication situation taxonomy is that for efficient, smooth communication, participants must agree on their judgments regarding the nature of the communication situation. When the participants' judgments do not agree, communication becomes incomplete and skewed, leaving the participants in an awkward or strange position, as when a sighted person refers to an object by pointing and saying *over there,* not realizing he is addressing a blind person, or when an adult talks back to a speaker on his television set.

The second variation from the norm of communication is those situations whose features seem to lie between the presence (+) and absence (–) poles of the communication situation taxonomy, such as when two persons are talking from a distance and can see arm and hand movements but not the nuances of facial expression, or when a deaf person who can speak and read lips converses with a hearing person. These situations appear to be "gray areas" in which neither a plus nor a minus notation seems appropriate for certain situations. A common behavioral response to such situations is for participants to communicate basically as if the situation were either plus or minus, but adding a few minor compensatory adjustments. For example, a speaker compensates for his audience being too far away to see facial expressions by exaggerating the kinesic movements the audience can see. A speaker addressing a crowded football stadium may use sweeping gestures that would be quite inappropriate were he addressing a small group in someone's parlor. Likewise, some movements and expressions appropriate in close [+ face] encounters cannot be used across distances. For example, a wink to communicate the message *I'm only kidding* is appropriate in addressing a small group, but would be ineffective when addressing a crowd in a stadium. Both of these situations are treated as essentially [+ face] encounters, but with adjustments to compensate for the varying distance between participants.[19]

While some situations which are seemingly indeterminate with respect to the value of a certain feature can be explained in terms of a basic feature value with some additional compensatory adjustments (as discussed above), others, such as the conversation between the deaf lip-reader and the hearing person, seem genuinely ambiguous with regard to a value for certain features. In the situation just cited, the value of the [voc] feature is uncertain. Both participants of the communication are using vocal mechanisms as sending devices, but only one participant is using the auditory apparatus for receiving messages. The deaf person is using the visual apparatus as a receiving device. Such situations, while admittedly marginal and rare, still require some account in the communication situation taxonomy.

The very existence of situations which exhibit such an inbetweenness with respect to a specific feature's value challenges the validity of the use of a binary notation in categorizing types of communication situations. The primary strength of a binary notation is the avoidance of a process of infinite regress, in which finer and finer distinctions are drawn and the numbers of possible feature sets quickly skyrocket out of the range of usefulness. The value of the communication situation taxonomy in terms of simplicity and usefulness needs to be preserved while at the same time giving some account of marginal situations that

seem genuinely in between with regard to the value of one feature or another.

One way of resolving this dilemma is to introduce a zero notation (0) into the communication situation taxonomy, such that whenever a situation is indeterminate with respect to the presence or absence of a given feature, that feature would be marked with a zero in the description of that situation. The zero does not have the same theoretical status as a plus or a minus in the system. Therefore, its use is not meant to imply or predict an additional forty-eight possible contrastive communication situations and thus establish a more finely grained taxonomy. Rather, the zero feature should be invoked only when absolutely necessary. Its use in the feature set describing any communication situation indicates that that situation is rare and an off-norm case. Use of such a zero notation should maintain the usefulness and integrity of the communication situation taxonomy as a system designed to categorize the norms of communication situations while still providing some account of the rare off-norm situations.

The communication situation taxonomy offers the linguist a mechanism for performing three functions essential to the task of discourse analysis. First, *the communication situation taxonomy suggests new areas of fruitful research.* The taxonomy, which is based on all possible combinations of four features having positive or negative values, implies that situations defined by the taxonomy which differ even by only one feature, may be associated with utterance types that are structurally distinct. Thus, while the sixteen communication situations described in the taxonomy have not been studied extensively with respect to the differences in language structure in each of them, the taxonomy proposed here encourages the linguist to check for such possible emic differences.

Second, *the communication situation taxonomy suggests explanations for structural differences in language used in different communication situations.* The use of features to specify various communication situations enables the linguist to attribute similarities and differences between language used in different situations to certain features which those situations hold in common or in which they differ. For example, the unique grammatical features of sign language are associated with the combination of features [+ face] and [- voc]. Many aspects of discourse structure studied by Longacre, Labov, and others, such as certain features of higher-level constituent structure (Longacre 1976: 214; Labov and Fanshel 1977:104), and foregrounded and backgrounded information (both in literary texts as in Hopper 1977 and in edited oral texts as in Jones and Jones 1979), seem to be associated with the feature [- turn]. The capability of identifying features of a communication situation with specific aspects of discourse structure facilitates progress in our knowledge of the relation between language

structure and its use. As Hymes (1972:49) wrote, "It is essential to isolate the dimensions and features underlying taxonomic categories. These features and dimensions, more than particular constellations of them, will be found to be universal, and hence elementary to descriptive and comparative frames of reference."

Third, *the communication situation taxonomy provides a means for controlling variables in discourse analysis data.* By categorizing various communication situations whose utterances differ structurally, the communication situation taxonomy enables a linguist to study some aspect of the relation of language structure to its use while holding constant certain variables, such as those stemming from the communication situation. This topic is discussed in greater detail at the end of section 1.4.

1.4 Related Areas of Research

The discipline of sociolinguistics has long been involved in the study of contextual influences on the form of language utterances. For example, many sociolinguists have noted that the identity of the participants in an exchange affects the form of utterances in various ways. Brown and Gilman (1960), Friedrich (1972), and Wallace (1976) have discussed the use of personal pronouns as affected by the status, power, and relationship of the participants of a conversation. Tanner (1967) and Gumperz and Chavez (1972) have noted that various features of the speaker and addressee affect the use of various codes as the language of communication among multilinguals.

In addition to various factors related to the identity of the participants, the topic of discussion has been shown to affect the form of utterances in a conversation. Friedrich (1972) on Russian pronouns in literature and Wallace (1976) on address and reference in Indonesian both mention that forms of address and reference are affected by the topic which is being discussed. Tanner (1967) and Gumperz and Hernandez-Chavez (1972) discuss the effect of topic on code switching among upper-class Indonesians and Hispanic Americans, respectively.

Another pragmatic factor which has been shown to affect the form of utterances is the setting of a conversation (Friedrich 1972). Lindenfeld (1972) has combined aspects of the physical setting and several of the above factors (participant identity and topic) and demonstrated that the use of specific transformations in French oral discourse varies according to both the social status of the speaker and the context (defined by the factors mentioned above) in which he speaks.

Another area of pragmatics which influences the form of utterances is the purpose of the speaker in making his utterance. The study of speaker purposes is part of the realm of speech acts. Austin (1962), Searle (1969), and Grice (1975) have been leaders in formulating a theory of speech acts, that is, what kinds of things speakers can

purpose to do when they speak. Gordon and Lakoff (1975) have shown that rules governing the appropriateness of utterances affect the distribution of certain transformations in English, such as the transformation changing *Why are you painting your house red?* to *Why paint your house red?*

The communication situation taxonomy is not meant to imply that the above analyses should or could be replaced by ones in which the conditioning factor is one or more of the features of the taxonomy. The communication situation taxonomy, rather than being a comprehensive model of sociolinguistics, is designed to complement the study of the interrelationship of context and utterance by organizing the language data of such investigations according to the general communication situation in which it occurs. The claim is that studies of the effect of topic, identity of participants, setting, purpose, content structure, and other factors on the form of utterances will be better served by a conscious awareness of the types of communication situation in which the data originated. For example, data that is an apparent counterexample to a discourse hypothesis may be anomalous with other data in the corpus due to a difference in the communication situation in which it occurred.

An important principle in experimental investigation is to exercise strict control of the constraints and variables affecting a given experiment. The communication situation taxonomy gives the linguist a tool by which he can hold constant the general communication situation while examining the effects of variation in other pragmatic factors such as participant identity, etc. The communication situation taxonomy also permits the analyst to gather data from communication situations varying only in a selected feature or feature cluster, enabling him to then examine the effects of that feature or set of features on the form of utterances.

1.5 Concluding Remarks

The communication situation taxonomy is useful to this particular study in providing a principled basis for strictly controlling the data considered. Specifically, the chapters which follow consider only data having the features [– face], [– voc], [– spon], and [– turn], that is, planned written monolog. This constraint represents a methodological strategy for providing a carefully constrained sample. Limiting the data in this way gives us additional confidence that the regularities and patterns described in subsequent chapters are not the illusory result of bringing together random data of several different types.

Notes

1. I generally use "communication situation" to refer to the context of a language communication *as it is perceived by its participants*. The actual, real world situation of a communication is not discussed in this study. In this respect I follow Pike's position on the "observer perspective": "Tagmemics does not discuss the 'thing-in-itself'—i.e., it does not discuss items or events abstracted entirely from perception or from speech . . . but treats only items-in-relation to some observer, perceiver, or imaginer; the nature of the thing as it is apart from the perceiver or discussant is not part of tagmemic analysis" (Pike and Pike 1977:363).

A participant's perception of the identity and background of his interlocutors, the social setting, and the medium being used in the communication (e.g., written vs. oral language) are examples of the type of factors included under the term communication situation.

2. The terms *etic* and *emic* are taken from Pike 1967. On the etic view of language, Pike writes: "The etic approach treats all cultures or languages—or a selected group of them—at one time. . . . The etic organization of a world-wide crosscultural scheme may be created by the analyst" (pp. 37, 38). On the emic viewpoint: "The emic approach is, on the contrary, culturally specific, applied to one language or culture at a time. . . . The emic structure of a particular system must, I hold, be discovered. . . . Units are different emically only when they elicit different responses from people acting within the system" (ibid.).

3. See section 4.1 for a fuller discussion of Longacre's discourse typology.

4. Note however that Longacre (1976:218ff), Pratt (1977:38), Labov and Fanshel (1977: 104), and Michael Montgomery (personal communication) have all demonstrated that spontaneous discourse also exhibits some striking similarities with planned discourse, particularly in terms of higher-level constituent structure.

5. This is not to say that monologs cannot function as fillers of a slot in a conversation (Pike and Pike 1977:25), nor that such monologs are not tightly integrated into the structure of the conversation (Labov and Fanshel 1977:105). Rather, the point is that even when monologs occur in everyday conversation there is generally a temporary cessation of normal turn-taking rules, and a consequent change in the structure of the utterance. Pratt (1977:104) discusses this point with respect to natural narrative monolog: "Natural narratives, in other words, upset the usual balance of face-to-face conversation by obliging potential next-speakers to temporarily but indefinitely waive access to those conversational mechanisms that exist precisely to counterbalance the considerable advantage the current speaker already has in competition for the floor."

6. A central principle of tagmemics is that the grammatical constituents of a construction are "tagmemes" which consist of "slots" in the construction correlated with the "class(es)" of constructions which can fill those slots.

7. The beginning of conversational narratives needs to be specially signaled because the speaker gains considerable control of the conversation by being allowed to tell a story; in a sense, he gains an almost unlimited turn. Although the listener can take pseudoturns in the middle of the story, perhaps to confirm his understanding or agreement (i.e., *uh huh* or *amen*), or to speed the story up (i.e., *What happened next?* or *And then what?*), he cannot take *control* of the floor and introduce some topic of his own at that time without considerable rudeness to the narrator. Thus, the abstract and orientation slots mark the point at which the narrator attempts to gain control of the conversational floor.

8. See Longacre (1976:217) for a similar discussion of the marking of evaluation sections in discourse, which he calls the "peak" of a discourse.

9. This system of distinctive features is not meant to imply that these features are the only ones in communication situations that can affect the form of utterances. See section 1.4 for a discussion of the relationship of the communication situation taxonomy to other aspects of the communication situation.

10. An argument for having a scale of values for each feature as opposed to a binary opposition is the work done by Martin Joos (1962) on styles of speech. Joos (p. 13) proposes five styles of speech in English: frozen, formal, consultative, casual, and intimate. These five styles seem to be an analog to the binary feature spontaneity in the communication situation taxonomy, and could serve as a scale of degrees of spontaneity. However, Joos defines the several distinctions along this parameter in terms of aspects of the other features of the communication situation taxonomy such as turn taking and written vs. oral discourse, making this scheme unsuitable for inclusion in the communication situation taxonomy as I have presented it. It is possible that such a scale for any feature of the taxonomy would have to use aspects of the other features in defining its coordinates, which suggests that the use of such scales with the particular features I have chosen is not possible, or at least not profitable.

11. The phrase here, "immediately following the preceding contribution," and the phrase in the description of [– turn] which follows, "or are restricted from responding immediately," are necessary in order to handle letter writing in a consistent fashion. See figure 1 and note 14 below.

12. Another way to portray the relations between various types of communication situations would be to use the features with their plus and minus values as parameters for a matrix, as follows:

	+ Face	- Face
+ Voc	Normal verbal communication	Telephone communication
- Voc	Sign language	Writing

13. It is an open question to what extent the communication situation taxonomy defines situations which engender equally distinct utterance types. Until in-depth analyses of the characteristics of all sixteen utterance types predicted by the communication situation taxonomy are undertaken, the question must remain an interesting, but open, one.

14. Friedman's analysis (1976) of predicate and argument in American Sign Language confirms the predictions of the distinctive feature system that sign language has structural

differences from oral language. Specifically, Friedman (p. 145) suggests that "the grammatical mechanisms and the way in which grammatical relations are indicated in ASL [American Sign Language] are unique to visual language and more importantly are a highly efficient means of utilizing the modality of communication. Language in the oral/auditory modality must rely on case markings and/or linearly fixed word order to mark grammatical relations because it does not have the options of spatial relations and expression that manual/visual language has."

15. Another typical example of an utterance occurring in this situation is a telephone planned monolog, as in telephone advertising.

16. I interpret Morse code to be a variation of written language. Communication via teletype is another example of an utterance from this type of situation.

17. Letter writing is a difficult example because of its pseudo-turn-taking nature. In letter writing each author has complete uninterrupted control of the floor, as with monolog. However, when a letter writer is himself responding to a letter received, and in turn expecting a letter in reply, his letter also has some of the characteristics of utterances in a [+ turn] situation.

Formal letter writing, as in a business letter, would be categorized with written literature, as [– spon].

Also the entries of a diary match the description of this communication situation but require an adjustment in the notion of participants in the communication. The author writing the entry is one participant in the communication and the person who may at some future date read the entry, even the author himself, is the other participant.

18. Another possible example of an utterance from this type of situation is programmed learning texts.

19. The participants themselves may *emically* perceive these borderline situations as having one feature or another. However, for the purposes of this etic taxonomy, these indeterminacies are recognized as such.

2 Toward a Linguistic Model of Human Knowledge Structure

2.0 Introduction

The primary concern of this study is to discuss from a linguistic point of view the assumptions an author makes regarding his reader's background knowledge in the subject matter of the text. Such a study inevitably forces one to consider to one extent or another the structure of human knowledge. In what terms do we talk about the knowledge an author assumes his reader has? Do the presuppositions of a text, when taken together, form a random collection of knowledge bits with no coherence or organization, or do they constitute a reflection of the reader's knowledge structure as it is assumed by the author? This chapter represents my attempt to answer these questions. I draw on the work of many linguists, providing my personal integration of their insights, adding to them my own.

Human knowledge is an awesome and vast expanse, stretching from knowledge of how to make a phone call from a pay phone to knowledge of the intricacies of space-age electronics, from knowledge of politics and international relations to knowledge of Mickey Mouse and Donald Duck. In order to say something useful and coherent about such a complex domain, I have chosen to begin with a single notion, found to be particularly useful in this study: the notion of *frame*. After expanding and explicating this notion in some detail, I consider another aspect of human knowledge, a person's knowledge of how to communicate appropriately in various situations. I conclude with a discussion of some of the features necessary for an adequate model of knowledge structure and a brief evaluation of two linguistic theories with regard to their compatibility with this scheme of knowledge structure.

The present chapter is by no means an exhaustive discussion of the organization of knowledge, but rather a careful working of one or two facets of that organization, and a cursory look at how these facets might fit into some existing linguistic frameworks.

2.1 Frame: An Organizing Principle of Knowledge

2.1.1 Introduction to frames. A basic assumption of this study is that the bits of information that compose the sum total of a person's knowledge are not arranged haphazardly, but are organized in some fashion. I suggest that a basic organizing principle of knowledge is the *frame*.[1]

A frame is a group of knowledge bits[2] customarily associated with one another in the mind of a person. In other words, a frame is a conceptual structure containing a person's knowledge of a group of things which normally go together in his mind, such as restaurants and food, fishing and fishing poles, or driving a car and starting the engine. A frame encodes a person's *expectations* about a given universe of discourse. That is, he expects certain items, actions, and relations to cooccur in certain contexts. The associations between the various knowledge bits of a frame are so strong that in a sense any of these bits implies the presence of the other bits of knowledge in the same frame, much as smoke, in a sense, implies a fire.

Thus, a frame represents an emic organization of knowledge in a person's mind, how that person emically categorizes and organizes his perceptions of a segment of reality. Frames can be emic to entire cultural communities, such that an entire group of people have more or less the same frame regarding a specific topic. For example, most Americans probably have Schooling frames which are similar to one another. Frames can also be emic to small groups of individuals, such that only a few people (or even one person) have a particular, unique understanding of a given matter. An example of this latter type of frame might be an in-depth technical knowledge of a country's top-secret weapon, knowledge which only a few select people might have. This study seeks to approximate through analysis these emic structures.

The groups of knowledge bits constituting frames involve a person's knowledge about things such as objects, activities, ideas, and so forth. For example, a person who is a specialist in brake repair on automobiles probably has a complex frame which constitutes his knowledge of hydraulic brake systems in cars. His Hydraulic Brake frame would include knowledge of the various components of normal hydraulic brake systems, such as a master cylinder, brake shoes, wheel cylinders, brake fluid, etc., along with the relations between all of these component parts. This type of frame I call an *object frame*.

Besides a knowledge of objects, such as brake systems, some frames constitute a person's knowledge of the repeated, normal purposeful actions of his/her life. For example, one's knowledge of what is involved in writing a letter to another person, or knowledge of how to

go about taking a trip on a commercial airliner, or how to use a bathroom facility, is organized in terms of frames. The specialist mentioned above might well be expected to have as part of his knowledge a Brake System Reconditioning frame, which would constitute his knowledge of the procedures normally followed in reconditioning the brakes of an automobile. Erving Goffman (1974:22) refers to frames such as these as *social frames,* because it is this type of knowledge that enables a person to function adequately in society. Without knowledge of the basic how-tos[3] of life, such as how to sell and buy, how to drive an automobile, how to use a pay phone, etc., a person would have great difficulty living in a modern society.[4] Correspondingly, in a primitive society, social frames might include how to track an animal, how to process manioc, and how to weave a hammock.

Another type of frame is the *natural frame* (Goffman 1974:22). This type of frame is the organization of a person's knowledge of those repeated happenings in his life which he perceives as undirected, unguided, not performed or carried out by an intelligent human being. A person's knowledge of seasons, such as autumn, is an example of such a frame. A typical Autumn frame includes knowledge of those things which happen in that time of year, such as leaves changing color and eventually falling off the trees, weather getting colder, including occasional frosts, birds flying south, and squirrels gathering nuts for the winter. All of these happenings are seen by most people as natural happenings that occur again and again, unguided by human intelligence or purpose.[5]

2.1.2 Relations among frames. The frames of a person's knowledge are related to one another in several different ways. Some of these relations are part-whole relations, nuclear-marginal relations, member-class relations, and appropriateness relations.

One of the ways the frames in a person's knowledge are related to one another is in terms of the part-whole relation. That is, frames can be constituent parts of larger frames, which can in turn be constituent parts of still larger frames. The constituents of a frame are those meaningful chunks or segments (consisting of items, activities, etc.) which are strongly associated with that frame, those which are expected to be a part of that frame, those whose presence is implied by the presence of that frame. For example, a professional mechanic may include some type of general Brake frame as a part of his Automobile frame. Other possible frames in this mechanic's Automobile frame could be an Engine frame, a Steering System frame, and a Suspension System frame. Likewise, a Supermarket Shopping frame might contain smaller frames such as a Paying for Purchases frame, and a Collecting Food for Purchase frame. In turn, a person's Collecting Food for Purchase frame might include smaller frames such as a Choosing Fresh

Produce frame, where the person's knowledge of how to select fresh produce as regards ripeness and quality is organized.[6]

The part-whole relation does not imply that frames contain as constituents only frames of the same type. This is especially true in the case of relations of social and natural frames with object frames. A given social frame, say Fishing, may include as its constituents more than just smaller social frames, such as a Baiting a Hook frame. It might also contain certain object frames which are strongly associated with that social frame in the person's mind. For example, the Fishing frame might well include as one of its constituents a Game Fish frame, which would include knowledge of various types of game fish, their habitats, and the baits used to catch them.

There are many different relations that can pertain between the constituents of a frame.[7] One particularly important relation between such constituents is that of *nuclear vs. marginal.*[8] This relation seems especially prominent in social frames, which contain knowledge of purposeful human action. In these frames, each constituent is ranked as nuclear or marginal depending on its contribution to the overall purpose[9] of the larger frame. Those constituents which are central to the accomplishment of the overall purpose of the larger frame are *nuclear,* whereas those constituents which are less important to the accomplishment of the purpose of that larger social frame are *marginal.*[10]

For example, in a typical Supermarket Shopping frame, certain actions, such as Collecting Food for Purchase and Paying for Purchases, and certain objects, such as Food, would be considered nuclear constituents, in that these items are all central to the main purpose of the Supermarket Shopping frame—obtaining food. Other constituent objects, such as Shopping Carts, or constituent actions, such as Choosing a Shopping Cart, would be marginal constituents because their contribution to the overall purpose of obtaining food is much less significant.

Another important relation between the frames of a person's knowledge is the *member-class* relation. Many frames in a person's knowledge can be classified together as types of one basic overall frame. Each member of a class of frames contains the general features of that basic overall frame, but also contains features unique to itself.

For example, a Baseball frame, Football frame, Chess frame, and Card Games frame would all be members of the same general class of frames, in that they all have the basic features of a Competition frame. The role of antagonist (teams or individual players) and the purposes of winning and avoiding losing (via plays in football, tricks in card games, etc.) are the basic features of a person's Competition frame. Of course, the actual constituents of various member frames of the Competition class are likely to differ, even though they each accomplish the same

general functions in their frame. Recognizing the member-class relations among frames enables one to see generalities of similar cognitive structures while at the same time accounting for obvious differences.[11]

It is important to note that some (perhaps most) frames are probably best classified as members of more than one class of frames (these might be called hybrid frames). For example, a person's Rowing frame, containing knowledge of the sport of rowing, could be a member of the class of Competition frames, and also a member of the class of Water Activity frames.

The possibility that frames may be members of more than one class of frames indicates one aspect of the incredible complexity of knowledge structures. One way of representing this complexity is through a system of network relations, such that a single frame could be cross-referenced as a member of several classes. Pike and Pike are among those who have recognized the need for a complex system of network relations to account for the content structure (or "referential hierarchy" in their terms) in texts: "The referential hierarchy involves a network of hierarchical relations which seem to be virtually open-ended . . ." (1977:364).

Another way of representing this complexity in knowledge structure is to posit numerous redundancies in the knowledge bank[12] of any person, such that the same frame may occur several times in a person's knowledge, each time as a member of a different class. Winograd has suggested that knowledge may indeed include such redundancies: "Knowledge is not a neat collection of definitions and axioms, complete, concise and consistent. Rather it is a collection of concepts designed to manipulate ideas. It is in fact incomplete, highly redundant and often inconsistent. There is no self-contained set of 'primitives' from which everything else can be defined" (1976:26).

Finally, the last relation between frames in a person's knowledge bank to be discussed here is the relation of *appropriateness*. When frames occur together, whether in conversation or in a person's perception of an actual situation, their juxtaposition is perceived as either appropriate or inappropriate. This relation is distinct from the part-whole relation discussed earlier in that frames which are constituents of other frames have a strong association with the larger frame: the occurrence of the frame entails the presence of its constituents in a person's mind. For example, a House frame implies the presence of doorways and windows for most people. However, in the case of the appropriateness relation, a certain frame is not an expected part of another certain frame, but neither is their juxtaposition in the same context perceived as unduly abnormal. Rather, the juxtaposition is considered to be appropriate. For example, a person's House frame may not contain a Darkroom frame as a constituent, in that for many people, not all houses are expected to contain darkrooms. However, it

is appropriate for houses to contain darkrooms; it is not bizarre or outrageous.[13] Hence, the Darkroom frame is in a relation of appropriateness with respect to the House frame.

2.1.3 Frames, scenes, and routines: generic vs. particular knowledge. Most of those who have discussed the notion of frame as an organizing principle of human knowledge structure have identified it with *generic* knowledge, that is, knowledge which is general, not tied to specific referents or to specific events that occur at a specific time. Schank and Abelson (1977:41) write concerning scripts (which are essentially similar to what I call frame): "Scripts handle stylized everyday situations. They are not subject to much change, nor do they provide the apparatus for handling totally novel situations. Thus, a script is a predetermined, stereotyped sequence of actions that defines a well-known situation." Minsky (1980:1) also identifies frames with a person's general knowledge of familiar actions or objects: "A frame is a data-structure for representing a stereotyped situation like being in a certain type of living room or going to a child's birthday party."

While I use frame in a way essentially compatible with these notions, I believe that in order to more fully account for the structure of knowledge, something needs to be added concerning the *particular* knowledge which a person has, that is, the knowledge of specific persons, objects, events, and so forth.[14] Part of the particular knowledge a person has includes his memories of specific persons, items, events, etc. I propose the term *scene* for these memories which are composed of groups of knowledge bits about particular things.

Scenes are in many ways analogous to frames. A mechanic's particuular knowledge can include memories of the worst car he ever worked on; e.g., all of the gaskets in the engine leaked, all of the bolts were rusted on, the car had never been greased, etc. On analogy with frames, I call these scenes *object scenes*. A person also has *social scenes* as part of his/her knowledge, such as memories of a particular trip to the supermarket, when he/she was robbed while in the store. Further, a person's particular knowledge can contain memories of natural occurrences which were especially noteworthy, such as the worst snowstorm he/she ever experienced. These scenes are called *natural scenes*.

Scenes are associated with specific frames in a person's knowledge. These frames function to fill in details which are not remembered or are irrelevant to the focal parts of the scene (Rumelhart and Ortorny 1977:116). Thus for example, a person who remembers a particular experience, say, a robbery in connection with supermarket shopping, is not likely to remember every single detail of that scene, such as which aisles he walked down, what foods he selected for purchase and in what quantities, etc. Other particular details such as which particular

store it was, and where in the store he was robbed, might be remembered vividly. In this particular scene, the details he remembers, especially those central to the memory, replace comparable parts of the associated frame. The frame, however, fills in details he does not remember, based on his general knowledge of supermarkets.

Not all the items in a scene will have analogs in the scene's associated frame. Some events and objects will be unique to the scene and not associated with any analagous events or objects in the person's general knowledge of that situation. In the case of a supermarket robbery scene, the robber would be an object of the scene with no counterpart in the associated frame: robbers are not normal objects in supermarkets. Likewise, the robbery itself has no analog in the Supermarket Shopping frame. Note that it is normally the concepts unique to a scene that most often make it memorable and part of a person's particular knowledge, while normal cases melt together to form the generic knowledge of a frame.[15]

Many scenes can be associated with the same frame. A person may have several vivid memories of different supermarket shopping incidents. Perhaps once he was robbed, once a cereal display fell on him, and once another customer fainted into his arms. Each of these separate scenes may be associated with the Supermarket Shopping frame in the person's knowledge. Figure 2.1 is a schematic representation of these relationships.

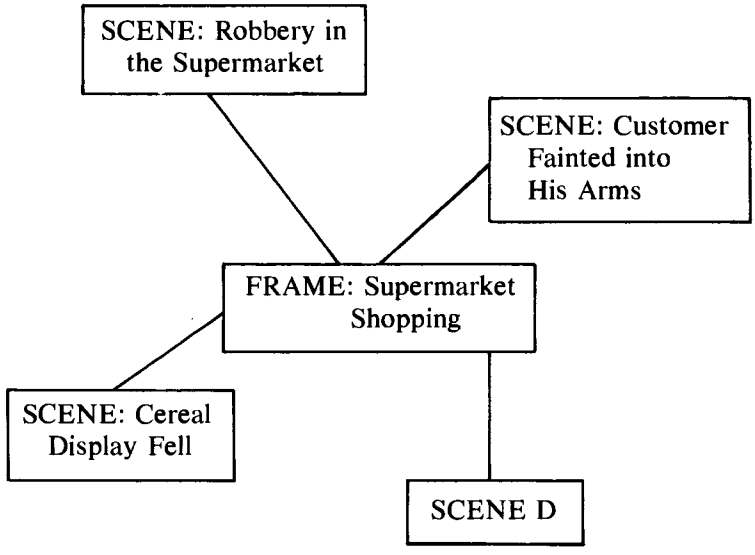


Figure 2.1 Schematic representation of many scenes associated with the same frame.

Likewise, a scene can be associated with more than one frame. Two or more frames may intersect in one scene. In fact, that may be what makes a particular scene memorable. An example of a scene associated with more than one frame is a robbery in the supermarket scene. This scene would be associated with a person's Supermarket Shopping frame and his Robbery frame, containing his knowledge of what generally happens in a robbery.[16] Figure 2.2 is a schematic representation of this.

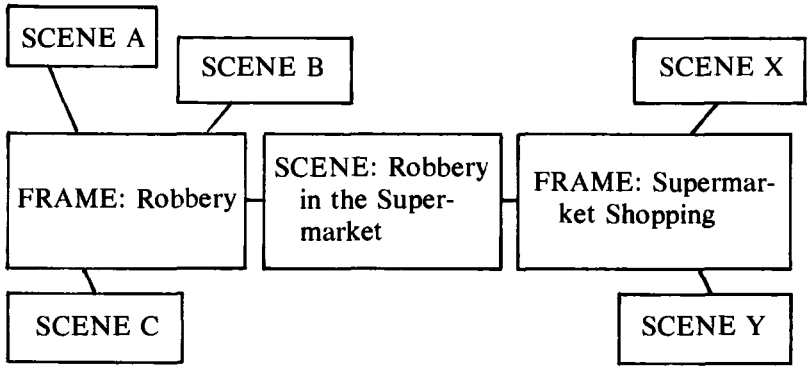


Figure 2.2 Schematic representation of one scene associated with two different frames.

What seems to be a cross between scenes and frames, containing a mixture of general and particular knowledge, is the knowledge a person has about his/her personal daily habits. I suggest the term *routine* for this type of knowledge structure. A man's knowledge of his morning habits, such as getting up, showering, shaving, dressing, having breakfast, and catching the subway for work resembles framelike knowledge. These are activities which the man does day in, day out. However, along with this generic framelike knowledge is the man's knowledge of his particular wife who makes his breakfast, his particular shaving mug, the particular person he buys his subway ticket from each day, and the particular subway train that takes him to work. These aspects of routines seem to resemble scenes in their particularity.

In sum, three distinct theoretical constructs are posited to account for different types of knowledge structures. The frame involves only generic knowledge—the structured knowledge of items which are associated repeatedly together. I posit the scene as the particular analog to the frame—the knowledge of particular items which are associated together in the form of a memory. Finally, the routine is the knowledge structure which accounts for the knowledge a person has of his own

habits, including items repeatedly associated with one another, as well as some very particular items in the person's experience.

2.1.4 A summary example: the U.S. Government frame. Before considering the relevance of frames to human communication, it may be helpful to summarize what has been said thus far by means of an example. This, then, is a brief discussion of the type of knowledge that could be included in a person's U.S. Government frame, and its associated scenes.

The frame itself would include the person's general knowledge of the U.S. Government. For example, the person's knowledge of the executive, legislative, and judicial branches of the U.S. Government, the powers of each branch, the relations between the branches in terms of checks and balances, would all be included in his U.S. Government frame. Each branch of the government would be a constituent object frame. For instance, the person's Legislative Branch frame would contain knowledge of the Senate and House of Representatives, and their characteristics, such as number of senators versus number of congressmen, the relationship between the two legislative bodies, etc. A constituent social frame of the U.S. Government frame might be a Making Laws frame, which would contain the person's knowledge of how laws are made, including various committee meetings, voting in each legislative body, the inclusion of amendments and riders, the presidential signature, etc. There would probably not be any constituent natural frames in the U.S. Government frame, since the events in government are all humanly directed, purposeful activities, not natural, humanly undirected ones.

The U.S. Government frame is a member of the class of Government frames. Other members of this same class may include a Totalitarian Government frame, a Communist Government frame, and so forth. The president himself would be a nuclear object in the U.S. Government frame, but his staff would be marginal. The Making Laws frame would be a nuclear social frame, whereas the Holding News Conference frame is probably marginal.

Finally, many scenes could be associated with the U.S. Government frame in a person's knowledge. Object scenes could include one's knowledge of specific presidents, such as Jefferson, Lincoln, and Wilson. Social scenes associated with the U.S. Government frame could contain knowledge of specific events such as the Prohibition Act, the decision to enter World War I, or the Watergate investigation.

2.1.5 Foregrounding and cues. When people participate in communication, whether verbal, written, or some other, they normally perceive that only certain frames of their knowledge are relevant to their communication. That is, certain frames are in special focus, or under

special attention in the course of any communication. The information in these frames is what is being talked about. Chafe (1972:50) writes: "At any one point in a discourse there are certain concepts which are in the foreground of the minds of the participants in the discourse—concepts which are, so to speak, in sharp focus at that point." Expanding on Chafe's use of the term *foreground,* I call the frame(s) which are the topic of communication *foregrounded* frames, and term the process whereby a participant in a communication places a frame under special attention *foregrounding.*[17]

The notion of foregrounding is crucial to an understanding of communication, in that unless the participants of a communication have foregrounded the same frame(s), the communication breaks down and becomes incoherent. Consider the following example excerpted from a text on the fall of Jerusalem in 70 A.D.:

(1) At last, after frightful suffering amid the rigors of famine, the city fell into the hands of the Romans, who looted the temple and razed it to the ground (September, a.d. 70). Captives and spoils were carried to Rome for Titus' triumphal procession.

(Metzger 1965:28)

If following this example one were to read, *But Kissinger escaped, streaking off to Washington in Air Force One,* his reaction would be amusement or annoyance at this anomaly. Why is it anomalous? Because the frame which has been foregrounded by the reader is probably something like ancient history, in which particular information about Henry Kissinger or jet airplanes does not apply. The problem is not that the reader does not know about Kissinger or air travel. Rather, the discord results from the fact that Kissinger and air travel are not part of the reader's foregrounded Ancient History frame.

Consider now (2) from a hypothetical text about a baseball game:

(2) The score was five to two, LaPorte leading Michigan City. It was the bottom of the ninth inning, two outs, and bases were loaded. Joe Smith, the Michigan City second baseman, came to the plate. The count went to three and two. The pitcher wound up and delivered a low fast ball. Smith swung and connected, sending the ball arching high towards the center field fence. The LaPorte centerfielder, Greco, raced back to the fence and, in a spectacular leaping catch, saved the game for LaPorte.

If the next sentence of this text were to read, *Albert was so mad he threw his spoon at the waitress,* a reader's response would probably be amused, confused, or annoyed, in that waitresses and spoons are not part of a Baseball frame but rather part of a Restaurant frame. Again, what jars the reader of such a text is not that he does not know what a

waitress or a spoon is, but rather that he has not been prepared or signaled that his knowledge about restaurants was relevant to the text.

However, consider the possibility that the following sentences had preceded example 2 early in the same text: *Last night Albert went to the local bar to watch the LaPorte-Michigan City game on TV*, or *Albert got special tickets to the LaPorte-Michigan City game last night. He and his wife sat in a special closed booth in the Superduperdome where they could see the game and waitresses came around to serve them sandwiches, soups, and cocktails.* In either case, the sentence about Albert, the spoon, and the waitress would have made perfect sense. Why? Because these sentences would have signaled the reader to foreground both a Baseball frame *and* a type of Restaurant frame.

These examples show the need for both participants in a communication to have foregrounded the same frame(s). If a speaker or author has foregrounded a frame which his hearer or reader has not foregrounded (the situation examples 1 and 2 illustrate), the resulting communication will seem incoherent or unconnected to that hearer or reader. How, then, do the participants in a communication go about having one another foreground the same frame(s)?

There are several types of stimuli to which people respond by foregrounding frames. For instance, participants in a communication situation which is [+ face] (that is, face to face; see chapter 1), often assume that the situation which they share with their interlocutor (especially if that situation is extraordinary) has caused their interlocutor to foreground a certain frame.[18] For example, say that two persons are running to shelter in the midst of a severe hailstorm. As the storm rages on, one person turns to the other and says, "I hope it lets up soon." The frame that is foregrounded in the speaker's mind is the Storm frame. He assumes, quite reasonably and correctly, that since his interlocutor is experiencing the same storm, the latter's Storm frame probably is also foregrounded. In this case, a participant in a communication assumed that the extraordinary situation both he and his interlocutor were experiencing had caused them both to foreground the same frame.

Notice that in the same situation of running through a storm one person normally could not begin a conversation by turning to the other and saying, "I heard it was 3 to 2 in the ninth." Even if a Baseball frame were foregrounded in the speaker's own mind, as this comment would reflect, there is nothing in the situation to indicate to him that his hearer has foregrounded that same frame. Thus, if he wanted to make such a comment he would probably need to first signal his companion to foreground the appropriate frame, perhaps by saying something like, "The last game of the World Series is being played

today." When one person in a communication signals to another to foreground a certain frame, I call that signal a *cue*.[19]

The function of cues is especially important in written discourse, since in this case the participants of the communication are not in a face-to-face situation, perceiving the same context. Thus, in order for an author to help his reader to understand his text, he must indicate by means of sufficient cues which frames his reader should foreground in his mind.

The first cues noticed in a published written work are very overt cues designed to signal to the reader the general overall frame to foreground. These blatant first impression cues also serve to guide the published discourse to its intended audience. The readers who are interested in the topic(s) of the general foregrounded frame(s) will be attracted and others will probably put the written text aside. Ricoeur (1977:31) writes in this regard: "A book is addressed to only a section of the public and reaches its appropriate readers through media that are themselves submitted to social rules of exclusion and admission." Also, in discussing what I am calling here first impression cues, Pratt (1977:119) notes, "These types of data . . . are designed to bring together literary works and their intended Audiences, that is (in most cases), the Audiences most likely to appreciate them."

The types of devices which an author can use as first impression cues for a published written work are numerous. For example, the title of an article or book, and the journal or series in which it is published, are cues to a reader concerning what body of his knowledge is relevant to this particular discourse. For example, a reader expects discourses published in *Language* to differ in terms of content from articles in *Time* magazine. Likewise a reader would tend to foreground different frames if he were presented with a book published as part of the Longman Linguistics Library as opposed to a book which was part of the Little Golden Books series. Further, the cover of a book often serves to cue the reader as to what frame to foreground. Thus, a clothbound book with plain gold lettering along its back is likely to be interpreted as more scholarly than a paperbound book with a cover depicting a swastika, a bloody knife, and a smoking pistol.

Besides the first impression cues which give a general indication of the contents of a written work, authors also use more subtle cues in the grammatical structure of the written text itself, such as the form of first mention references, to signal to the reader to foreground certain frames of his knowledge. These types of cues will be examined in detail in this study; see chapter 3, section 3.3.

The notions of frames and foregrounding are especially important to this study of assumptions authors make about the knowledge of their readers, and the effects of these assumptions on the structure of texts. As mentioned in the introduction of this study, because of the lack of

feedback in the communication situation of writing, an author must make sweeping assumptions about the knowledge of his reader, developing a mental image of him, and then write his text according to those assumptions. However, the author of a written text normally does not make assumptions about the whole extent of his reader's knowledge. Rather, most of an author's assumptions about his reader's knowledge are assumptions about the *reader's foregrounded frame.* When the author constructs his text, he assumes that his reader's foregrounded frame contains certain bits of knowledge, and that it has a certain degree of sophistication. The subsequent chapters of this study examine how such assumptions about the reader's foregrounded frame are reflected in the structure of English written texts.

2.2 Pragmatic Knowledge

Another type of knowledge, which differs to some extent from the frame-organized knowledge considered thus far, is the knowledge a person has of how to shape his/her message to be in keeping both with the communication context and his/her purposes in sending the message. I call this type of knowledge *pragmatic knowledge.*[20,21] This is the knowledge which enables a person to integrate his perceptions of the communication situation, such as his relationship with his interlocutor, the time, and the place of the communication, with his own purpose(s) in communicating (e.g., to make a request, give a command, etc.), and adjust the form of his communication to be in line with that integration.[22]

2.2.1 Examples of pragmatic knowledge. Many scholars in the fields of sociolinguistics and in philosophy have studied the sort of knowledge a person must have to communicate appropriately and effectively with others. Below I summarize the results of some of their research as exemplary of what I am calling pragmatic knowledge. I wish to emphasize that these summaries are given merely as illustrations of what pragmatic knowledge is, and should not be taken as a comprehensive proposal as to the theoretical contents and organization of that knowledge.

One example of pragmatic knowledge is H. P. Grice's (1975) work on the "Cooperative Principle." The Cooperative Principle consists of four rules or "maxims": Quantity, Quality, Relation, and Manner. The maxim of Quantity states that a conversational contribution should be neither more nor less informative than is required. The maxim of Quality asserts that one should not say something which one believes to be false, or for which one lacks adequate evidence. The maxim of Relation says that contributions to a conversation must be relevant. The maxim of Manner states that contributions should be brief and orderly, and avoid ambiguity and obscurity. These four rules govern

human communication to the extent that a person receiving communication from another person will assume that these rules are being followed unless he is given evidence to the contrary; thus, these rules constitute a person's knowledge of the normal pattern of human communication.

A further aspect of pragmatic knowledge as it is represented by the Cooperative Principle is that people know both how to effectively violate these norms of communication to imply a certain message and also how to interpret the implications of others' breaking of those communication norms. For example (my example, not Grice's), if at a professional meeting, someone walks up to you and says, "What did you think of John Brown's paper?" and you reply, "You know, John is a very sincere person, and very hard working, too . . . ," your hearer will likely assume that, even though your answer appears to be irrelevant, or at least not to the point, you are observing the Cooperative Principle. Thus, he will gather that you have some reason for not answering him directly, perhaps because you do not want to be overly negative. He will probably deduce that you did not like John Brown's paper very much.

Another example of what I call pragmatic knowledge is the set of appropriateness conditions which have been worked out for various types of speech acts. Searle (1969:66–67) has outlined the appropriateness conditions for numerous different speech acts. For example, he suggests that the appropriateness conditions for the speech acts of *requesting* are as follows:

(a) Propositional content condition:	Future act *a* of H[earer]
(b) Preparatory conditions:	H is able to do *a*.
	S[peaker] believes H is able to do *a*.
	It is not obvious to both S and H that H will do *a* in the normal course of events on his own.
(c) Sincerity condition:	S wants H to do *a*.
(d) Essential condition:	Utterance counts as an attempt to get H to do *a*.

These sorts of conditions constitute knowledge of specific patterns of human speech behavior which are necessary in order to make and interpret utterances appropriately. Without knowledge of these pragmatic rules, a person would not be able to correctly discern some of the implications of what was said to him and would not know what his own words were implying. As Edward Keenan (1971:49) suggested, "An utterance of a sentence pragmatically presupposes that its context is appropriate." In other words, the performance of a speech act generally implies that all of its appropriateness conditions are satisfied.

Further, some form of generalized rules concerning manner of address and reference, such as Brown and Gilman's (1960) notions of power and solidarity,[23] should probably be included as part of a person's latent bank of pragmatic knowledge. Brown and Gilman suggested that the social status of one's addressee with respect to oneself, which they call "power," and the degree of closeness in the relationship of the speaker and the addressee, which they call "solidarity," together determine the use of formal and intimate forms of the second person pronouns in many Indo-European languages. The more solid a relationship is, the more likely the speaker will use an intimate form of the second person pronoun. The more power one's addressee has, the more likely one will use the formal form of the second person pronoun. Brown and Gilman suggest that Indo-European languages tend to favor the solidarity factor in choosing forms of address and reference (1960: 259), but this is not a linguistic or cultural universal. Studies by Tanner (1967) on code switching among Indonesians, and by Wallace (1976) on address and reference in Jakarta Malay, indicate that while the factors of power and solidarity themselves might be universal in their influence, each language has its own (emic) integration of these factors with others such as topic of conversation, and the presence of bystanders. It is this emic integration of various sociolinguistic factors which forms part of each person's pragmatic knowledge.

Other examples of pragmatic knowledge may include something like the emic equivalent of the communication situation taxonomy discussed in chapter 1 of this study. An emic version of this taxonomy would represent for a specific language the different patterns of communication as they vary from situation to situation. Also, emic rules of conversation, such as turn-taking rules, and how to begin and end conversations (Schegloff and Sacks 1973), form part of a person's pragmatic knowledge.

The preceding paragraphs sketch various aspects of what I refer to broadly as pragmatic knowledge. This brief introduction to pragmatic knowledge will suffice for the purposes of my study.

2.2.2 Message, purpose, and perception of the communication situation. What are the factors which are interpreted and integrated by means of

a person's pragmatic knolwedge to produce an effective and appropriate utterance? I suggest that these factors can be summarized as the person's perception of the communication situation, his purpose in communicating a message, and the content of the message itself.

A person's perception of the situation in which he is communicating is conveniently summarized in Pike and Pike's phrase, "I-thou-here-now" (1977:380). In other words, a person perceives who his interlocutor is, who he is in relation to that interlocutor, the physical and social situation in which the communication is taking place, and the time of the communication, in evaluating how to shape his message. In perceiving these things, the person experiences various physical stimuli—visual, auditory, olfactory, etc.—which lead him to use certain relevant bodies of his knowledge in determining the shape of his communication. Thus, if he recognizes his interlocutor as a personal acquaintance, his knowledge of that person will be a factor in shaping his communication. If he does not recognize his interlocutor as an acquaintance, he may respond to the person's appearance, manner of speech, and so forth, utilizing his knowledge or assumptions concerning what type of person dresses or speaks in a certain way as criteria for adjusting his utterance to the situation. If a person perceives himself to be in a locker room after a lunch-hour workout, or in the middle of Sunday morning worship in a church, his background knowledge of these combinations of time and place will constitute part of the data which his pragmatic knowledge evaluates and uses in shaping his communication.

Along with his perception of the communication situation, a person's knowledge of the content of his message is also a factor interpreted by his pragmatic knowledge. Subject matter which is personal or intimate may be expressed in a different form than subject matter which is related to business. For example, Friedrich (1972) has suggested that the use of the formal and informal pronouns in Russian literature depends in part on the topic being discussed. Military characters in Russian literature, when talking about women, would use the informal pronouns to address one another, but would switch to the formal pronouns when discussing military matters.

Finally, a speaker's purpose in making an utterance is a factor evaluated in light of his pragmatic knowledge, which affects the shape of his utterance. I see a person's purpose in speaking as having two facets, what Austin (1962) called *illocutionary* and *perlocutionary force*. The illocutionary force of a person's utterance is what he wishes to accomplish or do in making that utterance. An example of an illocutionary force is *thanking* (Searle 1969:67), which is an action accomplished by a person's saying a certain thing. The perlocutionary force of a person's utterance is the effect which he hopes the utterance will have on his hearer. An example of the perlocutionary force of an utterance is *persuading*, in which the speaker hopes that his utterance(s)

will cause his hearer to change his mind about something. It is the combination of these two forces which defines a person's purpose in speaking.

One way in which a person's purpose affects the shape of his utterance is in the exercise of his options in speaking. By means of his latent pragmatic knowledge a person can evaluate a situation and the message he desires to communicate and thus have an intuitive notion of what shape a normal utterance of that message in that situation should have. However, a person always has the option of choosing a nonnormative shape for his utterance, especially if he has a special purpose in making the utterance, a purpose beyond simply communicating the content of the message. For example, a boy on his first date with a girl may try to impress her by using an overly educated style for the situation. He may also use vague circumlocutions to avoid answering some of the girl's questions, if he thinks she will not like his answers. In this situation the speaker would be adjusting the form of his utterances away from what is his norm to accomplish a specific purpose.

The preceding factors, which are taken into account in shaping an utterance, refer most clearly to the communication situation of speaking in a face-to-face encounter in everyday conversation. However, in the communication situation of writing, the factors that are taken into account by a person's pragmatic knowledge are somewhat different. The author's purpose in writing and the content of his message both are still relevant data which affect the shape of a message via the mediation of a person's pragmatic knowledge. However, an author's perception of the communication situation is quite different, in that there is no interlocutor physically present to be perceived. Therefore, as noted in the introduction, the assumptions which an author makes concerning his reader in the situation of writing serve the same function as the perceptions of the interlocutor in a face-to-face conversation. *These assumptions in writing replace actual perceptions of an interlocutor as data to be used in determining the shape of the message.*

2.2.3 Summary. A person's pragmatic knowledge is that knowledge which enables him to evaluate and integrate his purposes, the content of his message, and his perception of the communication situation so as to determine an appropriate shape of that message. As such, pragmatic knowledge includes a person's knowledge of the conditions and implications of various speech acts, the appropriate use of an emic system of address and reference, approriate turn-taking procedures, etc.

This study is an examination of the relation of one aspect of the communication situation—an author's assumptions about the knowledge of his reader—to English text structure. Thus, the principles of

the following chapters which explain these relations could be considered a reflection of the pragmatic knowledge of English speakers.

2.3 Linguistic Models for Knowledge Structures

2.3.1 Pattern and instantiation--an important distinction. Before discussing particular models of knowledge structure, it is important to mention a distinction which I believe is essential to any model attempting to deal with the structure of knowledge. The distinction which I wish to draw here harks back to the theory of Forms in Platonic and Aristotelean philosophy. Plato, in Book X of the *Republic*, suggested that there exists "a single essential nature or Form for every set of things which we call by the same name." For example, a "thing" could be any object in the real world, such as a particular chair, house, or tree. The "form" of that thing is the collection of those basic features which make the thing the member of a class of similar things called by the same name. For example, we know that a particular upholstered rocking chair is a chair because it holds certain basic features in common with all the other chairs in our experience. The particular rocking chair is an example of a "thing," and the collection of features by which we recognize the rocking chair to be a member of the class of chairs is the "form" of a chair. This type of distinction underlies much of the research done in linguistics. For example, in linguistics, a "thing" is an actual language utterance, something someone has said. The forms of that utterance are the linguistic patterns which can be abstracted from it, of which it is an example. Thus, in the sentence *The scrawny people run faster, the scrawny people* is a thing and *noun phrase* is its grammatical form.

I believe the relation of a particular thing and its form is a necessary parameter for any model of the structure of knowledge. In the following discussion I will make a terminological substitution for the sake of clarity, in that the term *form* already has a different common use in linguistics: I will use the term *pattern* to mean a philosophical form and *instantiation* to mean a particular thing which exemplifies a form.[24]

Applying what has just been said to the previous discussion of the structure of knowledge, the more or less permanent, systematized store of knowledge in terms of which a person interprets and understands the world in which he lives constitutes the patterns of his knowledge. The expressions of knowledge in a particular text, i.e, the content structure of an actual utterance, is an instantiation of patterns in the speaker's knowledge. Pattern is the latent, always available bank of knowledge a person has; instantiation is the localized knowledge a person exhibits in the expression of a particular text. Thus, I am proposing that the study of human knowledge structures must include both an examination of the knowledge bank, or "cognitive map" (Miller et al. 1972:55), of a

person, and an examination of that knowledge as it is expressed in the content structure of actual utterances.

It is important to study both patterns and instantiations in knowledge structure because apart from the instantiations, the actual expressions of a person's knowledge, we cannot apprehend what the patterns of that knowledge are. Aristotle, in Book I, chapter 9 of *Metaphysics*, recognizes this close relation between pattern (form) and instantiation (things): "For the Forms are practically equal to—or not fewer than—the things, in trying to explain which these thinkers proceed from them to the Forms." In other words, forms or patterns can only be ascertained by examining their instantiations. For example, one cannot know the pattern of clause structure apart from the examination of many specific clauses; one cannot know what the basic pattern of a chair is apart from examining a number of different chairs. The knowledge another person has of a given subject, say football, cannot be discerned apart from his making particular expressions, either physical or verbal, of that knowledge. Thus, methodologically speaking, an examination of the patterns in knowledge cannot be carried out apart from an examination of the instantiations of that knowledge.

Another reason for the study of both the patterns and instantiations of knowledge is that the patterns of a person's knowledge include a knowledge of previous instantiations. That is, part of the patterned knowledge which is expressed in a given text, especially a text of written or oral literature, is a knowledge of the texts that have preceded it. Becker notes, "Part of the context of any text is, more or less, all previous texts in a particular culture, especially texts considered to be in the same genre: readable literature is structurally coherent with its own ancestors" (1980:3). One of Becker's examples of the relationship between a person's patterned knowledge of past texts and a particular instantiated text is the American cowboy movie.

> Any cowboy movie tells the story of the past more in the sense that it repeats episodes and characters of previous cowboy movies and novels than that it recounts "real" events that occurred in the American West. The "truth" of a cowboy movie is much more a matter of its correspondence with . . . a body of prior literature . . . than with any events recognizable by non-fiction cowboys in their own experiences.
>
> (Becker 1979:226–27)

Thus, the content structure of particular texts (instantiations) must be examined in a study of knowledge structure, not only out of methodological necessity, but also because a knowledge of such texts themselves is part of the emic knowledge patterns of a cultural community.

In terms of the types of knowledge discussed previously in this

chapter, frames and pragmatic knowledge correspond to what I mean by patterns. A person's knowledge of the world and its workings, his knowledge of the basic repeated activities of his life, as well as his knowledge of how to make his utterances acceptable in a given context, all could generally be categorized as patterns in the person's knowledge. Instantiations, on the other hand, involve the content structure of specific texts. Studies of the content structure of particular texts would include, for example, studies of the themes of those texts. Linda Jones (1977:3 4) has discussed the fact that theme is text-specific: "Theme is *structure-defining* because the theme consists of just those ideas that give the text its characteristic conceptual structure. Theme makes the text *that* text and not some other text. It establishes the conceptual structure into which the rest of the ideas fit."[25] Another example of a type of content structure analysis is the comparison of the chronological order of happenings in a text and the order of events as told in that text. This type of study is exemplified in the work of Erickson and E. G. Pike (1976) and K. Pike (forthcoming).

The point of this section has been to present and defend the assertion that an adequate model of knowledge structure should account theoretically for both the patterns of a person's storehouse of knowledge and the content structure of particular instantiations. The next section summarizes some of the salient features of a linguistic model of knowledge structure.

2.3.2 Relation to linguistic theories. What has been said thus far in this chapter concerning the structure of knowledge should not be construed as a proposal for a new theory of language or linguistics. Rather, I believe that the notions of frames, scenes, and routines, pragmatic knowledge, and pattern and instantiation could be incorporated into a number of existing linguistic theories without entailing radical modifications.

Two theories in particular seem compatible with the material I have set forth concerning knowledge structure: the text theory of van Dijk, and tagmemics as developed by Pike, Longacre, and others. Some of the notions discussed in this chapter are already contained in some form in van Dijk's model of text theory. For example, van Dijk's theory includes a strong orientation toward the notions of speech acts and the application of our knowledge of how to make utterances appropriately (1977:190), which is essentially the realm of what I have called pragmatic knowledge. Also, van Dijk's theory deals both with general cognitive structures, e.g., frames, and with the content structure of specific texts (1977:130ff.), a distinction comparable to my pattern and instantiation.

The one area of van Dijk's theory in which the ideas of this chapter could make a contribution is in the distinction of frames, scenes, and

routines. Van Dijk's use of the term *frame* seems limited to a person's general knowledge of conventional repeated happenings.[26] I believe that associating specific bits of knowledge with frames, as I do in the notions of scenes and routines, could provide a more comprehensive account of human knowledge structures without modifying van Dijk's model significantly. Also, the notions of cues and foregrounding as presented here would seem to be appropriate additions to van Dijk's work.

Tagmemic theory, especially that aspect of the theory dealing with what is called "the referential mode,"[27] also seems especially compatible with what I presented in this chapter. Again, some of the salient points of my work are also salient in the framework of this model, albeit under different names.

For example, much of the research on the referential mode is focused primarily on the content structure of particular texts (Pike and Pike 1977:363), which I have called the instantiation aspect of knowledge structure. Also, while the patterns of knowledge structure have not received a great deal of attention in tagmemics, those tagmemicists who have examined them, such as Linda Jones (1977) in her examination of "expository scripts," have found this type of study compatible with the overall tagmemic framework.

Further, there is great emphasis in the tagmemic referential mode on knowledge of specific items (Pike and Pike 1977:384), which is thoroughly compatible with, I believe, my scenes and routines. And my notion of frame finds a rough analog in the referential "tagmeme" and the "vector" (Pike and Pike 1977:367). The different types of relations that Pike and Pike have suggested as pertaining between structures in the referential mode (1977:377) are identical to some of the relations I discussed in section 2.1.2.

The notions discussed in this chapter could make two important contributions in the development of the tagmemic theory of the referential mode. First, some of my notions could facilitate a more extensive examination of the general patterns of knowledge structure than has been implemented thus far in the tagmemic study of the referential mode. An extrapolation of the general structure of a person's knowledge based on the manifestations of that knowledge in specific texts is an important feature of this study which would increase both the generality and the significance of the tagmemic research in the referential mode.

Secondly, I believe that the explicit use of the notion of frame in tagmemics would improve the tagmemic account of knowledge structure. An account of the general patterns of knowledge structure, such as mentioned above, requires positing a cognitive unit, such as the frame, to represent a person's knowledge of items and actions customarily associated with one another. The structures presently posited in

the tagmemic referential mode—the referential tagmeme and the referential vector—have only been applied to the analysis of the referential structure of particular texts rather than to discussions of knowledge structures in general. Further, it seems to me that the relations between actions and the objects or participants closely associated with those actions are unclear in tagmemic referential theory, whereas these relations are more explicit in the frame analysis of this study. For these reasons, I believe use of the notion of frame would be a significant addition to tagmemic referential theory.

In this chapter I have discussed certain ideas, such as frame and pragmatic knowledge, which I believe should be included in a study of knowledge structure. In the following chapters, I apply these notions to the study of an aspect of pragmatic knowledge of authors writing in English, the knowledge of how to shape their written text in accordance with their assumptions about the knowledge of their reader.

Notes

1. The notion of frame as an organizing principle of knowledge has been used under different names by several scholars in various fields. Bartlett (1932), and Rumelhart and Ortorny (1977), in cognitive psychology, use the term *schema* with roughly the same meaning as my term *frame*. Schank and Abelson (1977), in artificial intelligence, use the term *script* analogous to frame. Pike and Pike's (1977) *vector* bears resemblance to my notion of frame. Finally, van Dijk (1977) in linguistics, Agar (1973) in cognitive anthropology, Goffman (1974) in sociology, and Minsky (1980) in artificial intelligence, all use the term *frame* similar to my use.

Linda Jones (1977) uses the term *script* in a way not entirely comparable to my use of frame. She uses script to refer to structural types found in expository discourse. Her use of the term comes from Schank's work, but her specific application is somewhat different from my use of frame.

2. I use the term *knowledge bit* here as a primitive notion, in a way analogous to information theory. It refers to some basic portion of knowledge which a person has.

3. Robert Longacre has referred to this notion as the basic procedural orientation of frames (personal communication).

4. Such difficulties are often experienced as culture shock by those living in a foreign culture, where the frames which they have for buying and selling, etc., may not match the corresponding frames of the culture in which they live.

5. Research into human knowledge structures has not progressed to the point where one can posit an exhaustive, precise taxonomy of frame types. The types mentioned here—object frame, social frame, and natural frame—are suggestive only and not proposed as a complete typology. In this study most often I use simply the generic term *frame* to refer to any organized body of knowledge which a person has, rather than attempt to classify frames as to their type at every point.

6. It may be because of the prominence of the part-whole relation as an organizing principle of knowledge that Pike and Pike (1977:3) have called the domain of knowledge structure studied in tagmemics "the referential hierarchy." I discuss briefly their work on the referential hierarchy as it relates to this study in section 2.3.2. See also Rumelhart and Ortony (1977:107–9) for a further discussion of part-whole relations in knowledge structure.

7. Other relations between the constituents of a frame might include any *obligatory chronological sequencing* of activities in the frame. For example, in a person's Fishing frame, the Baiting a Hook constituent chronologically precedes the Casting Out the Line constituent. Further, a relation of *government* can pertain between constituents of the same frame. Thus, if a cashier and a manager were constituents of a person's Supermarket Shopping frame, one relation between these constituents would be the fact that the manager governs, or is in authority over, the cashier.

8. The notions of nuclear and marginal are relative to a given frame and to a given observer. Concepts which are marginal to one frame may be nuclear to another. The cash register may be a marginal object in the Supermarket Shopping frame of the buyer, but it is probably a nuclear object in the cashier's Job frame. See Linda Jones (1977:45) for a discussion of different perceptions of the theme of a text according to the background of the observer. Also, some objects may be too irrelevant to be nuclear to a high-level frame, but may be nuclear to a lower-level constituent frame. For example, fresh produce itself would probably not be nuclear in a person's Supermarket Shopping frame. Rather a more general concept, food, which includes produce but also much more, is nuclear to this frame. Fresh produce is nuclear to the Choosing Fresh Produce frame, which is a low-level constituent of the Supermarket Shopping frame.

9. Pike and Pike (1977:365) have as a central feature of their analysis of knowledge structures the notion of purpose.

10. Goffman (1974:201) and Pike and Pike (1977:377) contain valuable discussions on the notion of nucleus and margin in knowledge structure.

11. Schank and Abelson (1977:40) refer to the member-class relation between frames (what they call "scripts") as the "tracks" of a script. Their prime example is the Restaurant script, which represents a person's knowledge of restaurants. This script may have several tracks, each of which has uniquenesses which make it different from the other tracks, but each also contains the essential features common to normal restaurants. Such tracks could include a Fast-Food Restaurant track, a Coffee Shop track, and an Elegant Evening Dinner Club track.

12. The term *knowledge bank* was suggested to me by Marvin Mayers (personal communication).

13. When two frames which do not have an appropriateness relation are perceived as applying to the same situation, the result is sometimes humor. The sight of a circus parade marching through a supermarket strikes some people as humorous because their

Circus Parade frame and their Supermarket Shopping frame do not share an appropriateness relation. See Pike (1981) for a linguistic discussion of humor.

14. Rumelhart and Ortorny (1977:116) make a distinction similar to the one I make between generic and particular knowledge. Their analogous terms are "semantic memory" and "episodic memory," respectively. Further, Strawson (1953:49) suggests a philosophical distinction between items referred to generally and those referred to particularly: "It is a necessary condition for a thing's being a general thing that it can be referred to by a singular substantival expression, a unique reference for which is determined solely by the meanings of the words making up that expression; and it is a necessary condition of a thing's being a particular thing that it cannot be referred to by a singular substantival expression, a unique reference for which is determined solely by the meanings of the words making up that expression." In other words, Strawson's distinction between general and particular rests on whether an expression refers to something solely on the basis of the meanings of the words of the expression (general), or whether it refers to something on the basis of the meanings of the words *and* some particular real world referent (particular).

15. What is business-as-usual for some people may be memorable and become part of the particular knowledge of other people. For example, an account of the everyday life of a political prisoner, such as Solzhenitsyn's *The First Circle,* may be interesting enough to become part of the particular knowledge of those who are not political prisoners, who read about it.

16. Scenes are probably not associated with several frames indiscriminately. Rather, certain frames are perceived as being appropriate or not out of place in combination with other frames in scenes. Thus, the intersection of a Robbery frame and a Supermarket Shopping frame, while not normal, is not perceived as totally outrageous or incompatible.

Humor, on the other hand, often capitalizes on a person's knowledge of appropriate and inappropriate combinations of frames (cf. the discussion of appropriateness in section 2.1.2 above). For example, the idea of an elephant crashing around in a supermarket full of shoppers is humorous to many people because frames containing elephants do not normally form appropriate combinations with a Supermarket Shopping frame. See also note 12.

17. See also Nunberg (1978) who discusses the function of foregrounding (his term is "salience") as it applies to the interpretation of the meaning of words with multiple senses.

18. Goffman (1974:36) writes in this regard: "It seems that we can hardly glance at anything without applying a primary framework [i.e., a frame], thereby forming conjectures as to what occurred before and expectations of what is likely to happen now."

19. Schank and Abelson (1977:49) call this notion a "script header." Further, the term *cue* as it is used here is not related to the use of this term in anthropology. Rather, I posit it here as a technical term for signals that indicate to a person to foreground a particular frame.

20. I use the term *pragmatics* in a way similar to van Dijk (1977:189–90), who describes pragmatics as the study of systematic, conventional relations between factors of the context of an utterance and the shape of the utterance itself: "Pragmatics must be assigned an empirical domain consisting of *conventional rules* of language and manifestations of these in the production and interpretation of utterances. . . . It should be made clear in

pragmatics how conditions of success for the utterance as act, as well as principles of communicative interaction, are connected with the structure or interpretation of the discourse." Thus, my term *pragmatic knowledge* refers to a native speaker's knowledge of these conventional relations between aspects of context and the structure of an utterance.

21. Although I borrow the term *pragmatics* from the semioticians, I do not wish to imply that I fully agree with the traditional semiotic distinction between syntax, semantics, and pragmatics. I do not believe each of these areas of study is completely distinct and coequal with the others. For example, meaning, which has been traditionally understood as the realm of semantics, is also an aspect of grammar (or syntax), as tagmemicists such as Pike and Longacre, and case grammarians such as Fillmore, Chafe, and others, have suggested. Thus, the distinctions between these three areas are not clear-cut. Further, Carnap (1961:13) has suggested that in the study of natural language, these three fields are not coequal: "All knowledge in the field of descriptive semantics and descriptive syntax is based upon previous knowledge in pragmatics. . . . Descriptive semantics and syntax are, strictly speaking, parts of pragmatics." In particular, it seems to me that the study of the content of an utterance (that is, semantics) is dependent on the use of that utterance in a situational context (pragmatics). In sum, then, although I use the term *pragmatics* here in a way similar to the semioticians, I recognize the problems in their three-way distinction of syntax, semantics, and pragmatics.

22. Thus, pragmatic knowledge is probably equivalent to what Hymes (1971), Lyons (1977), and others have called "communicative competence."

23. Brown and Gilman applied the notions of power and solidarity to the use of Indo-European second person pronouns, both formal and familiar forms. However, the general rules they outline are probably applicable to all forms of address and reference. For example, Wallace (1976) has applied rules similar to Brown and Gilman's to account for the complicated system of address and reference in Jakarta Malay, which includes use of kin terms, personal pronouns of several languages, title, and personal names.

24. A similar distinction is one introduced by C. S. Peirce and used extensively by Lyons (1977:13ff.): that is, the distinction between a "type" and its "token."

25. A related field of research in the content structure of particular texts is van Dijk's (1977) work in "macro-structures."

26. Van Dijk writes concerning frames, "A frame is an *organizational principle*, relating a number of concepts which by *convention* and *experience* somehow form a 'unit' which may be actualized in various cognitive tasks" (1977:159).

27. Pike and Pike have described the referential mode (which they call "the referential hierarchy") as follows: "Study of the referential hierarchy analyzes the content of what the speaker 'wants to say' about some unit, element, situation, action; or speaker or hearer attitude, emotion, presupposition, evaluation or belief that is communicated (intentionally or unintentionally) by the speaker about that statement or content of that statement, or that is elicited from the hearer about that statement" (1977:363).

3 Functions of First Mention References in Discourse

3.0 Introduction

This chapter examines one aspect of the pragmatic knowledge of English-speaking authors. Specifically, the relations between the form of first mention references and author assumptions are discussed. The various ways in which an item can be mentioned for the first time in a discourse is shown to correlate with different assumptions on the author's part regarding the reader's prior knowledge of the item. Definite and indefinite articles, possessives, proper names, and technical terms are all discussed with respect to what an author presupposes in using them to refer to an item for the first time in a discourse.

3.1 On First Mention References in General

In recent years several discourse analysts, e.g., Judith Schram and Linda Jones (1979:282) and Wiebe (1977:204), have noted that the first reference to a participant in a narrative discourse differs from most of the subsequent references to that participant. I believe this phenomenon may be an instance of a more general principle, that the first time *any item* is mentioned in a discourse, be it participant or prop, that reference is of unique communicative importance in the speaker-author's message to the hearer-reader. As a result, that reference may differ in form and function from subsequent references to that same item. The particular importance of a first mention reference in written English discourse is that by means of that reference the author most often communicates his presuppositions regarding the reader's prior knowledge of that item.[1] Whether the author assumes that his reader normally associates a specific item with the topic under discussion (e.g., associating windows with a discussion of houses), or he assumes that the reader will not associate that item with the topic (e.g., associating banana leaves with car engines), he will normally indicate his presupposition in this regard the first time he mentions the item in the discourse.

The signaling of author presuppositions in first mention references

can be described more explicitly in terms of the theoretical framework presented in chapter 2. Once an author assumes that a frame (or frames) has been foregrounded by the reader, each subsequent first mention reference identifies an item as to whether it is a constituent of that frame or not; items that are assumed to be part of the reader's foregrounded frame may differ in the form of their first mention references from items assumed not to be part of the reader's foregrounded frame.[2] Further, first mention references may also function as cues which help the reader identify which frame in his knowledge bank to foreground.

In sum, first mention references function either (a) to signal to the reader to foreground a particular frame (a cueing function), or (b) to identify an item as to whether it is in a foregrounded frame or not. In both functions, the various grammatical features of the first mention reference—type of article, possessive pronoun, etc.—signify different information about the referent to the reader. Below I discuss several grammatical aspects of first mention references in turn.

3.2 Grammatical Features of First Mention References

3.2.1 Definite articles. The definite and indefinite articles in English have been the subject of considerable study in recent years.[3] A recent and particularly perceptive treatment of the English articles is by Hawkins (1978). My analysis draws heavily on Hawkins's work, but I rephrase and recast his ideas to be in line with the framework I presented in chapter 2.

There are four conditions for the appropriate use of the definite article in English.[4] The frame existence condition is that the speaker must believe that he and his hearer share knowledge of the same frame. The frame foregrounding condition is that the speaker must believe that the hearer has foregrounded the relevant frame on the basis of various linguistic and nonlinguistic contextual clues. The frame membership condition states that the speaker must assume that the definite referent is part of the hearer's relevant frame. Finally, the frame composition condition states that the speaker must assume that there are no items in the hearer's frame matching the definite referring description which are not included in his reference. It also states that the speaker assumes that all the items to which he refers by the definite referring description are entered in the hearer's frame. In other words, in using a definite reference for an object or group of objects, a speaker presupposes that the reference includes every single object that matches that description in the hearer's frame, and no more.

The first three conditions, that is, the frame existence, frame foregrounding, and frame membership conditions, can be summarized as a general *location* condition. The speaker assumes the hearer can locate

the referent in some domain or frame. The last condition, the frame composition condition, is essentially an *inclusiveness* condition. The speaker assumes his reference will include all objects in the hearer's frame which match the referring description.[5] Thus, when an author uses a definite article in a first mention reference, he most often is assuming that his reader is able to locate the referent in his foregrounded frame(s), and that the reader's frame contains the precise number of objects which he has referred to in the first mention reference.

The following is one example of a definite article used in a first mention reference to refer to an item in the foregrounded frame of the reader. I have italicized the relevant data.

(1) While the dominance of the "radicals" is conventionally said to be shown by their emasculation of "conservative" John Dickinson's first draft and production of a final draft that left few powers to the central government, the successive drafts of the Articles do not show such a steady movement from a strong to a weak central government. For instance, between the first and second drafts, alterations in limiting language served to strengthen *the supremacy clause*, enhance central authority over the general budget, and increase national military powers.
(Freedman 1978:144)

In example 1, the phrase the *supremacy clause* is a first mention reference to a clause in the Articles of Confederation which deals with the relative powers of the Federal government and the State governments in the postrevolutionary United States. The use of *the* in this first mention reference indicates that the author assumed the reader's particular knowledge of the Articles of Confederation included the fact that it contained such a clause and contained only *one* such clause.

Another example of the use of a definite article to refer initially to an item assumed to be in the reader's foregrounded frame is example 2. As in example 1, the relevant data has been italicized.

(2) Forward of the T tail, there's little to distinguish a 1978 Arrow from a 1979 model, save the paint scheme. There is one inconspicuous change you'll appreciate: the new design shifts *the CG envelope* an inch or so aft.
(Crandall 1979:32)

In this example, the author assumed the reader's generic knowledge of airplanes included the fact that they normally contain a "CG envelope," and only one such envelope. Thus the author initially referred to the airplane's CG envelope with the definite article *the*.

Finally, a third example of the definite article in a first mention reference to an item in a foregrounded frame is example 3 taken from a newspaper article on a major business transaction. In this case, the use of the definite article in the first mention reference *the kraft pulp mill,* suggests that the author presupposed that his reading audience knew that kraft pulp mills are associated with corporations producing forest products, and that only one such mill would be located in a given area. (I have used italics here and in the following examples to highlight the portions under special attention.)

(3) Great Lakes Forest Products Ltd. said it agreed to buy the forest-products assets of Reed Ltd. at Dryden, Ontario, for an estimated $80 million (Canadian).

Great Lakes also said it intends to spend about $200 million to modernize and expand the facilities.

Capacity of *the kraft pulp mill* will be beefed up to almost 250,000 tons a year, from about 210,000 tons, at a cost of $130 million, Great Lakes said. The project will take three or four years.

(*Wall Street Journal,* Nov. 7, 1979:4)

In sum, then, use of the definite article in a first mention reference indicates the author assumes that the referent can be located in the reader's foregrounded frame(s) and that the reference includes all the items in that frame matching the description of the reference.

3.2.2 Indefinite articles. Hawkins also examined indefinite articles in terms of the speech act appropriateness conditions governing their felicitous use.[6] I paraphrase the two conditions relevant to this analysis as follows: the first condition is that, when referring to an item using the indefinite article, the speaker may assume that the referent is not included as part of the hearer's foregrounded frame, and is thus not "locatable."[7] The second condition, which may apply instead of the first condition, is that the speaker presupposes that the hearer's foregrounded frame includes the referent, and that it also includes at least one additional item which matches the referring description, but which is not included in the reference.

These conditions could be briefly summarized in terms of two notions: *nonlocatability* and *exclusiveness.* An indefinite reference can be used appropriately in a written work if the author assumes that either the reader cannot locate the referent as an item in a foregrounded frame (i.e., nonlocatable), or that the reader can locate the referent in a foregrounded frame but that there are other items in the frame

matching the referring description which are excluded from the reference (i.e., the reference is exclusive). Thus, when an author uses an indefinite article in a first mention reference in a text, he is assuming either that his reader does not know that the referent is part of the foregrounded frame(s), or that the reader knows that there are several items such as the referent associated with the foregrounded frame, and he (the author) is referring to a subset of those items.

The following example is excerpted from a text on interest-bearing checking accounts. In this case the intended reader is assumed not to have overdraft accounts as part of his foregrounded Checking Accounts frame.

(4) *An overdraft account* is another version of the automatic-transfer account. With such an account, you have savings and checking accounts in the same bank, but you can write a check for more than is in the checking account. Instead of bouncing the check, the bank automatically covers it with money from the savings account. Thus, you can keep more of your funds in the savings account, where they earn interest, without worrying about overdrawing your checking account.
(*Consumer Reports*, Aug. 1979:478)

In 4, the indefinite reference *an overdraft account* indicates the author presupposed that his reader might not know what such an account was, nor that it was a type of interest-bearing checking account. Thus, the indefinite article is used here in its nonlocatable function, to refer to an item not in the reader's foregrounded frame.

Example 5 is taken from a text describing a type of private airplane.

(5) The Arrow's stabilator has been fitted with *an inverted slot* that extends about halfway out from the vertical tail on each side of the stabilator. Its purpose is analogous to that of a wing slot. As the airplane slows and the stabilator runs out of airflow and effectiveness, air begins to enter the slot, providing adequate pitch control at lower speeds.
(Crandell 1979:35)

Here the assumption is made that the reader would not automatically identify an inverted slot as a normal part of the tail assembly of an airplane. Thus, the slot is first mentioned with the indefinite article in its nonlocatable use, introducing it as an item which is probably not in the reader's Airplane frame.

As a final example of the indefinite article used in its nonlocatable function, consider 6.

(6) The concern said it is considering installing *a newsprint machine* to be

integrated with the kraft pulp mill. The unit being considered has annual capacity of about 190,000 tons and would cost about $190 million.

(*Wall Street Journal*, Nov. 7, 1979:4)

The use of the indefinite article in the expression *a newsprint machine* indicates that the author did not assume his reader expected the installation of a newsprint machine to be a normal procedure after the acquisition of a kraft pulp mill. In other words, the author assumed that his reader's foregrounded frame (perhaps called Production of Forest Goods) did not include a newsprint machine as closely associated with a kraft pulp mill.

In examples 4–6, the use of the indefinite article in a first mention reference indicated that the referent was assumed not to be part of the foregrounded frame of the reader, that is, the referent was nonlocatable in that frame. As mentioned above, the indefinite article in first mention reference may also be used in an exclusive function, to refer to some *subset* of a group of items assumed to be part of the reader's foregrounded frame. A hypothetical example may help in clarifying this distinction.

(7) Albert bought an expensive book recently. He was mad when he discovered *a page* was missing.

Here the use of the indefinite article in the phrase *a page* does not indicate that the author assumed that his reader did not have the item *page* as part of his Book frame. Rather, the use of *a* here indicates that the author assumed the reader's Book frame included the knowledge that books consist of pages, and the phrase *a page* refers to one page of such a group.

Example 8, from a text reporting a rowing race, also illustrates the exclusive use of the indefinite article.

(8) A Russian woman had jumped her slide and the Soviet boat had blown over into the Canadians' lane and hit oars. The Canadian three woman threw up *a hand* in protest and the Russians limped off the water, disqualified.

(Warner 1978:15)

Again in this case, the indefinite article in the expression *a hand* cannot be indicating that the referent was not locatable in the reader's foregrounded frame(s), as indefinite phrases in examples 4–6 did. Rather, the indefinite article is used here exclusively, referring to one of a group of hands assumed to be a part of the reader's Human frame. In other words, the reader was assumed to know that humans normally have two hands, and this indefinite expression merely refers to one of those hands.

Yet another example of an exclusive indefinite first mention reference is 9 from a text about the Korean War.

(9) All day long, too, the North Koreans punched closer to Seoul. Their tanks were everywhere invincible, even on that stubborn eastern sector, which had at last caved in. Once *a gallant South Korean colonel* struck at the enemy armor with explosives, destroying four tanks; but otherwise the ROK retreat was complete.

(Leckie 1963:27)

In this case the use of the indefinite article indicates that the reader was expected to know colonels were a normal part of a modern army. Further, the author assumed that the reader's Modern Warfare frame contained a *group* of colonels as expected objects in an army. Thus, the indefinite reference in example 9 refers to one of that group of colonels expected to be in the South Korean army.

Examples 7–9 show the exclusive use of an indefinite article, referring to items which can be located in the reader's foregrounded frame, and which are some subset of a group of items in that frame. A semantic variant of this use of the indefinite article may be called a *type-instance* use. In this use, the indefinite article still indicates that the referent is locatable in the reader's foregrounded frame. However, instead of indicating that the referent is some subset of a group of items in that frame, the indefinite article in this case signals that the referent is an instance of a general type that is part of the frame.

Consider in this regard example 10.

(10) Piper also attributes to the T tail a "perceived" sound reduction. "Perceived" means that although there's no actual reduction in noise, you will think the airplane is quieter because of its lower vibration level, another benefit of placing the stabilator above the turbulent air rolling back from the prop. Perception of sound and vibration is a terribly subjective affair; nevertheless, I'd be willing to say that *an Arrow IV* would be a pleasant place to spend some traveling time, even for the noise-sensitive.

(Crandell 1979:32)

Although this example is not a first mention reference, it nonetheless illustrates nicely the type-instance use of the indefinite article. The Arrow IV airplane has been introduced previously as a new type of airplane being produced by the manufacturer. Up to this point in the text the Arrow IV has been discussed generically—comments have been made about the Arrow IV as a type of airplane that would presumably apply to each specific Arrow IV that came off the

assembly line. By using the indefinite article here, the author refers to a particular instance of the Arrow IV airplane type.

An alternative to the type-instance analysis is to apply the exclusiveness condition rigidly, and say that the use of the indefinite article here implies that the reader has a very large group of Arrow IV airplanes as part of his knowledge, and that this reference refers to one member of this large group. While the latter analysis may lead to a tidier generalization, I suggest that it seems more likely that in certain cases, items in our knowledge are remembered as types of which there can be specific instances, rather than representing all such knowledge as knowledge of groups of items.

The type-instance use of the indefinite article in first mention references occurs frequently when the noun of the indefinite reference refers to an action or series of actions. This may be illustrated by 11 below, which is part of a text on a business merger.

(11) The revised offer calls for *an exchange* of 28 Thorn common shares plus $120.30 of 7% convertible preference shares for every 100 EMI common shares outstanding. The bid involves the issuance of 31.1 million Thorn common shares and $133.8 million of the convertible preference shares. Thorn said it values EMI shares at about $3.25 each.
(*Wall Street Journal,* Nov. 7, 1979:7)

In this example, the reader was to have known that offers to buy corporations normally include mention of an exchange rate between shares of the old company and shares of the new company. Exchange of stock is a normal type of activity assumed to be in the reader's Business Merger frame. The phrase *an exchange,* with indefinite article, refers to a specific instance of exchanging stock.

Before concluding this brief discussion of the type-instance use of the indefinite article, it must be noted that this use constitutes only a slight semantic variation of the exclusive use of the indefinite article mentioned earlier. The two uses are basically the same in indicating that the referent is part of the reader's foregrounded frame. They differ only in the way in which the information is seen to be organized in the reader's knowledge—in one case (exclusive use) as a group of discrete items, and in the other (type-instance use) as a type of item which can have specific instances.[8]

The indefinite article differs from the definite article in its application to plural referents. While the definite article occurs with both singular and plural nouns, the indefinite article *a* occurs only with singular nouns. There are two plural counterparts of the indefinite article—*some* and no article at all. These two indefinite plurals differ in the conditions of their appropriate use. The conditions for the use of

some in a first mention reference are basically the same as the conditions for the use of the indefinite singular *a*—namely, that either the referent is nonlocatable in any foregrounded frame, or it is singled out from a group of similar items in the reader's foregrounded frame (exclusive reference).[9]

Example 12 illustrates the use of *some* in a first mention reference to refer to items assumed to be nonlocatable in the reader's foregrounded frame.

(12) I patted out the squaw bread and dropped it into the hot grease, watched it turn brown and then flipped it over and took it out. Grandmother stood beside me waiting for the coffee to boil.

> I broke *some eggs* into the skillet. Grandmother reached across the skillet to get the coffee pot. The eggs popped some hot grease on her arm. She jerked her arm back, dropping the hot coffee pot on her right foot. The scalding hot coffee and grounds spilled over her bare feet, and she cried out and stepped backwards.
>
> (Crying Wind 1977:36)

In this case a Cooking frame has been foregrounded. Items such as pans, stoves, and food would probably be assumed to be a part of the reader's foregrounded Cooking frame. However, *specific* foods, such as eggs, often are not assumed to be part of a reader's Cooking frame because different people cook and eat different things, and the same person may cook different things on different occasions. A particular food may not be a customary part of a person's concept of the activity of cooking. Thus, in 12 the expression *some eggs* refers to items which the author assumed were not a part of the reader's Cooking frame.

When *some* is used in its exclusive function, to indicate information assumed to be known to the reader, it refers to some subgroup of a group of items (i.e., exclusively) which are an expected part of the reader's foregrounded frame. In the following text, *some* refers exclusively to information which has been previously mentioned in the text. Although this reference is not a first mention reference, it nonetheless illustrates the use of *some* to refer exclusively to some subgroup of a group of items already known to the reader. The use of *some* in a first mention reference with this function would be quite similar.

(13) Fabric softeners, for instance, are supposed to make your wash miraculously soft and cling-free. *Some softeners* work well, we found. Others don't work well at all. And there are undesirable side effects the commercials don't mention.

(*Consumer Reports*, Jan. 1979:48)

Fabric softeners is a first mention reference. *Some softeners* is a second mention reference, referring to a subgroup of the already introduced fabric softeners, namely, the subgroup consisting of the softeners that work well.[10]

The phrase *some of the* is related to the exclusive use of *some,* in that both expressions presuppose that the reader has some knowledge of the relevance of the referent to the topic at hand. Example 14 illustrates this use of the phrase *some of the.*

(14) After I got home I hung up my dress to dry out. It was heavy and sagging from the water it had soaked up. The elk-skin dress weighed sixteen pounds when it was dry, but now that it was wet it must weigh twice that much. *Some of the beads* on the right sleeve were missing.
(Crying Wind 1977:7–8)

In this example, the phrase *some of the beads* is an indefinite first mention reference. The use of the expression *some of the* indicates that the author expected the reader to know that beads would be sewn onto an elk-skin Indian garment. Further, this expression indicates that the reader was to have understood that of the group of beads originally on the sleeve, only a subgroup of that number were missing and the rest remained sewn on.

I have found that the use of *some* in first mention references is quite rare in more formal written discourses; plural first mention references in written texts tend to use the definite article or no article at all. It may be that the use of *some* in first mention references is generally regarded as more appropriate to casual language than to formal published language. In this case the occurrence of *some* in first mention references may be governed by the type of communication situation in which a discourse is written (cf. chapter 1). In particular, whether the communication situation of a given discourse may be described as [+ spontaneous] or [– spontaneous] may have a bearing on this use of *some.* It is interesting to note that the two examples of *some* used in genuine first mention reference (examples 12 and 14 above) are both taken from an autobiography, written in a popular, casual style.

While the conditions for the use of *some* are essentially the same as the conditions for the use of *a,* a plural with no article can be used even though some of the conditions for use of the indefinite article are not met. The two basic conditions discussed above for the use of the indefinite article were that the referent either had to be nonlocatable in the foregrounded frame of the text; or it was locatable in the frame, but also exclusive in that the referent was some subgroup of a larger group of items in the frame. The plural without article can be used in a first mention reference to refer to information not in the reader's foregrounded frame, in a fashion similar to the use of the indefinite article.

Consider 15.

(15) Then *eight great beetle shapes* rolled slowly out of the rain mists below Suwon. The Americans gasped. The squat shapes were tanks, the spearhead of thirty-three armored T-34s leading approximately 10,000 North Korean soldiers down the road.

(Leckie 1963:49)

In this passage the "eight beetle shapes" are presumed not to be in the reader's foregrounded frame. In other words, the reader was not to have expected the appearance of beetle shapes on the scene.

The function of article-less plurals to indicate information not locatable in the reader's frame is the same as one of the functions of the indefinite article *a*. The major difference between the conditions for the use of the plural without article and the indefinite article is in referring to items which are assumed to be part of the reader's foregrounded frame.

Specifically, an indefinite article can only be used to refer to an item in the reader's foregrounded frame if the exclusiveness condition is met. On the other hand, a plural without article may be used regardless of whether that condition is met or not. When a plural without article is used in a first mention reference to items in the reader's foregrounded frame, that reference can refer either to a whole group of items or to some subgroup within the whole group. These two different uses can be distinguished only by context or knowledge of the subject matter. That is to say, grammatically the plural without article is ambiguous as to exclusiveness or inclusiveness.

Example 16, from a text on a business merger, uses a plural without article to refer to items assumed to be in the reader's foregrounded frame.

(16) On the London Stock Exchange yesterday, *Thorn shares* closed at $7.18 and EMI at $2.97. The announcement of the revised offer came after the close of London trading.

(*Wall Street Journal*, Nov. 7, 1979:6)

In this example, the author assumed his reader knew that a corporation such as Thorn would have shares which are sold on the stock exchange. It is also clear from one's knowledge of the stock market that in this case, the plural reference without article is inclusive; it refers to *all* of Thorn's common shares, not just to some subset of them.

In contrast, the text in 17 is unclear as to whether an entire class of referents is being referred to or only some subpart of a class.

(17) This is usually a single stage proctocolectomy developed by Dr. Lee that spares *pelvic nerves,* reducing the considerable risk of impaired sexual function.

(*Emergency Medicine,* Sept. 15, 1979:141)

The phrase *pelvic nerves* is ambiguous as to whether all pelvic nerves are being referred to, or only some of them. Presumably, a person whose Medical Treatment frame of knowledge was very complete would be able to determine whether the reference here is inclusive or exclusive.

Finally, in 18 the word *oars* is probably not meant to refer inclusively to all the oars of the boats, but rather exclusively, to some subset of them.

(18) Suddenly, a bell sounded and the race stopped. A Russian woman had jumped her slide and the Soviet boat had blown over into the Canadians' lane and hit *oars.*

(Warner 1978:15)

Oars were an expected part of the reader's foregrounded Rowing frame. The reference to them in 18 is not to all the oars of the boats, but to some subset of them, in that it is, in physical terms, unlikely that all the oars of both boats hit each other in such a mishap. It seems more likely that some of the oars of both boats are referred to by this expression.

Thus, the indefinite article and its plural counterparts generally have a nonlocatable or an exclusive function in first mention references; they refer either to information which the author assumes is *not* part of the reader's foregrounded frame or to a particular subset of a group of items assumed to be in the foregrounded frame.

3.2.3 Possessive pronouns. Other pragmatically significant structural features of first mention references include the use of a possessive pronoun instead of an article. The function of a possessive pronoun in a first mention reference is essentially the same as the function of the definite article. That is, a possessive pronoun occurring in a first mention reference indicates that the author assumed that the referent of that expression was part of the reader's foregrounded frame.

For example, in 19 the possessive pronoun *its* in the first mention reference *its wheels (or flaps)* reflects the author's assumption that his reader knew that airplanes normally have wheels. In this respect, the possessive is functioning like a definite article.

(19) The airplane seems to pause for an instant, realize that *its wheels (or*

flaps) are down, and gently compensate beginning a descent that will maintain its trim speed.

(Crandell 1979:32)

Consider next 20, which contains a first mention reference with possessive pronoun.

(20) *His men* had canvassed Hart's Location in New Hampshire days before, sending his autographed picture to each of the twelve registered voters in the village.

(White 1961:3)

The use of the possessive pronoun *his* in the first mention reference *his men* suggests that the author made the following assumption about his reader's knowledge: the reader was expected to know that Presidential candidates normally have a group of people associated with them (i.e., a staff) who perform various tasks for their candidate, such as information gathering.

The text in 21 is from a report on a business merger between Thorn Electrical Industries Ltd. and EMI Ltd.

(21) Thorn said *its financial advisor,* Hambros Bank, will alternatively buy back for $6.85 in cash each Thorn share to which EMI holders "who accept the offer by Thorn become entitled." The cash offer values EMI shares at $3.11, Thorn said.

(*Wall Street Journal,* Nov. 7, 1979:7)

The use of the possessive pronoun in the first mention reference *its financial advisor* is an indication that the author assumed his reader was fairly conversant in business practices. Specifically, this reference, with the possessive pronoun *its*, shows that the reader was expected to know that it is normal for large corporations to have financial advisors; financial advisors were items that were assumed to be a part of the reader's Business frame.

In summary, possessive pronouns, when they occur in first mention references, function in discourse to indicate items that the author presumes are a part of the reader's foregrounded frame.

3.2.4 Proper names. Another type of first mention reference that has some bearing on the interpretation of an author's assumptions regarding his reader's knowledge in a text is the proper name. Proper names in first mention references function differently than initial references containing common nouns.

The linguistic status of proper names has been hotly debated among the various philosophers of language (see Lyons 1977:219–23 for a brief review of the arguments).[11] The aspect of proper names which interests

us here is the fact that "proper names are logically connected with characteristics of the object to which they refer" (Searle 1958:96).[12] That is, the characteristics of a person (or object) are intimately associated with the name of that person. A name, by itself, has only limited meaning to us unless we can associate with that name a person (or object) having certain characteristics.[13] Likewise, the first mention use of a name in a written text can only communicate to the reader if he is able to associate with that name a person who has certain characteristics.

A basic premise for using a name as a first mention reference is that the reader is expected to discern, either from the text itself or from his prior knowledge, all the characteristics of the named person which are necessary for full understanding of the text. In keeping with this premise the author makes explicit somewhere in the text those characteristics that the reader needs to know, which he believes the reader does not know. Further, he often leaves implicit or unmentioned those characteristics associated with a name that he assumes the reader already has in his foregrounded frame.

Thus, a first mention reference with proper name may imply that the author assumed his reader's foregrounded frame included certain characteristics associated with that name; characteristics which the author does not presume the reader would associate with that name are generally made explicit somewhere in the text.

The identification of the information implied by the use of a proper name in a first mention reference is essentially an argument from silence. If a particular characteristic of a name seems necessary for the reader to have fully understood a text, but that characteristic is not mentioned explicitly in the text, then it can be inferred that the reader was to have associated that characteristic with that name in the frame(s) which the text has foregrounded. The unmentioned characteristic may not even be fully articulable by the analyst; rather, it may be that he simply knows the text cannot be understood without some sort of background knowledge.

Consider 22, which is excerpted from a discussion of the influence of the Greek translation of the Old Testament, called the Septuagint, on Jewish life.

(22) For the Alexandrian Jews the translation became surrounded by an aura. They had an annual liturgical festival to commemorate its production; and some told wonderful tales of its origin, notably that Ptolemy had appointed seventy-two translators and that they produced their version in seventy-two days. *Philo* believed that the version had been granted divine assistance. The legend of the seventy-two was widely credited and, even where it was not, the Septuagint often ranked as an

> inspired version enjoying an authority that no other translation possessed.
>
> (Chadwick 1967:12)

A reader unfamiliar with religious history might well ask of this passage, "Who is Philo, and why is his opinion relevant to this matter?" The author of this passage apparently has assumed that his reader knew that Philo was an Alexandrian Jew of great renown in his day, that his writings are an important historical source, and that these characteristics associated with the name Philo were part of the reader's Ancient History frame, probably in a Religion subcategory.

Another instance of using a proper name in a first mention reference to refer to information assumed to be in the reader's foregrounded frame is the following:

(23) The earliest account of disease is the story in the Iliad of the plague sent by *Apollo* upon the Greek army before Troy in punishment for Agamemnon's insulting the priest Chryses when he came to ransom his captured daughter. Apollo begins to shoot his arrows, killing first the mules and dogs in the camp, and then the Greeks themselves. This should be a mythical description of a disease with acute fever, sudden in onset and rapidly fatal, such as might easily attack an army. Nothing is said explicitly of any symptoms, nor even of any recoveries. However, when Apollo has been appeased with sacrifice and by the return of the girl, the Greeks set about cleansing the camp, throwing "defilements" into the sea.

(Phillips 1973:16)

In this case, the author supplies much relevant information concerning Apollo which he suspected the reader did not know. Particularly, the specific actions Apollo carried out in punishing the Greeks, and the reasons for this punishment were bits of information which the reader was not expected to have in his foregrounded frame, and which were supplied by the author in the text. The one crucial bit of information which the author assumed was known to his reader as part of his Ancient History frame was the fact that Apollo was a Greek god. Apart from knowledge of this characteristic of the object named Apollo, the above passage would seem quite confusing. There would be no explanation for many of the actions, such as Apollo's ability to shoot arrows at an army without retaliation, and his final appeasement through sacrifice.

Example 24 illustrates a passage in which the author assumed the reader did not associate many characteristics with a name used in first mention reference.

(24) The Gnostics liked to contrast the God of the Old Testament as the God of justice, whose principle was an eye for an eye and a tooth for a tooth, with the loving Father proclaimed by Jesus. This antithesis was especially worked out by *Marcion*, a figure who stands quite apart from the mainstream of Gnosticism in that his system of thought did not include speculations about cosmogony or the names of the angels, but who in this one respect was the most radical and to the church the most formidable of heretics. (Chadwick 1967:38–39)

In this example, the author did not assume that his reader had any knowledge about a Marcion in his Ancient History entry. Thus, he supplied in an explicit fashion all the relevant details about Marcion. Note here, too, that many of the details about Marcion which the author supplies are contained in an apposition construction, a grammatical device commonly employed in such explanations.

As we have seen, an author may sometimes assume that his reader has no prior knowledge of the person or object when initially referred to by proper name, and other times assume that the reader knows all of the relevant characteristics of the referent of a name and thus mention none of them in his text. When English-speaking authors initially refer to persons in modern Western culture, they may either use a full name (plus a title, if relevant), or a partial name. A full name tends to be used initially to refer to a person of whom the author assumes the reader knows almost nothing. A partial name, such as only first or only last name, tends to be used when the author presumes the reader knows almost all of the relevant characteristics associated with that name.

Consider example 25, which begins an article on a new means of treating severe colitis.

(25) If a patient comes in with a severe attack of ulcerative colitis your best bet—unless he's so ill that immediate surgery is called for—is to start an intensive intravenous corticosteroid regimen. That . . . from a team at the Radcliffe Infirmary in Oxford, England, where patients with severe colitis undergo a five-day intensive program developed there by *Dr. Sidney C. Truelove* and colleagues in the '50s when the corticosteroids became generally available. The approach was formalized in the '60s and first reported in the mid-'70s.

(*Emergency Medicine*, Sept. 15, 1979:141)

The rest of the article deals with the treatment that Dr. Truelove developed, and his recommendations concerning its application and interpretation. All of the relevant characteristics of Dr. Truelove are mentioned explicitly in the article. Thus it seems that the author in this case did not assume that the reader had any prior knowledge of Dr.

Truelove or his work. This assumption is underscored by a first mention reference with full name and title, Dr. Sidney C. Truelove.

By way of contrast, consider the paragraph in 26, in which partial names are used in first mention references.

(26) Only one other major nation in modern history has ever tried to elect its leader directly by mass, free popular vote. This was the Weimar Republic of Germany, which modeled its unitary vote for national leader on American practice. Out of its experiment with the system it got *Hitler*. Americans have had *Lincoln, Wilson,* two *Roosevelts*.
(White 1961:10)

The entire thrust of the passage, its power and its irony, rests squarely on the author's assumption that his reader knew essentially all the relevant characteristics of each person named in the passage. The reader was expected to know that Hitler was a tyrannical, evil national leader, and that Lincoln, Wilson, and the two Roosevelts, were all courageous and good national leaders. Unless the reader knows these characteristics of each person named, the text becomes almost meaningless.

3.2.5 A note on technical terms. Technical terms are also important features of first mention references. Technical terms are terms referring to items which are especially associated with certain frames. For example, *carburetor* is a technical term for a specific item in the Engine frame. Also *pitch* is a technical term which refers to an action especially associated with the Baseball frame. Generally, when a technical term occurs in a first mention reference, and is not defined in the context of that reference, the author has assumed that his reader is familiar with that term and its technical meaning as it relates to the foregrounded frame of the text.

As an example of this use of a technical term, consider 27.

(27) The system had its shortcomings as well, two of which were central. First, wronged defendants received no compensation; rather, the amercement was paid to the king, lord, or sheriff in whose court the wrongful suit had been brought. Second, since amercements could penalize only those before the court, the law found itself unable to deal effectively with suits brought through *straw parties*.
(Campbell 1979:1223)

Straw parties is a technical legal term which refers to a person who is procured by another to file suit against a third party. In other words, in a suit involving a straw party, person A, who has a grievance against person B for some reason, but would not find it to his advantage to file

suit against B, might persuade person C, perhaps for monetary compensation, to take B to court. In this case, person C is the *straw party* in the legal action. In using this term without definition, the author assumes that the reader knows its technical meaning. This implies that the author anticipated a certain degree of complexity in his reader's Legal Action frame.

It is frequently the case that the use of undefined technical terms in a text implies that the author assumed a good deal of complexity in the reader's foregrounded frame. Perelman and Olbrechts-Tyteca (1969:99) discuss this connection between technical terms and the complexity of the reader's knowledge:

> But even disciplines such as law, which borrow many of their technical terms from everyday language, sometimes seem an impenetrable mystery to the uninitiated. For such technical terms, which are supposed to be as univocal as possible in the context of the discipline, in fact summarize an aggregate of acquired knowledge, rules, and conventions. Because he is not familiar with these, the layman completely fails to understand these terms, as technical terms.

Consider in this context example 2, repeated here for convenience as 28.

(28) Forward of the T tail, there's little to distinguish a 1978 Arrow from a 1979 model, save the paint scheme. There is one inconspicuous change you'll appreciate: the new design shifts *the CG envelope* an inch or so aft. (Crandell 1979:32)

Use of the technical term *CG envelope* above implies that the author assumed her reader had this term as part of his foregrounded Airplane frame. The understandability of the example above depends on the reader's knowledge of the undefined technical term *CG envelope*. If the reader does not know this term, the design modification which the author is discussing is incomprehensible. Thus, the undefined use of *CG envelope* in 28 implies first that the author assumed the reader's foregrounded Airplane frame contained knowledge of what a CG envelope was. It also probably implies that the reader's Airplane frame is quite complex, including knowledge of many detailed parts of an airplane. (By the way, *CG envelope* means "center of gravity envelope." It refers to a section of an airplane within which the loaded airplane's center of gravity must fall in order for it to be safely flown. Moving the center of gravity aft in an airplane enables more cargo to be carried in the rear compartment.)

As a final example of a technical term used in discourse, see 11, repeated here as 29.

(29) The revised offer calls for an exchange of 28 Thorn *common shares* plus $120.30 of *7% convertible preference shares* for every 100 EMI common shares outstanding. The bid involves the issuance of 31.1 million Thorn common shares and $133.8 million of the convertible preference shares. Thorn said it values EMI shares at about $3.25 each.
(*Wall Street Journal*, Nov. 7, 1979:7)

The terms *common shares* and *7% convertible preference shares* are used here technically to refer to items assumed to be in the reader's foregrounded Business Merger frame. Again, the occurrence of these undefined technical terms implies that these terms were in the reader's foregrounded frame and also that that frame was fairly sophisticated and complete.

This brief discussion hardly scratches the surface of the use of technical terms in discourse. A study of the use and categorization of types of technical terms is a project which, while beyond the scope of this study, would contribute significantly to our understanding of various pragmatic influences on discourse.

To sum up thus far, the preceding analyses of the pragmatic-semantic functions of various features of first mention references (that is, of articles, possessive pronouns, proper names, and technical terms) account for the general norms of first mention references in a text. Figure 3.1 summarizes these functions. In the following section, I consider one important area of exceptions to the above analyses to be the area of "cues" in a text.

3.3 First Mention References and Cues

The interpretation of first mention references as it has been presented above depends on the fact that a frame has already been foregrounded in a text. Once a frame has been foregrounded, all first mention references can be interpreted in terms of whether they add information which is assumed not to be a part of the reader's foregrounded frame, or whether they refer to an item assumed already to be in the foregrounded frame. However, this analysis must be adjusted in discussing first mention references in which no frame has yet been foregrounded. Normally such first mention references themselves contribute to the foregrounding of the proper frame. In the terms used in chapter 2, these first mention references function as cues.

Items which can serve as cues are those items assumed to be in some frame in the reader's knowledge so characteristic of that frame that when they are mentioned the reader will automatically foreground the appropriate frame as a body of knowledge needed to understand the discourse.

I believe that as a general strategy, when a reader of a text encounters a first mention reference to an item not in his foregrounded frame, he tentatively foregrounds the frame(s) which could be cued by that bit of information, pending confirmation further in the text that these frames are relevant. If the first mention reference is not followed up in the text by any other supportive, confirming cues, the reader would then subconsciously put the frames cued by that reference out of focus, into general storage once more.[14] But if the first mention reference *is* a cue, then the reader would have foregrounded the appropriate frame and would thus be better prepared to understand the discourse.[15]

Consider example 30, which is the opening sentences of an article.

(30) Last June, Michael and Mary Holton arranged for *a substantial mortgage* with an 8¾ percent interest rate from The Banking Center, a mutual savings bank in Waterbury, Conn. At the time, other lenders were charging 9¼ and 9½ percent, a rate that was fixed for the term of the loan. The Holton's lower rate is guaranteed for three years. After that, it might go up or it might go down.
(*Consumer Reports*, Jan. 1979:17)

The indefinite noun phrase *a substantial mortgage*, which occurs in the opening sentence of this text, is potentially a cue to foreground a Buying a House frame. Whether this noun phrase is a cue or not is not clear from the first sentence of the discourse. Discourses about the Holtons or about banking in Waterbury could follow the first sentence of example 30, as well as the discourse about low-payment mortgages which does follow.[16] I suggest that the reader, as a subconscious strategy, would probably foreground his Buying a House frame on a tentative basis, based on the indefinite cue *a substantial mortgage*. He would then look for confirmation from the following sentences of the text that this frame is relevant.

The cue in the previous example occurred with an indefinite article. Another case of an indefinite article occurring in a first mention reference functioning as a cue is example 31. This passage is the opening of an article in a medical journal.

(31) If a patient comes in with *a severe attack of ulcerative colitis* your best bet—unless he's so ill that immediate surgery is called for—is to start an intensive intravenous corticosteroid regimen.
(*Emergency Medicine*, Sept. 15, 1979:141)

The phrase *a severe attack of ulcerative colitis* cues the reader to a particular subframe in his Medical Treatment frame that he should foreground. Again, this indefinite-article cue would lead the reader only

GRAMMATICAL OR LEXICAL DEVICE	FUNCTION IN FIRST MENTION REFERENCES
Definite Article	Indicates that the referent is in the reader's foregrounded frame, and that the reference includes all items in that frame which match the referring description.
Indefinite Article	(1) Indicates that the referent is not in the reader's foregrounded frame. OR (2) Indicates that the referent is in the reader's foregrounded frame and that it is in some subgroup of a group of items in that frame.
Possessive Pronoun	Same as definite article.
Proper Name	(1) Indicates that the text contains all the necessary features of the referent associated with that name. (Sometimes occurs with full name, with title, etc.) OR (2) Indicates that the reader knows some or all of the necessary features already. (Sometimes occurs as abbreviated name.)
Technical Term	(1) If defined in the text, indicates the reader was not expected to know this term. OR (2) If undefined, indicates that the reader was expected to know the term. Probably implies considerable complexity in the reader's foregrounded frame as well.

Figure 3.1 The discourse functions of various grammatical and lexical devices in first mention references.

tentatively to foreground his Colitis Treatment subframe, while he searches for confirmation later in the text that this frame is relevant.

Example 32 is yet another instance of a first mention reference functioning as a cue. These are the first lines of a text on the value of keeping records of one's jogging experiences.

(32) There has long been a need for *a truly functional runner's calendar,* one that offers space and incentive for keeping track of the essentials—distance, special conditions, weight, and so forth—and that provides, at the same time, information appropriate to the season and to a runner's ability.

(Fixx 1979:1)

The phrase *a truly functional runner's calendar* cues the reader to tentatively foreground the frames necessary for him to understand the remainder of the text.

Cues marked by indefinite articles seem to have tentative cueing value; they are somewhat weak. On the other hand, cues that are definite first mention references are not as likely to be confused or misinterpreted. Their cueing force seems stronger, or more definitive.

(33) *The first Christians* were Jews differentiated from their fellow-countrymen by their faith that in Jesus of Nazareth the Messiah of the nation's expectation had now come.

(Chadwick 1967:9)

This is the first sentence of a book on the history of the early Christian church. The appropriate frame to be foregrounded by the intended reader is signaled by the initial noun phrase, *the first Christians.*

Example 34 is the beginning of a discourse evaluating different kinds of tuna fish for sale in American supermarkets.

(34) What's *the best tuna?* Mermaids, talking fish, and bumblebees all have their own opinions. In CU's opinion what matters most is whether you eat it straight or mix it with other things in a salad or casserole.

(*Consumer Reports,* Jan. 1979:7)

The definite noun phrase *the best tuna* instructs the reader in no uncertain terms to foreground his Fish frame, and probably his Food or Eating frame as well. A first mention reference with a definite article in the beginning of a discourse, as in 34, is an unmistakable cue to most readers.

Thus, the difference between definite and indefinite reference in terms of cueing is essentially a matter of the completeness of foregrounding. An indefinite noun phrase can cue the foregrounding of a

specific frame only on a tentative basis; it depends on the following context to confirm its identity as indeed a frame-foregrounding cue. When a reader encounters an indefinite noun phrase referring to an item not in his foregrounded frame, particularly in the beginning of a discourse, he would probably recognize that noun phrase as a possible cue. He would then tentatively foreground the frame that the cue indicates and look for confirmation in the subsequent context that the foregrounded frame was indeed relevant to the text.

A definite noun phrase, especially when it occurs early in a text, is definitive in its cueing force. When a definite reference cue is encountered in a text, it is clear that the indicated frame needs to be foregrounded for a complete understanding of that text.

Possessive pronouns can also occur in first mention references that function as cues. In such cases the possessive pronoun has a cueing force comparable to the definite article. That is, a possessive pronoun cue strongly indicates to the reader that a certain frame should be foregrounded as in the following:

(35) The millions of runners in the United States today have been attracted to the sport not just by its health benefits but by *its spirit of camaraderie*. In parks and along roads and trails from Honolulu to Bangor, runners gather at every hour to run together, to compare training notes, and not infrequently to form strong friendships. When I took my first running steps a dozen or so years ago it was rare to encounter another runner; those of us who ran were considered more than slightly eccentric. Today I rarely go out for a run, no matter what the weather, without encountering other runners and, as often as not, being cheered on by the nonrunners among my neighbors. It is plain that we runners have at last become objects of admiration rather than of curiosity or derision.

(Fixx 1980:11)

In this example, two frames are cued as being relevant to the following text: the Running frame and the Friendship frame. The Running frame is cued by the definite noun phrase *the millions of runners* in the opening sentence. Thus, the phrases which follow this reference, *the sport* and *its health benefits*, refer to items which the author assumed to be in the reader's foregrounded Running frame. The Friendship frame, on the other hand, is cued by the phrase *its spirit of camaraderie*. That this phrase functions as a cue in 35 can be seen first in the fact that the notion of friendship is very prominent in the rest of the text.

Also, the grammatical construction in which *its spirit of camaraderie* occurs tends to put special focus on this phrase. In a *not just X, but Y* construction, such as occurs in the first sentence in 35,

the first item, *X*, is frequently assumed to be already known by the reader, as part of his foregrounded frame. The second item, *Y*, in this type of construction is often an item which the author assumes is *not* part of his reader's foregrounded frame, but one which he wants to call the reader's attention to. In 35, *its health benefits* is the first item *X* in the construction, and is thus assumed to be part of the reader's foregrounded frame. *Its spirit of camaraderie*, on the other hand, is comparable to *Y*, meaning that it is not assumed to be part of the reader's foregrounded frame, but rather is an item which the author wants to call the reader's attention to. In other words, the use of the *not just X, but Y* construction accomplishes a shift in thematic attention from the Running frame to the Friendship frame for the remainder of the paragraph.

Proper names and dates also can function as cues, particularly when they occur in the beginning of a text. Consider example 36.

(36) On *June 7, 1776, Richard Henry Lee* proposed to the Second Continental Congress "that these United Colonies are, and of right ought to be, free and independent States," and "that a plan of confederation be prepared and transmitted to the respective Colonies for their consideration and approbation."

(Freedman 1978:142)

The date *June 7, 1776* serves as a cue in this example, foregrounding the reader's Colonial History frame. Also the proper name *Richard Henry Lee* may, for some readers, be a further cue that the text will consider some aspect of American colonial history.

Finally, technical terms seem to have a function in cueing. Normally they work in conjunction with a definite or indefinite reference to identify for a reader the appropriate, relevant frame to foreground. For example, in 31 the cue *a severe attack of ulcerative colitis* is an indefinite noun phrase whose cueing function depends on the reader's knowledge of the technical expression *ulcerative colitis*. Unless the reader of 31 had this expression as part of his Medical Treatment frame, the cue would be completely ineffective.

Thus, in first mention references, both definite and indefinite articles, possessive pronouns, proper names and dates, and technical terms may function as cues to foreground a frame.

3.4 Conclusions

The significance of this chapter lies in its integration of the theory of frames with a broad study of the forms of first mention references in English. While others have analyzed the articles of English and have studied some of the uses of proper names, in general their studies have not been strongly tied to a model of human knowledge structure. The

examination of many types of first mention references with regard to what they imply regarding the author's assumptions about the reader's foregrounded frame has yielded a more comprehensive account of different types of first mention references. I believe, for example, that including an analysis of possessive pronouns in first mention references, as I have done here, presents a more rounded picture than other analyses, which have been limited to the examination of definite and indefinite articles. This study has also enabled us to say something more specific about the author assumptions implied by a given first mention reference, than has been the case with previous analyses of the "presuppositions" of such references.

The notion that first mention references can cue a reader to foreground a given frame is another important contribution of this chapter, further developing the account of first mention references in terms of frames of knowledge. I anticipate that the analysis of cues and of first mention references in general will apply to oral conversational analysis, as well as to written texts as I have done here.

Another contribution of this chapter is the application of a text orientation to the study of first mention references. Most studies of first mention references have dealt with individual sentences, such as the classic example *The present King of France is bald,* or perhaps two sentences in sequence. The proposal of this chapter is that, having determined what the various individual first mention references of a text imply about the author's assumptions about the reader's foregrounded frame, all of these assumptions can be brought together to form an integrated picture of what the author assumed his reader's foregrounded frame was like. The notion that all of the assumptions implied in a text can be collected and collated to give an impression of the author's estimate of his reader's knowledge is an idea not previously mentioned in the literature on presuppositions to my knowledge, and is the product of the text orientation of this study.

Notes

1. Judith Schram and Linda Jones (1979:282ff.) note a similar phenomenon in Mazatec participant reference. The first mention of a participant in a Mazatec narrative varies according to whether the speaker assumes the participant is "expected" or "unexpected" by the audience.

2. It is important to remember that I distinguish here between items which are *constituents* of frames and items which may occur *appropriately* in connection with frames. I refer here to the former type of relation. Also see section 2.1.2.

3. See Chafe (1970), Perlmutter (1970), van Dijk (1972), Cooper (1974), Linde (1974), and Kempson (1975), for a representative sample of the linguistic studies on the article in English. See Russell (1905), Strawson (1950) and (1954), and Sellars (1954) for a discussion of the philosophical issue of presupposition as it relates to the use of the English definite article.

4. These conditions are essentially those of Hawkins (1978:168). I have rephrased each condition in the terminology of my model and have adjusted each condition by adding an observer perspective, indicated in each condition by a phrase such as *the speaker must believe . . .* or *the speaker must assume. . . .*

Hawkins's names for the conditions are the "set existence condition," "set identifiability condition," "set membership condition," and the "set composition conditions."

5. The terms *location* and *inclusiveness* come from Hawkins (1978).

6. Again, I have adapted the appropriateness conditions of Hawkins (1978) to my terminology. I have added an observer perspective, usually encoded by a phrase such as *the speaker assumes.*

7. Hawkins (1978:187) adds a clause at the end of each appropriateness condition which compositely could be summarized, "The pragmatics of the remainder of the sentence may force a locatable or nonlocatable interpretation of the reference." I have omitted this clause from each of the appropriateness conditions as it is a basic assumption of this study that the context of an utterance may determine its interpretation.

8. Because there is no overt difference in form between them, the nonlocatable and the exclusive functions of the indefinite article cannot always be distinguished in actual text material; the distinction at times becomes somewhat fuzzy and, in such cases, depends on the interpretation and intuitions of the analyst. One test I found helpful in distinguishing the nonlocatable function of the indefinite article from its exclusive function in a given indeterminate case *an X,* was to ask the question, "Can this expression be rephrased as *one of the Xs* and still make sense in this context?" If so, then the article was used in its exclusive function. If not, then the article was used in its nonlocatable function.

A similar test to distinguish the type-instance use from the nonlocatable use would be to ask the question, "Can this indefinite expression *an X* be replaced by the definite phrase *the X* without significant change of meaning?" If so, then the indefinite article is used in its type-instance function. If not, it is used in its nonlocatable function. Although the distinction between the two functions of the indefinite article is at times fuzzy and subjectively determined, I believe the positing of these two functions is necessary to analyze completely and fairly the use of the indefinite article in English.

9. These functions of *some* extend to its use with mass nouns with only minor modifications. *Some* may be used either with count nouns or with mass nouns in its nonlocatable function, that is, when it refers to items assumed not to be locatable in the reader's foregrounded frame. However, the exclusive use of *some* is slightly different semantically when it occurs with mass nouns. Specifically, when *some* is used exclusively with count nouns, it refers to some subset of a group of items assumed to be in the reader's foregrounded frame. When *some* occurs with mass nouns, on the other hand, it refers not to a *subgroup* of items in the reader's foregrounded frame, but rather to a *subpart of a substance* assumed to be in that frame.

10. Halliday and Hasan's (1977) discussion of these two different uses of *some* suggests to me that when *some* occurs in its nonlocatable function (what they seem to call a "nonspecific determiner"), it is phonologically weaker or less stressed than when it is used exclusively.

11. Among the hotly debated issues has been whether names have a "sense" in the same way that common nouns do. Lyons (1977:219) claims they do not; Searle (1958 and 1969: 162ff.) claims they do to a certain extent. It is not really relevant to the purposes of this chapter to speak on this issue; my only comment is that the issue seems to revolve around different understandings of what a "sense" is.

12. Another similar way of looking at the phenomenon of names is the perspective taken by Pike and Pike (1977:382). They suggest a person's (or object's) name is a feature of that person, by which he or she is identified.

13. Lenore Langsdorf (personal communication) has suggested to me that names have meaning to the extent that they indicate the probable ethnic background, social class, and sex of the referent. For example, the name *Abraham Rosenblum* is likely to refer to a male person of Jewish background.

14. Schank and Abelson (1977:50) suggest that a frame (which they call "script") can only be foregrounded if at least two cues (which they call "script-headers") for that frame occur in the text.

15. The importance of correctly identifying when a first mention reference is a cue and when it is not is indicated by Mahaffy (1977) in his discussion of the structure of technical abstracts as related to their comprehension by nonnative speakers of English. He notes that one of the problems encountered by nonnative speakers of English in reading abstracts is the correct determination of the main thrust (which he calls "core information") of the abstract. I hypothesize that this problem may be due in part to a lack of understanding of the emic English cueing system as discussed in this study.

16. Probably, for example 30 and for others as well, frames relevant to the discourse as a whole could be foregrounded by the title of the discourse. In this case the title of the text is "Are Those New Low-Payment Mortgages Worthwhile?" However, few authors writing in English depend solely on their title to foreground the appropriate frame(s). Rather, the title seems to function as a reinforcement while the appropriate frames are cued in the text in the normal manner.

4 The Pragmatics of Author Comments

4.0 Introduction

The study of author comments is an essential aspect of the larger study of pragmatics in connected discourse. Just as valuable ore is concentrated in lodes in the earth, so evidence of an author's presuppositions regarding his reader's knowledge and about the general subject of his discourse is concentrated in the author comments of a text. By examining the author comments of a discourse, the analyst is able to uncover, so to speak, many of the assumptions the author of that text made concerning his intended reader and the topic of the discourse.

This chapter begins with a general discussion of author comments, examining some of the ways in which these resemble certain types of discourses. I then describe and exemplify four common types of author comments, which I call explanatory, opinion, incidental, and thematic comments. After this is a section dealing with various devices used in English to mark author comments in a text. This section includes discussion of extraposition sentences, demonstratives, shifts in deictic standpoint, and lexical markings, among others. The final section crystallizes this discussion of author comments by describing how author comments are to be interpreted to obtain an image of the author's concept of the foregrounded frame of his intended reader.

4.1 On Comments in General

> Now, Reader, I have told my dream to thee;
> See if thou canst interpret it to me,
> Or to thyself, or neighbor; but take heed
> Of misinterpreting, for that instead
> Of doing good, will but thyself abuse:
> By misinterpreting evil ensues.
> (John Bunyan, *The Pilgrim's Progress*)

Most author comments, in which an author addresses some remark

directly to his reader, are not nearly so explicit in their marking as the apostrophe above, taken from the conclusion of Bunyan's *The Pilgrim's Progress*. The comments which normally occur in modern English discourses, while more subtly marked (cf. sec. 4.3), are nonetheless identifiable and have an important function in the discourse they are a part of.

Most of us have some intuitive notion of what constitutes an author comment in a text. Some possible descriptions of author comments are an aside, a parenthetical remark, a comment made directly to the reader, and an explanatory note. In this chapter I use the term *author comment* in a way compatible with these intuitive notions. I describe author comments in this chapter as having generally two aspects. The first aspect I discuss has to do with the fact that author comments involve a departure from the main train of thought in a text. Next I examine the second aspect of author comments—their inherently pragmatic nature.

Author comments generally have an aspect of "departure"; that is, they involve a *temporary departure from the main train of thought in a text*. An author comment interrupts the normal progression of argument or the normal flow of thought with an inserted remark of some kind. Such a comment can be related to its discourse context in various ways. An author may interrupt his text to give his personal opinion on some aspect of the text's content. He may suspend his argument temporarily to explain a certain part of the discourse, perhaps an event or concept, which he suspects his reader will not understand. He may define a term which he believes his reader may not know. The author could stop momentarily to provide information which is tangential to the main thrust of his discourse, but which may nonetheless interest his reader. Or he may interrupt the development of his argument to summarize what has been said up to that point to ensure the reader's understanding.

The second aspect which I use to describe author comments is what I call the inherently pragmatic nature of these comments. This phrase expresses the somewhat intuitive feeling which many people, including myself, have, that an author is speaking more directly to his reader in a comment than he is in other parts of his discourse. This intuition may be related to the original use of the English noun *aside* to mean those words of an actor in a play spoken to the audience, but which are supposedly not heard by the others on stage. Such a use reflects the attitude that, although plays generally are performed *in the presence of* an audience, the words spoken by the actors most often are spoken primarily *to* another person(s) on stage and only secondarily to the audience, as if the latter were overhearing the conversation of the actors. The pragmatic center of attention in a play is the play itself. The fact that the actors are communicating to an audience is out of

focus in this situation. Thus, for an actor to shift the center of attention from the play itself to the communication between himself and the audience is a marked, off-norm occurrence, which engendered the development of the special name for such a shift, an *aside*.

The notion of a play and its dramatic asides may be helpful by analogy in describing the inherently pragmatic nature of author comments in a written discourse. A formal written discourse as a whole is like a play in that the focus of attention in the situation is on what is being said, on the discourse itself.[1] The reader is out of focus in the communication situation of writing, just as the audience normally is not the center of attention in a play. Just as actors in a play generally do not overtly recognize the presence of the audience, so the author of a text does not generally recognize his reader in the course of his discourse. Hence, just as an aside in a play represents a major shift of attention in the play, even if only momentary, an author comment represents this same sort of major shift of attention in a written discourse. The comment shifts the center of attention from the content and development of the discourse itself to the communication between author and reader. It is in this sense—the center of attention having shifted from the discourse itself to the communication between the author and the reader—that comments can be called inherently pragmatic.[2]

Time is relevant to such shifts in attention, both in plays, and in discourses. The time factor in an aside during a play is the *now* of the communication (see Pike and Pike 1977:380). This can be seen especially in the fact that during an aside, time on stage often stops, no one moves or speaks while one actor addresses the audience. The time of the play itself and the time of the direct communication with the audience are seen to be independent in a sense. In this same way, the time orientation for most author comments is the now of the communication between writer and reader.[3]

The fact that author comments have a time orientation related to the now of the communication explains in part why they generally bear resemblances to some types of behavioral and expository discourse. These types of discourse have a now time orientation as well.

Before this can be explained further, a few remarks about discourse types in general are in order. As was mentioned in chapter 1, Longacre (forthcoming) defines four basic monolog discourse types on the basis of the binary plus (+) or minus (–) features of a pair of intersecting parameters—"agent orientation" and "contingent temporal succession." Longacre defines agent orientation as an "orientation towards agents . . . with at least a partial identity of agent reference running through the discourse." Contingent temporal succession "refers to a framework of temporal succession in which some (often most) of the events or doings are contingent on previous events or doings."

Expository discourse is then characterized as not having agent orientation and not having contingent temporal succession. Behavioral discourse (which encompasses hortatory discourse and other related discourses such as eulogies, praises, etc.) is defined as having agent orientation but no contingent temporal succession. See figure 4.1 for a schematic representation of Longacre's categorization of discourse types.[4]

	+ a.o.	- a.o
+ c.s.	Narrative	Procedural
- c.s.	Behavioral	Exopository

Figure 4.1 The Longacre scheme of discourse types based on the intersection of two parameters, agent orientation (a.o.) and contingent temporal succession (c.s.).

Notice that both expository discourse and behavioral discourse are described as normally not having contingent temporal succession. This fact is the crucial reason why author comments most often resemble one of these two discourse types. Since neither type is organized chronologically, the normal time orientation for expository and behavioral discourses is the now time of the communication situation. While this time orientation is not pronounced in either discourse type, it can be seen, for example, in the use of present tense as the backbone tense of many expository discourses in English. (See sec. 4.3.1 for a fuller discussion of verb tenses and the backbone tense of a discourse type.) Hence, the inherently now time of an author comment in a text matches the now orientation of expository and behavioral discourses. This accounts for many of the similarities between author comments and these discourse types.

Another general feature of author comments is that they can occur in various sizes, from just one word to an entire paragraph or longer. As an example of a one word author comment, consider the following sentence: *Surprisingly, Janet turned him down.* In this sentence, the word *surprisingly* constitutes an author comment on the fact that Janet turned someone down. Most of the discussion and examples of this chapter will focus on longer comments, at least a sentence or more, although the basic concepts presented also seem to apply to the shorter ones.

4.2 Types of Author Comments

Author comments can be divided into different types, according to the different functions which these comments can serve in connected discourse. In this section I propose four functions an author comment can have in a discourse: a comment can (1) express an author's personal opinion about something in the main body of the text; (2) give a note of explanation to the reader at a point where the author believes there might be some confusion; (3) add extra, tangential information to the discourse which the reader may find interesting as background; and/or (4) summarize or preview the main points of a portion of text, to be sure that the reader has understood, or will understand, the theme(s) of the discourse. Discussion and illustration of each of these types of author comments follow.

4.2.1 Opinion comments. Some author comments explicitly express an author's opinion or evaluation of some item in the main body of the discourse. I call these comments opinion comments. An example of an opinion comment is 1, in which the opinion expressed is an evaluation of the results of a rowing race. (Note that I have italicized the relevant data in each example).

(1) The race post mortem was devoid of acrimony and recriminations except for a few comments prodded out by the writer concerning the extra weight that they were pulling (approximately 60 pounds of boat and a cox 12 pounds over the limit). They also had some steering problems. *Although in the opinion of the writer we did not have a gold prospect crew, I believe that we could have been well into the finals if the equipment had been adequate. The writer estimates that the equipment could account for at least 13 seconds which would have put them in pack. Adding some thrust as a result of the psycho-dynamics of contention position, I believe we could have placed well in the heat.*
(Pisani 1978:32–33)

As another example of an opinion comment, consider the following, which is a recommendation or proposal by the author based on the evidence presented in the main body of the text. The text is from a report on various kinds of tuna fish sold to consumers. (The italicized phrases in the first paragraph of the example, beginning *Chicken of the Sea* and *Star-Kist*, were italicized in the original document. Also the words *drained weight* in the second paragraph were originally italicized. Italicizing in the second paragraph is my indication of the data to be focused on.)

(2) Although we bought cans labeled 6, 6¼, 6½, or 7 ounces, some of

them failed to provide two three-ounce servings. That's because the labeled weight includes the packing liquid, which most people drain off. As a type, the chunk tuna, albacore or light, was the most often short of the six-ounce total. The worst offenders were *Chicken of the Sea Chunk Light Tuna* packed in water, and *Star-Kist Diet Pack Chunk White Tuna*, also packed in water. Both products are labeled 6½ ounces, but both contained, on average, only 5¼ ounces of fish.

Canned tuna is expensive. For an average of 12 cents an ounce, or $1.92 a pound, you should get fish, not oil or water. Canned tuna should be labeled with drained weight—the weight of the food minus the packing medium—so consumers know what their money is buying.

(*Consumer Reports*, Jan. 1979:9)

In this example, the main body of the text is an expository discourse on how cans of tuna are labeled. The comment, which constitutes the second paragraph of the example, gives the author's opinion on how cans of tuna "should" be labeled.

A third illustration of an author comment with the function of expressing the author's opinion about a topic is found in 3, from a biography of Jonathan Edwards. (Italics in this and remaining examples have been added to mark the data under discussion. Note that the phrases *Farewell Sermon* and *Freedom of the Will* were italicized in the original.)

(3) Most touching of all, perhaps, is the pathos of that moment when Edwards faced his congregation on Sunday, July 1, 1750, to deliver his Farewell Sermon. There he stood at the fulness of his spiritual and intellectual power, already dismissed from his church . . . soon to be compelled to move westward with his large family into the wilderness settlement of Stockbridge as pastor of the small group of whites and as missionary to the Indians. . . . His duties gave him leisure to write, and the greatest of his treatises were executed during his residence as a missionary. *Plain living and high thinking have never been more surely paired, and as one reads the Freedom of the Will, one should remember that many a chapter must have been temporarily laid aside while the great theologian paused to catechise the Indian boys or set them a spelling lesson.*

(Faust and Johnson 1962:xiv)

This author comment combines an evaluation of an item in the text with a recommendation. The first clause of the comment, concerning plain living and high thinking, is the authors' personal evaluation of Edwards's lifestyle. The clauses following this evaluation focus on a recommendation to the reader concerning his reading of a work written

during the time of Edwards's life under discussion. The comment as a whole expresses the authors' opinion about aspects of Edwards's service as a missionary.

4.2.2 Explanatory comments. Another common function for author comments in a text is that of explaining something to the reader which the author presumed he might not otherwise understand. I call this type an explanatory comment. Explanatory comments may involve the definition of terms which may be strange to the reader, or may explain some type of relation or implication which the author assumed the reader would not perceive on his own.[5] Example 4 is an author comment with the function of explanation. An Indian girl has just acquired two chickens from her brother and is carrying them home.

(4) A few minutes later he came back with two chickens and tied their feet together so I could carry them back.

They were heavy and I stopped to change hands. *This meant laying the chickens in the snow, taking the glove off one hand, putting it on the other, picking up the chickens and starting off again.* I had to do that three times before I reached home.

(Crying Wind 1977:31–32)

In this explanatory comment, the author assumed her reader was unaware of the complicated nuisance it was to change a burden from one hand to the other on a cold day with only one glove available. Therefore she elaborated on this aspect of her journey home.

The following paragraph includes an explanatory comment, this one defining a term which the author suspects the reader does not know.

(5) Your National Cancer Cytology Center is also responsible for methods which detect cervix or uterine cancer, early skin cancer, cancers of the mouth and throat. *Cytology means collecting a cell sample and making a diagnosis by microscopic examination.* The methods we've developed save thousands of lives.

(Ayre 1979:1)

In this case, the author presumed that the word *cytology* might not be a familiar term to the reader, and so defined it in an explanatory comment.

In 6 the author interrupts his report of a rowing competition with a comment explaining an action of a participant in the report.

(6) Bill Belden in the single was fortunate in that he foresaw the difficulty *(evidently aware of the NAAO record of niggardly supporting*

lightweights) and long before the trip arranged to use a shell that he was accustomed to, from the same women's team.

(Pisani 1978:31)

Note the author-opinion overtones in this comment, which suggests the possibility of hybrid comments—comments which have more than one function.

4.2.3 Incidental comments. Another function author comments may have in a discourse is to provide incidental information. I term these incidental comments. Incidental comments may contain interesting but somewhat tangential background information to the main body of the text. They may also involve extra material supporting a hypothesis of the main part of the text. These comments are tenuously connected to the main body of the text, embodying items the author deemed in some way worthy of mention although strictly marginal to the development of the text.

In example 7, a discussion of Judaism in the first century, the author makes an incidental comment concerning the influence of certain first-century Jewish customs on the present practice of Christianity.

(7) Foreign domination and the poor economy of Palestine had led to a general emigration of Jews all over the Mediterranean world, the "Dispersion," so that Jewish colonies could be found almost anywhere from Cadiz to the Crimea. At Rome in the first century A.D. they had eleven or twelve synagogues. At Alexandria they formed a particularly large proportion of the population; there were a million Jews in Alexandria and Egypt altogether, and they were always a factor in municipal politics, even though their social exclusiveness prevented them from becoming a pressure-group for the acquisition of power. Everywhere they refused to be merged with the Gentile inhabitants, but adhered to their own beliefs and practices, meeting each Saturday for psalms, readings from their Scriptures followed by an exegetical sermon, and prayers. *Users of the Latin Breviary or the English Prayer Book are in important respects legatees of this way of worship.*

(Chadwick 1967:10)

The author here relates the Jewish first-century worship practices with the practice of Christian worship today. This information does not develop the theme of the paragraph or the discourse as a whole—rather, it provides additional information which may be of some interest to the reader.

Likewise, in the following passage, an author comment occurs which provides information incidental to the main flow of thought in the text as a whole.

(8) In order to minimize the vulnerability of the land-based ICBM's to a surprise attack both countries have emplaced these missiles in buried reinforced-concrete and steel structures called silos, where they are maintained in operational readiness and protected from nuclear attack. . . . At present the probability that such a missile would survive a nuclear attack. . . depends. . . on the characteristics of the attacking weapons, on the "hardness" of the silo and to a lesser degree on. . . the targeted missile itself. *(Another way to avoid the destruction of these missiles. . . would be simply to launch them toward their predetermined targets on receipt of an early warning of a massive attack by the other country's ICBM force.)*

(Feld and Tsipis 1979:51–52)

In the parenthetical comment, the authors interrupted their discourse concerning the protection of ICBMs to note a possible alternative to protecting such missiles at all—that is, launching them all as soon as an early warning of attack is received. This comment is tangential to the theme of the entire discourse. Thus it is not presented as a concrete alternative in the discourse, but is rather noted in an author comment for the reader's information.

Example 9 is excerpted from a text concerning ancient Greek medicine, *Aspects of Greek Medicine*.

(9) The Cnidian school was of equal antiquity with the Coan. The Cnidians are said by Galen to have delighted in distinguishing varieties of disease in each organ; seven in the gall-bladder, twelve in the urinary bladder, four in the kidneys, two in the thigh, five in the foot, four kinds of stranguria, three of phthisis, many varieties of quinsy, and many diseases of the entrails. . . . *This attempt to catalogue varieties for the sheer love of classification was a trait of the Greek intellect at most times, as can be seen from Plato's* Sophist *and from comedy, not to speak of Aristotle. It is a sound scientific procedure but only when information is abundant enough to make precise differentiation useful and important, as when diseases may be superficially alike but show different natures later.*

(Phillips 1973:32)

The author comment in 9 provides additional, incidental information to the reader regarding the Cnidian tendency to categorize diseases—that this tendency is in line with a tendency perceived in all of Greek thought. This information does not develop the main train of thought in this passage, which involves a description of the Cnidian school of medicine (discussion of the Cnidian school continues immediately

following the comment). The author provided it in an incidental comment as a bit of background that could interest his reader.

4.2.4 Thematic comments. The final common type of author comment discussed in this section is the thematic comment. Certain author comments function to summarize or preview a section of text in order to make the important theme(s) of the text explicit to the reader.

Thematic comments differ from the other types of comments in that, while all the other types of comments have a very marginal semantic relation to the main theme of the discourse they are a part of, thematic comments *are* closely related to that theme. Thematic comments provide an explicit expression of all or part of the theme of a text or section of text. Thus, they constitute a departure from the main train of thought in a text only in the sense that the text's theme does not continue to *develop* by means of a thematic comment. Rather, the development stops while a portion of text is capsulized into its main point(s). This contrasts with explanatory, incidental, and opinion comments; each of these is a departure from a text both in that the development of the theme is temporarily stopped *and* in the sense that they are only marginally related to that theme anyway. It is important to note, however, that all types of author comments, including thematic, have an inherently pragmatic nature. Thus, since they have an inherently pragmatic nature and constitute a departure at least in one sense from the main train of thought in a text, thematic comments are included in this discussion of author comments.[6]

Consider 10, from the previously mentioned text on Jonathan Edwards. (The phrases *Enlightened Mind* and *raised Affections* were italicized in the original. Other italics are mine.)

(10) Completely in agreement at this point both in theory and in practice with the "New Lights," as the ministers who participated in the Great Awakening were called, he stood at all major points in the controversy squarely with them and squarely in opposition to Chauncy and to the group of which Chauncy was the acknowledged spokesman. Chauncy bewailed the overemphasis upon the affections and the passions in the Revival. Edwards complained that they were not played upon enough. "Our people," he wrote, "do not so much need to have their heads stored, as to have their hearts touched." Chauncy declared that religion ought to be primarily a matter of reason, that "an *Enlightened Mind* and not *raised Affections*" ought to be the guide in religion as in all other things. . . . *It is plain that the core of their differences was the question of the place of emotion, of the passions or the affections, in religion.*
(Faust and Johnson 1962:xxiii)

The above text was taken from a discussion of Jonathan Edwards's

part in the religious revival in colonial America. The comment at the end of the above paragraph summarizes the main point of that paragraph for the reader.

A thematic comment can also serve as a preview for a following section of text. Note 11, an example from the same text on Jonathan Edwards. The same authors who employed a thematic comment as a summary in the previous example, here use a thematic comment to preview a portion of text.

(11) *It is clear that Edwards felt that he had said the last word concerning the freedom of the will.* He was confident that he had set the Calvinistic theory of the will in an impregnable position, and that he had made untenable the position of Arminians on the subject. With ruthless logic he triumphantly reduced the arguments of his opponents to absurdity, remarking on one occasion, after blocking as it seemed to him all possible avenues for eluding his conclusion, "and so the race is at an end, but the evader is taken in his flight," and declaring on another occasion that all the objections of Arminians to his theory were "vain and frivolous."

(Faust and Johnson 1962:lxii)

The first sentence of 11, beginning "It is clear that," is a thematic comment which states the theme of the paragraph which follows, that Edwards was convinced that he had settled the issue of the freedom of the will in his book on the subject.

Finally, consider example 12 below. (The phrases *Places in Man III* and *vena cava* were italicized in the original. Highlighting at the end of the example is mine.)

(12) *Places in Man III* has a system similar to the ones mentioned. Several pairs of vessels originating in the head run about the head and downwards into the body in the familiar manner, but one pair converges to become the "hollow vein" (*vena cava*) which runs between the trachea and the oesophagus, through the heart and diaphragm, before dividing in the lower body to enter the thighs and legs. The hollow vein also gives off symmetrical branches to left and right. *Here we have one main vessel in the centre of the body which gives off branches, not two main vessels running parallel with relatively unimportant cross-junctions.*

(Phillips 1973:45)

This paragraph, from the previously cited discussion of ancient Greek medicine, ends with a thematic comment, explicitly telling the reader what the important point of the paragraph is.

These four types of author comments—opinion, explanatory, incidental, and thematic—may not be the only types of author comments that occur in discourse. But in the corpus of data I have considered, these four types are sufficient to categorize the comments which occur.

4.3 Marking of Author Comments

In recent years many linguists have discussed the occurrence and distribution of grammatical items in terms of their functioning to mark a particular item in a discourse as semantically or pragmatically significant. For example, Linda Jones (1977:185) has recorded some of the functions of clefts and pseudoclefts in English in terms of the marking of theme in discourse. Also, Longacre (1976:217ff.) has noted several important markings of the "peak" of a discourse, which is often the semantic point of highest tension or the climactic release of tension in a narrative. Hinds (1979) has suggested a discourse explanation of the distribution of ellipsis in Japanese in terms of topic of paragraph.[7]

The underlying claim of each of these analyses is that the form of a text normally reinforces and reflects its meaning. Hence, it is often profitable to isolate and study individual forms across a number of texts to determine what, if any, common meaning function(s) they have. Conversely, another interesting study is to take a particular meaning function and examine the forms which are found to be commonly associated with it. The latter is the type of analysis presented here: I have examined numerous author comments and determined a set of formal devices with which they typically appear. These devices include demonstratives, sentential adverbs, and extraposition sentences, among others.

That there should be such formal signals is not surprising. In plays, an aside, which represents a major, if temporary, shift in the center of attention, is marked clearly, either by the suspension of time on stage, or by an actor or actress leaning toward the audience and addressing them in a stage whisper, or by some other means. In written discourses, therefore, one can anticipate that the author comments, which we have seen to be comparable in many ways to the dramatic aside, will also be marked in some way, to signal to the reader that such a shift in the center of attention is occurring.

None of the markings that I discuss in this section is analyzed exhaustively in terms of all its possible functions in text material. Rather, I have chosen to concentrate on one function, the marking of author comments, and explicate the many devices which can have that function in written texts.

Finally, it is important to note that, while I treat each device by itself in this section, they frequently cluster together to mark an author comment in a text. Many of the following examples illustrate this clustering phenomenon.

4.3.1 Shift in deictic standpoint. One aspect of the structure of texts is what I call their deictic standpoint.[8] By the phrase *deictic standpoint* I refer to the characteristic backbone tense, mood, and aspect, and the characteristic person markers of a text, which together reflect that text's orientation or posture with respect to the communicative context.

An important distinction in information in discourse is between information that advances the development of the discourse, what Longacre and Levinsohn (1978:107) have called the "backbone" of a discourse, and the information that essentially adds supportive material but does not move the discourse forward. This latter type of information is called background information. For example, in many narratives the backbone information consists of the main events of the story, which move the discourse towards its conclusion. Information concerning the setting in which the events take place, descriptions of participants, including at times their thoughts or feelings, and some minor events are all generally considered background information in narrative.

The backbone information in discourses is sometimes marked by the use of a particular tense, mood, and/or aspect. In fact, different types of discourse frequently use different tenses, moods, and/or aspects to mark their backbone information. Longacre and Levinsohn (1978) have suggested along this line that each discourse type has its favored tense/aspect for the mainline of its development and other tense/aspects for other functions.

Longacre (1976:200ff.) has further suggested that types of discourse may have characteristic person markers. For example, in a given language, narrative discourses could characteristically include many first and third person pronouns, while behavioral discourses in that language might often have a preponderance of second person pronouns.[9] Thus, in that the use of different person markers as well as different tenses, moods, and aspects seems to be associated with different types of discourse, one could say, in the terms of this chapter, that different discourse types have different characteristic deictic standpoints.[10]

The fact that different discourse types have different characteristic deictic standpoints is crucially relevant in the marking of author comments. As mentioned above, author comments bear strong resemblances to both expository and behavioral discourses, each of which have their own characteristic combination of person markers and backbone tense, mood, and/or aspects. Thus, it is possible in some cases to identify author comments in a discourse by the fact that the characteristic deictic standpoint of that discourse shifts to the deictic standpoint of expository or behavioral discourse.

This type of marking is clear only when there is a contrast between

the deictic standpoint of the discourse as a whole and the standpoint of the author comment itself. Thus, an explanatory comment in a narrative discourse might be marked clearly by means of such a shift in person marker, tense, mood, and/or aspect, since the deictic standpoint of the explanatory comment would likely be the same as that of an expository discourse. Thus, it would contrast with the deictic standpoint of the narrative as a whole. On the other hand, an explanatory comment in an expository discourse would not be clearly marked solely by a shift of tense, mood, aspect, and/or person since the deictic standpoint of the main body of the text and the standpoint of the comment would probably be the same.

In the following example, the Indian girl's brother, Flint, has just entered a tipi to participate in a peyote ceremony:

(13) I laid down in the seat of the pickup and cried until I heard the drum begin to beat inside the tipi. I sat up and wiped my tears off on my sleeve and watched the tipi. Smoke was coming out the top—the ceremony was beginning. Even though I was never allowed to go to a peyote ceremony, I knew exactly what was going on inside the tipi just as well as if I were sitting inside next to Flint.

Peyote is a cactus that grows in the southwest. When it is eaten it is supposed to increase the senses. It dulls the consciousness and takes a person to a half-dream world where he can see visions and speak to the spirits. To the Indian, peyote represents the mother earth.

(Crying Wind 1977:101)

In English narrative discourse the characteristic backbone tense is past tense.[11] In the first paragraph of example 13 the backbone information is marked by the past tense, e.g., *laid down, cried, heard the drum, sat up, wiped my tears, watched,* etc. However, in the second paragraph, the information is reported exclusively in the present tense, e.g., *is, grows, is eaten, dulls, takes,* etc. Present tense is often the backbone tense of expository discourses in English.

Further, the most frequent person marker in the narrative portion of example 13 is first person: six uses of *I* and one *my* in the first paragraph of the example. However in the second paragraph, there is no occurrence of a first person pronoun; rather, the neuter third person pronoun *it* occurs if any pronominal reference occurs at all. Thus, in this case an explanatory comment in a narrative discourse is marked by a shift in deictic standpoint—from past to present tense and from first to third person.

A similar case is example 2, repeated for convenience here as 14, in which a comment resembling behavioral discourse is embedded in an expository text. (The italicized phrases in the first paragraph were

italicized in the original. Also, *drained weight* in the second paragraph was originally italicized. Other italicizing is mine.)

(14) Although we bought cans labeled 6, 6¼, 6½ or 7 ounces. some of them failed to provide two three-ounce servings. That's because the labeled weight includes the packing liquid, which most people drain off. As a type, the chunk tuna, albacore or light, was the most often short of the six-ounce total. The worst offenders were *Chicken of the Sea Chunk Light Tuna* packed in water, and *Star-Kist Diet Pack Chunk White Tuna,* also packed in water. Both products are labeled 6½ ounces, but both contained, on average, only 5¼ ounces of fish.

Canned tuna is expensive. For an average price of 12 cents an ounce, or $1.92 a pound, you should get fish, not oil or water. Canned tuna should be labeled with drained weight*—the weight of the food minus the packing medium—so consumers know what their money is buying.*
(*Consumer Reports,* Jan. 1979:9)

The second paragraph of example 14 is an author comment expressing the author's opinion about the weight notation for canned tuna. While the discourse as a whole is an expository type (a report comparing different tuna products on the market), the comment in 14, marked by repeated use of the modal *should,* resembles a behavioral discourse. The modal *should* is very frequent in English behavioral discourses which involve giving advice, or making recommendations.

Also notice that in the first paragraph, a first person pronoun *we* occurs, referring to the writers of the text, as well as a third person pronoun *them.* But in the author comment portion of example 14, a second person *you* occurs, referring to the reader of the text. The shift to second person underscores the resemblance of this comment to behavioral discourse. In sum, this example also typifies the use of a shift in deictic standpoint to mark an author comment.[12]

A shift in deictic standpoint may be accompanied by some other marker, such as a demonstrative, together marking an author comment. Some of the examples given in later sections also demonstrate this type of shift.

4.3.2 Demonstratives. A frequent marker of author comments in discourse is the use of demonstratives, both nominal demonstratives such as *this* and *that* and adverbial demonstratives such as *here*.[13] However, not all uses of demonstratives mark comments; rather, demonstratives in their extended use occur with particular frequency in author comments.

My use of the concept of the extended use of demonstratives is based on Halliday and Hasan's (1977:66) discussion of this topic. A

demonstrative in extended use is one which refers, not to a preceding nominal construction, but rather to a predication or group of predications.[14] An example of the extended use of a demonstrative, as contrasted with one of its normal uses is 15, taken from Halliday and Hasan (ibid.).

(15) They broke a Chinese vase.
(i) That was valuable.
(ii) That was careless.

The demonstrative *that* in 15i is used in its normal way, referring to a nominal reference earlier in the text, i.e., the Chinese vase. *That* in 15ii occurs in an extended use, referring not to a preceding nominal reference but rather to a larger portion of text, i.e., the incident of breaking the vase. Halliday and Hasan further note with regard to the extended use of demonstratives that among the nominal demonstratives only the singular forms *this* and *that* can be used in extended reference, and then only if they occur without an immediately following noun.

The extended use of nominal demonstratives is a frequent marker of author comments. Comments of all types (opinion, explanatory, incidental, and thematic) have been found to include such uses of demonstratives. We have already seen an example of *this* used in extended reference to mark an author comment. See example 4. The following is another example:

(16) According to prevailing cosmological theory the universe began with an explosion from a superdense state in which the rate of expansion increases with the distance from the observer. The wavelength at which electromagnetic radiation from a distant object reaches the earth is increased by the velocity of recession of the object with respect to the observer. *This is the well-known red shift, so named because if the radiation is in the visible region of the spectrum, it is made redder.* The amount of red shift is a measure not only of the remoteness of the object but also, since one is looking backward in time, of its age since the "big bang."

(Meier and Sunyaev 1979:130)

The italicized portion of 16 is an explanatory comment, in which the authors explain the name of a particular phenomenon (*red shift*) and the reasons for its having that name (because radiation in these circumstances is made redder). Note that the comment begins with a nominal demonstrative in its extended use: *this*.

Another example of a demonstrative in extended use signaling an author comment is 17. This passage is excerpted from a paragraph

discussing the initial impact of the rapidly spreading Christian faith on the Jewish people.

(17) Even some of the strictest adherents of the Mosaic Law and of its traditional interpretation, the Pharisees, were associated with the movement. Nevertheless, neither the authorities nor the people as a whole came to follow "the Way." On the one hand Christianity offered no encouragement to the nationalistic Zealots, awaiting the hour for revolt against Rome; on the other hand, it was far too revolutionary for the Jewish "Establishment," which pursued a compromising policy of political collaboration and religious conservatism. Above all, there was the delicate problem of the Christian attitude towards the Gentiles. *This was an issue causing deep division of opinion within the Church itself, the beginnings of which may be traced in the story of the "Hellenists" and Stephen told by Luke in Acts vi-vii.*

The spread of Christianity northwards into Syria and Cilicia caused such acute anxiety to the synagogues that a counter-movement was provoked. . . . (Chadwick 1967:16)

This comment provides information incidental to the main thrust of the paragraph in which it occurs. The primary theme of the paragraph has to do with the Jewish reaction to Christianity. The fact that the church also experienced division over an issue is additional information which is not part of the main train of thought in the passage. Note that this comment is marked by *this* used in an extended reference.

Most occurrences of a nominal demonstrative to mark an author comment occur at the beginning of the comment, but this is not always the case. The following is one example of *this* occurring in noninitial position in a comment:

(18) When Piper designers get around to figuring out how to make next year's model distinctive, I'd give them a couple of suggestions: I wish they'd round out or cushion the forward corner of the baggage door. When it's strapped open, a sharp edge hangs right where anyone who lost footing clambering off the wing would probably grab. Also, I'd appreciate fuel drains that don't require a special tool. The Arrow's wing-tank drains are opened with a needle-like probe; if you haven't got one, you're out of luck. *For a personal airplane, this is no problem, but with the parade of students at flight schools, where Arrows are popular, it's hard to keep a fuel cup in a glove box for an entire day.*
(Crandell 1979:37)

This entire passage is an opinion comment expressing the author's opinion on certain faults in an airplane. However, the last sentence of

the example is an embedded explanatory comment, explaining to the reader why the author's recommendation concerning wing-tank drains is necessary. This embedded comment is marked by the extended use of *this* in noninitial position in the comment. Notice also that the entire passage in 18 is marked as a comment by a shift in mood, as shown by the repeated occurrence of *would* and its abbreviation *'d* in the passage. This sets this portion off from the rest of the discourse, since both what precedes example 18 and what follows it is by and large in the indicative mood.

Another example of a noninitial demonstrative in extended use is 19.

(19) President Truman also instructed the U.S. Seventh Fleet to sail north from the Philippines to the strait separating the Communist Chinese mainland from the Nationalist Chinese stronghold on Formosa. *He did this because he wanted to keep the war from spreading.*

(Leckie 1963:25)

The comment in this portion of text is explanatory in function. Notice that this comment is signaled by the use of the demonstrative *this* in noninitial position.

Besides nominal demonstratives, Halliday and Hasan (1977:74) stated that some adverbial demonstratives can occur in an extended sense. I have found that the adverbial demonstratives referring to place, especially *here,* often mark author comments when they occur in extended use. A previous example—example 12—contains the adverbial *here* in extended use to indicate an author comment.

Another example is 20. (The last sentence in the example, being the author comment, has been italicized. The other italics in the example appeared as such in the original; *vena cava* was also italicized originally.)

(20) *The Nature of Bones X* and *Epidemics II* have the two great vessels *hepatitus* and *splenitus* so arranged on either side that at one point a section of each runs inward to the heart to meet a section running out toward it. *Here at least it is recognized that the aorta and* vena cava *are not simply vessels that run up and down the body each in a single and uninterrupted course.*

(Phillips 1973:45)

In this example, the adverbial demonstrative *here* highlights an author comment functioning as a summary. The author comments on the text by making explicit the main point he desires the reader to draw from his discussion, that is, that the ancient Greek authors of these works recognized that the blood vessels formed an interconnected system.

Example 21 also illustrates the extended use of *here* to signal an author comment. The passage is part of a discussion of Jonathan Edwards's work *Freedom of the Will.* (I have italicized the latter portion of the example, beginning with the words *Here again* to indicate the author comment. The other italicized words were italicized in the original. The embedded quotes were mostly italicized as well.)

(21) That position he attempted to make perfectly clear by defining carefully the term *freedom* or *liberty* as he employed it. In a very important passage, he explained that by liberty he meant "the power, opportunity, or advantage, that anyone has to do as he pleases, or conducting in any respect, according to his pleasure; without considering how his pleasure comes to be as it is." The question, as he saw it, was, can a man do what he wills, not can he will what he wills. . . . *Here again Edwards is in the tradition established by Hobbes, Locke, Collins, and others. Hobbes had defined liberty as "the absence of all impediments to action that are not contained in the nature and intrinsic quality of the agent." "I acknowledge," he said, "this liberty, that I can do if I will."*
(Faust and Johnson 1962:xlix)

The author comment in 21, marked by the demonstrative adverb *here*, has the function of providing additional background information. The author assumed that this information concerning the sources of some of Edwards's ideas might interest his reader. However, it is off the main train of thought in the passage, which is an exposition of Edwards's ideas themselves.

It is interesting to note that each case discussed above of an adverbial demonstrative in author-comment function occurs in a text in which an author comments on someone else's words. In this same vein is the following example from Halliday and Hasan (1977:75). The author comment, indicated by *there*, refers to someone else's words.

(22) "Of course it would be all the better," said Alice, "but it wouldn't be all the better his being punished."
"You're wrong *there*, at any rate," said the Queen.

In this case, *there* occurs in its extended use to refer to Alice's words. Note that the Queen, in her response, is essentially commenting, giving her opinion or evaluation of what Alice has just said. The use of adverbial demonstratives to mark an author's comments, especially comments on someone else's ideas or words, may not be the only function of these demonstratives, but it seems to be one of the most frequent.

Before concluding this discussion of the use of demonstratives to mark author comments, it should be noted that certain occurrences of

nominal demonstratives in direct modification to a following noun, in *normal* rather than extended use, may also signal an author comment. This is particularly true if the noun which they modify refers to a portion of the preceding text. For example, see 23.

(23) Health consists of the proper blending in the body of humours of many kinds, which in their uncompounded state are strong and injurious. Medicine brings this about by suitable diet and regimen. To those who say that correct treatment can be given only by someone who knows, as Empedocles claimed to know, what man's constituents are and how he came into being, it should be answered that the clear knowledge of nature can be derived from no source except medicine, which understands man in relation to what he eats and drinks. *(This claim is as exaggerated as the opposite one made by the nature philosophers. The two sides of the argument were continued in the seventeenth century and later by the physicians and the iatrophysicists and iatrochemists in one phase of modern science.)*

(Phillips 1973:39)

The author here comments on the ideas he is describing, giving both his opinion (that the claim is exaggerated) and additional, incidental information (that the same controversy was carried on later in history). This comment is marked by the use of the demonstrative *this* modifying a noun referring to content in the previous text (*claim*).

Another example of this use of the demonstrative occurs in 24.

(24) We undertook to calculate the expected spectrum of a primeval galaxy. . . . In a primeval galaxy the infant stars and the objects associated with them should contribute to the spectrum of the galaxy. Although these stars and objects are distant and ancient, they are expected to be almost identical with the stars and objects in our own galaxy. *This close similarity is quite likely because the model suggests that heavy elements are created and distributed early in the collapse of a protogalaxy, giving an infant star the same chemical composition, and hence the same spectrum, as an infant star in our galaxy.* As a result all the ingredients for determining the properties of remote and ancient primeval galaxies are present in our galaxy. To calculate the spectrum of a primeval galaxy we simply estimated. . . .

(Meier and Sunyaev 1979:136,138)

The comment in 24 is explanatory in function. The authors are interrupting their discussion to explain to the reader the basis for one of their assumptions. Note that this explanatory comment is marked by a noun phrase modified by a demonstrative, *this close similarity*, which refers to the content of a section of the preceding text.

A final example of this use of the demonstrative is the following. (I have italicized the last sentence to indicate the author comment; other italicized portions represent italics in the original.)

(25) The term *imagination* plays so important a part in the *Treatise concerning Religious Affectation* that Edwards took time to define it carefully for his readers. It is, he said, that power of the mind by which one has an image of the things which are the object of sense when those things are not actually present to be perceived by the senses. So one has a lively idea of a shape, or of a color, or of marks on paper, or of a voice when one "does not really see, hear, smell, taste, nor feel." Memory, which like imagination depends upon sensation, differs from it only in being accompanied by a consciousness that the idea has been entertained formerly and that its presence in the mind formerly is the cause of its reappearance. *These notions concerning imagination and memory were commonplace in Edwards' time.*

(Faust and Johnson 1962:xxix)

In this passage, the authors offer additional, rather tangential, information in their closing comment concerning the relation of Edwards's ideas to those prevalent in his time. This comment is indicated by the use of the demonstrative *these* modifying the noun *notions*, which refers to the content of the preceding whole paragraph.[15]

Thus, demonstratives in normal use and especially in extended use co-occur with author comments often, indicating that the marking of author comments is one function which these grammatical items have.

4.3.3 Sentential adverbs. Certain adverbial expressions, which often express a speaker attitude of some kind (cf. Pike and Pike 1977:255), and which modify entire sentences, sometimes mark author comments. It should not be altogether surprising that expressions of speaker attitude should occur with particular frequency in author comments, which, we have noted, have an inherently pragmatic flavor anyway. Such adverbial expressions include *presumably, probably, unfortunately, perhaps, of course, more than likely*, and *hopefully*, among others.[16]

Examples of comments already cited which contain sentential adverbs include examples 6 *(evidently)*, 8 *(of course)*, and 20 *(at least)*. The entire paragraph in 26 is an author comment which occurs at the end of a discussion about dismantling a certain type of missile whose advent has created a threat to the military parity of the U.S.S.R. and the United States.

(26) This "return to the good old days" option is one of several possible ways to seek strategic stability through arms limitation negotiations.

> Indeed, it could be thought of as a stage in a process that would lead to the eventual elimination (perhaps by mutual agreement at some later stage of SALT) of all fixed land-based missiles on both sides. After all, nuclear disarmament, not just strategic stability, remains a valid long-term goal, even though it may appear utopian in the present political atmosphere.
>
> (Feld and Tsipis 1979:56)

Example 26 is a thematic author comment, summarizing the key points in the preceding portion of text. In this example there are several devices which function to mark it as an author comment. The demonstrative *this* in the first sentence modifies a noun referring to content in the preceding text (*this "return to the good old days" option*). Particularly relevant to the present discussion is the occurrence of two sentential adverbs in this comment, *indeed* and *after all*. One of the functions of these two adverbial expressions is to set off this entire paragraph as an author comment.

The comment in example 27 is a footnote from an examination of the Articles of Confederation in a law journal. The first paragraph of an example is part of the text itself; the second paragraph, preceded by the number 80, is the footnote which constitutes a comment. The ellipses indicate places where I omitted source and page references irrelevant to this discussion.

(27) Financial problems plagued the new nation, and, lacking a dependable source of revenue, the Confederation never solved its money troubles. Nonetheless, on two occasions, twelve of the thirteen states agreed to tariff proposals that would have provided such revenue.[80]

> 80. . . . *Interestingly, Virginia initially approved the first revenue-raising plan, which was proposed as an amendment to the articles, and then effectively killed it by voting to reverse that approval. . . . This would seem to be a precedent for the validity of a state legislature's rescission of its ratification of a constitutional amendment.*
>
> (Freedman 1978:154)

The comment above opens with the sentence adverb *interestingly*. This comment supplies incidental information to the reader concerning which state had not approved of the revenue-raising plan and the details surrounding that disapproval. The fact that this information is in a footnote also is a marking of its status as an author comment (cf. sec. 4.3.7 below on graphic markings of author comments for further discussion). Also, note the embedded comment in this example, marked by the demonstrative *this*, and a mood shift (from indicative to the conditional *would*).

Example 28 illustrates the use of a sentential adverb to highlight an explanatory comment.

(28) By the time the United Nations Security Council began assembling at Lake Success, New York, the straight road south from Uijongbu to Seoul lay open to the enemy.

The United Nations, of course, is an international agency founded to keep peace among men. Under the U.N. charter, chief responsibility for this is assigned to the Security Council. The Council is made up of eleven members, five of whom have permanent seats. The other six seats are filled, in turn, by all the other nations. The five permanent members are the Soviet Union, Great Britain, France, Nationalist China, and the United States. Any of these five members can, by veto, cancel any action of the council. Thus, the Soviet Union would certainly have vetoed the United States proposal for a cease-fire in Korea. But she did not. Why?

(Leckie 1963:23–24)

The comment here explains to the reader what the United Nations is. Notice that this comment occurs with a sentential adverb, *of course*. This indicates its comment nature.

4.3.4 Extraposition sentences. Some types of what the generative grammarians have called extraposition sentences seem often to function as signaling author comments in connected discourse.[17] An extraposition sentence is a complex sentence type in which a dummy *it* occurs in subject position and a clause that seems semantically to be the subject of the sentence occurs at the end of that sentence. The sentence *It bothered Albert that his son flunked all of his courses* is an example of an extraposition sentence. Here the final clause—*that his son flunked all of his courses*—functions in a sense as the subject of the sentence, which can be seen by comparing this sentence with its paraphrase *That his son flunked all of his courses bothered Albert.* In this paraphrase we see that the dummy *it* is replaced in subject position by the clause *that his son flunked all of his courses.*

Only certain types of extraposition sentences mark author comments with any frequency. These extraposition sentences involve the verb *be* as their main verb. *It is obvious that the world is round* is an example of an extraposition sentence which has the verb *be* as its main verb. Example 29 includes the use of an extraposition sentence to mark an author comment. This example constitutes the concluding paragraphs of an article on interest-bearing checking accounts.

(29) In the Janesville example, when banks dropped free checking accounts,

some customers who could not or would not maintain the required minimum balances opened share-draft accounts at the Black Hawk Credit Union in Janesville, where there were no fees or minimum-balance requirements. These former bank customers not only got free share-draft accounts but were earning 4 percent on them as well. The credit union was delighted to have the new customers. "With their minimum balances and service charges, the banks actually helped us," says Pat McGuire, the credit union's vice president. . . .

It is clear that competition in the banking business has been increasing. But the next step is up to Congress, and it must be taken by the end of the year. Congress should allow all financial institutions to offer interest-bearing checking accounts. The simplest way to do that would be to authorize NOW accounts for all financial institutions.

(*Consumer Reports*, Aug. 1979:480)

The extraposition sentence *It is clear that competition in the banking business has been increasing* sets off the final paragraph as an author comment. The first sentence of the paragraph functions as a summary: the author made explicit to the reader the main point of the preceding portion of text. The remaining portion of the comment expresses the author's opinion in the form of a recommendation.

Next consider 30.

(30) So now unhappy little Korea was truly cut in half. Premier Kim Il Sung in North Korea was a communist puppet dangling at the end of Stalin's string, while President Rhee in South Korea was an elected leader depending on the United Nations and the United States for his support. Thus democracy and communism confronted one another in Korea. *It should have been obvious that they would soon collide, but unfortunately the eyes of the world were focused elsewhere.*

(Leckie 1963:14–15)

In this example, the extraposition sentence beginning "It should have been obvious that" marks an author comment in which the author interrupts his discourse to express his opinion to the reader.

Likewise, example 31, from the text on Jonathan Edwards, contains an author comment highlighted by an extraposition sentence.

(31) Hobbes had concluded that since by nature men were wholly selfish, their endeavors to preserve themselves were just and right. . . . Every man in "the bare state of nature," that is, before men are united by compacts in society, has a right to do what he thinks fit and to possess himself of what he can. The state of war which such a system would

> produce would, however, defeat the desires of men for self-preservation. Moved, therefore, by fear for their own safety, men make contracts which involve giving up some of their rights for the sake of securing peace. *It is plain that to Hobbes acting from self-interest was no sin. That men are moved wholly by self-love seemed to him no reproach upon human nature.*
>
> (Faust and Johnson 1962:lxxiv)

In 31 the extraposition sentence beginning "It is plain that" occurs at the beginning of an author comment summarizing the key point of the preceding text, that Hobbes approved of self-love as a trait of man.

Still another example of an extraposition sentence occurring in an author comment is 32 in which the comment is contained in a footnote to the text proper. As above, I give part of the text itself and then the footnote with its appropriate number.

(32) The effectiveness of the amercement-conspiracy system depended primarily on the continuing vitality of the internal sanction. But amercement, which had once formed a branch of the royal revenue, was in a long but steady process of decline.[63]

> 63. Holdsworth suggests that the practice was naturally superseded by the process of "making fine".... His sources, however, do not suggest that fines took the place of amercements. *It is more likely that ever-stricter limitations on the size of amercement resulted from changing attitudes toward the "wrongs" amercement punished. Since both plaintiffs and defendants could suffer amercement for losing a suit, limitations on its size, like limitations on the costs statutes, might well have been viewed as protecting the honest litigant.*
>
> (Campbell 1979:1226)

The author here comments on Holdsworth's suggestion, giving his opinion in terms of his quite different interpretation of the same data. This comment is highlighted by the use of an extraposition sentence, *It is more likely that. . . .*

Some variants of this basic type of extraposition sentence also occur frequently in author comments. One such variation is that the final clause of the sentence is an infinitive clause, rather than a *that* clause, as in "It is necessary to go home now." Example 33 illustrates the use of this type of extraposition sentence to mark an author comment. In this example, from the book on ancient medicine, the author describes an ancient Greek physician's views on the development of the human fetus.

(33) The lungs are formed next to the heart, which heats moist and

> glutinous matter and gradually dries it up in a foamy state, so that they become spongy and full of small vessels. The cold element in this glutinous mass is melted into liquid, and the most glutinous part dried into a membrane. The liver arises from moisture heated without glutinous and fatty components. The spleen is formed with cold and glutinous elements, the latter composing its fibres. The kidneys are composed of a little glutinous material and a little heat, with much cold, which causes coagulation. Thus cold fixes and coagulates materials and makes flesh of them, while the glutinous element forms hollow vessels for containing blood or other moisture. . . . *Before the development of chemistry in modern times, there could be no fundamental improvement in these notions, but it is easy to see what problems were before the author's mind. They were those of the origin and differentiation of living matter.*
>
> (Phillips 1973:57–58)

This comment functions as a combination of opinion and summary. The first part of the first sentence of the comment gives an opinion or evaluation of the Greek physician's attempt to describe the formation of the fetus. The second part of this same sentence, which begins with the extraposition construction *it is easy to see* is a summary of the key point of the preceding discussion.

Another example of the infinitive variant of the extraposition sentence used to mark an author comment is 34.

(34) The action on the case presented courts with the opportunity to fashion, by analogy to writs of conspiracy, a cause of action that would fit those forms of malicious prosecution that had become unreachable through the internal sanctions.[68]

> 68. *It is difficult to pinpoint exactly when amercement ceased to be effective, though by 1478 it was no longer serious enough to require pledges, which had become a formality even before that time.*
>
> (Campbell 1979:1227)

In this comment-footnote, the author gives additional incidental information which may be of interest to his reader concerning the date at which amercement became ineffective. Notice that this comment is marked by the use of an infinitival extraposition sentence, *It is difficult to pinpoint. . . .*

There is another variant of the extraposition sentence which may mark author comments. In this variant, a passivized verb is the main verb of the sentence, rather than *be*.[18] An example of this type of sentence is *It is said that she is an angel.* The paragraph in 35 illustrates the use of this type of extraposition in an author comment.

(35) Industry and labor officials caution that the new MacMillan Rothesay contract doesn't necessarily signal the basis for next year's round of bargaining. *But it's known that the agreement will be the main talking point at CPU meetings beginning next week to map strategy for the negotiations.*

(*Wall Street Journal,* Nov. 7, 1979:4)

In this comment the author counters the industry and labor officials' caution with additional information which he knows. Thus, this comment functions to provide supplementary interesting information, but it also seems to have a contrastive function. Note that this comment includes the extraposition sentence *it's known that. . . .*

Another example of this type of extraposition used to highlight an author comment is 20 above, repeated here as 36.

(36) *The Nature of Bones X* and *Epidemics II* have the two great vessels *hepatitus* and *splenitus* so arranged on either side that at one point a section of each runs inward to the heart to meet a section running out toward it. *Here at least it is recognized that the aorta and* vena cava *are not simply vessels that run up and down the body each in a single and uninterrupted course.*

(Phillips 1973:45)

The thematic comment here, besides being marked by the demonstrative *here,* is further signaled by the extraposition sentence which begins with *it is recognized that* and the adverbial phrase *at least.*

In sum, I suggest that extraposition sentences, at least of the types I have discussed here, have as one of their functions the marking of author comments in a discourse.

4.3.5 Nonrestrictive relative clauses. Nonrestrictive relative clauses often mark short author comments in discourse. In such cases, the relative clause itself constitutes the author comment. Several scholars have noted the function of nonrestrictive relative clauses as constituting author comments in discourse. For instance, Gray (1977:123) noted that nonrestrictive relative clauses have an "additive" function; that is, nonrestrictive relative clauses make additional, independent assertions in discourse.[19] Christensen and Christensen (1978:117) remark in this same vein: "Bound modifiers are restrictive, free modifiers are nonrestrictive. *Restrictive* and *nonrestrictive* are accurate terms and should suffice, but they seem to communicate almost nothing to our students. *Defining* and *commenting* sound better and may be more intelligible. Bound modifiers are defining; free modifiers are commenting." Thus, the occurrence of a nonrestrictive relative clause (this

type of relative clause is normally set apart by commas or occasionally parentheses in written texts) is often a marker of an author comment in discourse.

Consider 37.

(37) A labor agreement that could have a significant impact on contract bargaining in the Canadian pulp-and-paper industry next year was signed at a newsprint mill in St. John, New Brunswick.

The agreement, *which ended a seven-month strike that closed MacMillan Rothesay Ltd.'s newsprint plant,* suggests that the 58,000-member Canadian Paperworkers Union is moving toward the goal of a national contract to replace the historical pattern of East and West settlements.

(*Wall Street Journal,* Nov. 7, 1979:4)

In the above example, the nonrestrictive clause *which ended a seven-month strike* . . . is an author comment which gives incidental, additional information concerning the agreement between the management and labor groups in a Canadian paper company.

Another example of a nonrestrictive relative clause marking an author comment is 38, which is taken from an article discussing different kinds of bank accounts. (Note that the phrase *NOW accounts* was italicized in the original.)

(38) A new kind of checking account was invented back in 1972 when savings banks in Massachusetts and New Hampshire began offering "negotiable orders of withdrawal," or *NOW accounts.* Technically, these are savings accounts, and they earn interest just as savings accounts do. However, you may write an order of withdrawal *(which is like a check)* against the account, so it serves the same function as a checking account does.

(*Consumer Reports,* Aug. 1979:478)

The comment *(which is like a check),* marked by parentheses and the use of a nonrestrictive relative clause, explains what a negotiable order of withdrawal is by associating it with an item presumably familiar to the reader, a check. Note that this comment is embedded with a larger comment, marked by the sentence adverb *technically* and the demonstrative *these,* explaining what NOW accounts are.

As a third illustration, consider 39.

(39) Many words and phrases in one language have no exact equivalent in another. But the small army of interpreters have only a split second to change what they hear from one to another of the UN's official

languages: English, French, Spanish, Russian and Chinese—and Arabic during meetings of the General Assembly.

How tricky this can be was shown again in February in a Security Council exchange between U.S. Ambassador Daniel Moynihan, *who has since retired,* and his Soviet counterpart, Jacob Malik.

(*Brandon Sun,* Mar. 17, 1976)

In this case, the nonrestrictive relative clause *who has since retired* constitutes an incidental author comment, providing extra information to the reader about Daniel Moynihan.

Thus, nonrestrictive relative clauses have as one of their functions the marking of author comments in discourse.[20]

4.3.6 Lexical markings of author comments. Besides the grammatical markers discussed thus far, there is a group of verbs which occur in the author comments of my data with such frequency that I believe that they, in themselves, constitute a type of marking of author comments. This set of verbs includes *seem,*[21] *mean, indicate, appear, suggest, imply,* and perhaps others. While this set does not constitute a verb class per se,[22] there are certain similarities in the type of grammatical constructions in which they occur. One such feature shared by all of these verbs is that they allow (and some require) complex constructions, such as *that* clauses, as objects. I call this group of verbs lexical markers of author comments in texts.

As an example, consider 40.

(40) The chief advantage of such silo-protection systems is that they could be deployed fairly quickly and therefore be in place by the mid-1980's, when the appearance of Minuteman vulnerability might otherwise become alarming. All the other policy options designed to counter this vulnerability cannot be expected to become effective before the early 1990's. The suggested protection devices could not protect the silos with absolute certainty, but they could decrease the expected number of destroyed silos to the point where the opponent would be forced to expend such a large portion of his counterforce warheads that the attack would be almost self-disarming. Furthermore, this approach would increase the uncertainty of the outcome of a countersilo attack and complicate it to such an extent that its planning would be made more difficult and the political decision to execute it would be made even more improbable. . . . *A weakness of this approach appears to be its lack of technological novelty, an aspect that seems to diminish its attractiveness to military planners.*

(Feld and Tsipis 1979:56)

In this paragraph the authors make a comment which contains additional incidental information concerning the protection system under discussion. The theme of the paragraph involves the advantages of the system; these advantages are paraded in sentence after sentence throughout the paragraph. The note about weaknesses constitutes a minor aside in the discussion. This comment occurs with a demonstrative modifier, *this approach,* and with the verbs *appears* and *seems,* both of which occur frequently in author comments. Notice too the subtle author opinion overtones in this comment, suggesting it may be a hybrid.

Example 41, taken from a text on emergency treatment of colitis, also occurs with the verb *seem.*

(41) "We don't know exactly why treatment succeeds or fails. There are no clear-cut predictive factors," Dr. Truelove says. "We've learned that patients whose entire colon is involved don't do as well and are somewhat less likely to go into remission than those with more limited lesions. Age and sex don't seem to affect the outcome, nor does the length of history—except in the longer term. Generally, remissions are more likely in patients having their first severe attack and they are likely to last somewhat longer. *On* prima facie *grounds, it would seem that if we could pick up severe attacks very early, and treat them very vigorously, we could minimize damage to the colon and so improve the long-term outlook. But it's not yet proven.*"

(*Emergency Medicine,* Sept. 15, 1979:141)

The last sentences of this quotation are a comment of Dr. Truelove, expressing his opinion in the form of a conclusion based on the evidence he had just mentioned. Note that this comment includes use of the verb *seem,* as well as a type of extraposition sentence (*it would seem that. . . .*), and a shift in mood, as shown by the use of *could* and *would* in the comment but not in the preceding sentences.

The verb *mean* can also serve to indicate an author comment. Example 42 illustrates the use of *mean* in this function.

(42) The model also suggests that the ratio of the brightness of a galaxy's nucleus to the brightness of its outer regions is greater for a primeval galaxy than it is for a normal one. *This means that the images of primeval galaxies resemble the images of quasars and stars, and so it is understandable that they have been difficult to distinguish.* At a distance of 16 billion light-years the bright nucleus, although it would be thousands of light-years in diameter, would be only a second of arc in apparent diameter. The space telescope will be able to clearly resolve

> the structure of such an object. Indeed, thousands of primeval galaxies should eventually be detectable in a square degree of sky.
>
> (Meier and Sunyaev 1979:136)

The author comment in 42 gives incidental information, comparing the brightness of a primeval galaxy to that of quasars and stars. This comment contains the verb *means* as well as a nominal demonstrative in its extended use, *this*.

Another example of the use of *mean* to mark an author comment is 43, excerpted from the previously cited law journal article on malicious prosecution. The comment is in a footnote; hence, the text proper will be given, followed by the footnote.

(43) Honest litigants would have the benefit of a system in which the extent to which they are deterred is directly related to their perception of the merit of their claim;[124] if they were satisfied that they had probable cause, deterrence would be minimal.

> 124. *The objective nature of the proposed definition of probable cause means that a few plaintiffs who have retained negligent counsel and sued in good faith on the strength of counsel's advice may be subject to ultimate liability. Although these plaintiffs would have probable cause as that concept has traditionally been understood, . . . the suit itself would still be without probable cause.* (Campbell 1979:1236)

The author here provides information incidental to the main thrust of his argument, carried in the text proper. He includes the footnote to take care of a few rare cases, which are almost exceptions to his main argument—they are the few cases of plaintiffs who would not benefit under this system. Notice that the verb *means* serves to mark this footnote as an author comment.

Other verbs that often mark author comments are *indicate* and *imply*. The excerpt in 44 is an example of *indicate*, which occurs in an author comment.

(44) The process of compromise that marked the drafting debates is clearly visible in the surviving rollcall votes of various provisions[32] and in the congressional appeal to the states for ratification of the Articles.

> 32. The records of the sixteen rollcall votes taken on the Articles are to be found in. . . . Their most salient characteristic is their consistent one-sidedness; aggregating the results of all these votes, the majority positions carried by a margin of 125–30. *Rollcalls normally indicate questions about which there is some disagreement.*
>
> (Freedman 1978:147)

This comment is an explanation of a presupposition which the author held which he suspected that at least some of his readers may not have shared. The verb *indicate* serves to mark this comment as such.

Finally, consider example 45, taken from a discussion in the ancient medicine text previously cited of the ancient Greek views on the origin of semen in the body.

(45) Those who have had incisions made in the vessels behind the ears have a main contribution cut off from the sum of the semen, so that they are infertile. . . . In male infants the seminary vessels are small and blocked; in female infants the same cause prevents menstruation. *This implies that menstruation is regarded as a flow of female seed.*

(Phillips 1973:60)

Here the author comment provides additional information, an interpretation of the ideas he is discussing which is interesting but not part of the main thread of his text. This digression contains both a demonstrative in extended use, *this*, and the verb *implies*.

In sum, along with grammatical devices, certain lexical items may help to indicate author comments.

4.3.7 Graphic markings of author comments. Finally, I will discuss briefly some of the graphic markers used in written discourse that highlight author comments. By graphic markers I mean those conventions of the written form of language which are associated with the marking of author comments.[23] Two important graphic conventions which are employed in English writing to mark author comments are parentheses and footnotes. These seem almost self-evident. The use of footnotes to set off author comments has been amply illustrated already in this chapter, in examples 27, 32, 34, 43, and 44. One further example of this use of footnoting is 46.

(46) The Great Awakening began in Edwards' own Connecticut River village, Northampton, Massachusetts, in 1734, and spread finally, "over the whole eastern seacoast from Main to Georgia." For fifteen years after 1734, waves of religious enthusiasm deluged New England, one of the most notable of these storms coming in 1740 when George Whitefield visited the colonies.[5]

5. *Whitefield visited Edwards. See. . . .*

(Faust and Johnson 1962:xvii)

In this case the footnote encodes an incidental comment. The fact that

this information is in a footnote is in this case the primary marker which indicates that this information is an author comment.

Another graphic convention which commonly marks author comments is the use of parentheses. Parentheses often signal that the author is making a comment to his reader. Examples 6, 8, and 23 are examples of author comments contained within parentheses. Further, consider 47.

(47) James the Just, "the Lord's brother," was president of the Jerusalem Church until his martyrdom in 62 *(an event which gave many non-Christian Jews a very bad conscience),* when he was succeeded by a cousin of the Lord.

(Chadwick 1967:18)

In this case, the author placed his comment containing information which was incidental to the main line of his thought in parentheses. It is thereby clearly set off as an author comment.

Another example of the use of parentheses is 48.

(48) Soon the shell of ionized gas expands, unveiling the star by dispersing or destroying most of the dust grains. As a result the intensity of the infrared radiation decreases sharply and the intensity of the visible radiation increases. *(The Orion nebula in our galaxy is an example of a region of visible hot stars and ionized gas.)* When the massive star reaches the end of its life cycle, it explodes violently as a supernova. A supernova explosion would be a spectacular event in a normal galaxy because of the comparative faintness of the other stars. In a primeval galaxy, however, a supernova would go unnoticed at visible wavelengths because of the abundance of other bright, massive stars.

(Meier and Sunyaev 1979:138)

The parenthetical author comment in 48 cites an example of what the author is discussing in the text proper. This comment functions as both incidental information and as an explanation. For those who are familiar with the Orion nebula in our galaxy the comment would serve as an explanatory comment, associating a point in the central discussion with some aspect of the knowledge of the reader. For the reader who is unfamiliar with the Orion nebula, the comment is basically incidental information. In any case, that it is a comment tangential to the main discussion is graphically noted by the parentheses.

Thus far, I have examined various grammatical, lexical, and graphic devices which mark author comments in a discourse. I turn now to an examination of the relation between author comments and the presuppositions made by an author regarding his reader's knowledge.

4.4 The Interpretation of Author Comments

The identification and analysis of author comments is an essential part of the larger endeavor of discourse analysis, for in author comments we often catch glimpses of the author himself and his conception of his reader's knowledge. In many author comments, information and insight can be gleaned concerning the pragmatic situation in which a work was written.

In keeping with the focus throughout this study on the analysis of an author's concept of his intended reader, this section will focus on interpreting author comments for the light they shed on an author's assumptions regarding his reader's foregrounded frame. Explanatory and incidental comments are particularly revealing in this way. The other types of comments, thematic and opinion, however, will also be touched upon briefly at the end of the section in terms of the insights which study of these comments can yield.

4.4.1 Explanatory comments. One of the most fruitful studies of the influences of pragmatics on written discourse is the examination of author comments which have an explanatory function.[24] These comments are particularly important in that they indicate a great deal about what an author assumes is part of his reader's foregrounded frame, and what he assumes is not part of it.

In order to interpret explanatory comments with regard to their implicit assumptions regarding a reader's foregrounded frame, one must understand the basic structure of explanations. To successfully explain something to someone, something which he presumably does *not* already know, we must do so in terms of those things we believe he *does* know. This is the crux of explanation as it is most often experienced in everyday life and it is the crux of explanatory comments in written discourse: *we explain the unknown in terms of what we presume is known.* In terms of the framework in chapter 2, we explain what we assume not to be in a person's foregrounded frame in terms of what we assume is in the frame.

Consequently, when we encounter an explanatory comment in a written text, two questions can be asked whose answers will yield information regarding the author's assumptions about his reader's foregrounded frame: *What is the author explaining? How is he explaining it?* Once we have determined *what* the author is explaining, it is a generally safe assumption that he presumed his reader probably did not have prior knowledge of that concept in his foregrounded frame. Otherwise he would have no reason to explain it in the first place. Then, having determined what is being explained, if we go on to examine *how* the author explains that bit of information—that is, in terms of what information in the reader's foregrounded frame this item

is explained—we can gain considerable insight into the contents of the knowledge frame which the reader was expected to have prior to reading the text at hand.

Now consider example 5, repeated here as example 49.

(49) Your national Cancer Cytology Center is also responsible for methods which detect cervix or uterine cancer, early skin cancer, cancers of the mouth and throat. *Cytology means collecting a cell sample and making a diagnosis by microscopic examination.* The methods we've developed save thousands of lives.

(Ayre 1979:1)

The explanatory comment in this text explains what cytology is. Thus, it can be concluded that the author assumed that at least some of her projected readers probably did not know what cytology was. Cytology is defined in the text in terms of cell samples and diagnoses by microscopic examination. This explanation assumes that the reader's Science or Medicine frames contain knowledge of the most basic rudiments of modern biology—that human bodies are made of cells which can only be seen under microscopic examination. A possible further assumption that the author made here was that the reader knew that cancer is a disease that affects the cells of the body. What is important to note here is that the information presumed to be unknown to the reader—what *cytology* means—is explained in terms of other facts presumed to be already in the reader's foregrounded frame.

Another illustration of an explanatory comment occurred in 19 above, which is reprinted here as 50.

(50) President Truman also instructed the U.S. Seventh Fleet to sail north from the Philippines to the strait separating the Communist Chinese mainland from the Nationalist stronghold on Formosa. *He did this because he wanted to keep the war from spreading.*

(Leckie 1963:25)

This comment explains why President Truman moved the U.S. Seventh Fleet to a place near Formosa at the outbreak of the Korean War. Therefore, we can assume that the author did not think President Truman's reason for this action would necessarily be obvious to at least some of his readers. The reason the author gives for this action is that President Truman wished to keep the war from spreading. The crucial assumption in this explanation is that the reader can make a logical connection between this movement of the U.S. fleet and the prevention of the spread of war. This logical connection depends to some extent on a knowledge of the import and function of such

"shows of strength." The reader's foregrounded frame, something like International Politics, was also expected to contain knowledge of how a war could "spread" from one area to another. Finally, some specific knowledge of the political situation regarding mainland China and Formosa was expected. Without all this knowledge the explanation offered in the author comment probably would be meaningless to the reader.

A final illustration of the interpretation of an explanatory comment in a text is 16, repeated here as 51.

(51) According to prevailing cosmological theory the universe began with an explosion from a superdense state in which the rate of expansion increases with the distance from the observer. The wavelength at which electromagnetic radiation from a distant object reaches the earth is increased by the velocity of recession of the object with respect to the observer. *This is the well-known red shift, so named because if the radiation is in the visible region of the spectrum, it is made redder.* The amount of red shift is a measure not only of the remoteness of the object but also, since one is looking backward in time, of its age since the "big bang." (Meier and Sunyaev 1979:130)

In this comment the authors first give a name to the phenomenon they have just described in the text—"the well-known red shift." The phrase *well-known* indicates that the authors are assuming that the reader has probably heard of this term before but may not know precisely what it means. The authors' comment connects the term with the phenomenon they have just described. What the reader's foregrounded frame was to include, based on the first part of the comment, is the term *red shift* itself. Note that the use of the definite article at the first mention of *red shift* (cf. chapter 3) further supports the hypothesis that it is assumed to be known to the reader. What is supposed to be information not in the reader's foregrounded frame, based on this part of the comment, is the connection of the phenomenon described in the text with the name *red shift,* which the reader was not necessarily expected to know.

The second part of the comment, beginning with "so named because," suggests other information which the authors suspected the reader might not know. Specifically, they assumed the reader's foregrounded frame, perhaps Science, may not include knowledge of why the red shift phenomenon had that name. Hence, this section of the comment explains the term *red shift.* The way in which the authors explain this term reveals various assumptions they had regarding the reader's foregrounded Science frame, for the explanation relies on knowledge of the relation of light and color to radiation, wave theory, and the electromagnetic spectrum.

Thus we see that careful analysis of explanatory comments in a text has great potential for explicating the author's presumptions regarding his reader's foregrounded frame. By using the basic principle that the unknown is normally explained in terms of the known, many of an author's presuppositions about the knowledge of his reader can be determined.

4.4.2 Incidental comments. The incidental comments that an author includes in a discourse also reflect certain of his assumptions regarding his intended reader. However, the interpretation of these comments differs from the interpretation of explanatory comments mentioned above. There is no particular interpretive principle or formula for incidental comments comparable to the explaining-the-unknown-in-terms-of-the-known principle found so useful in analyzing explanatory comments. Rather, in the case of incidental comments, it is their very presence in a discourse that normally gives some general indication of the author's presuppositions regarding the foregrounded frame of his reader. Secondly, while explanatory comments suggest certain specific concepts which the author assumed his reader knew, incidental comments often indicate the overall degree of knowledge and expertise the reader is presumed to have; that is, they reflect the complexity of knowledge in his foregrounded frame.

Before proceeding to explain and illustrate the interpretation of incidental author comments, it is important to divide these comments into two groups based on their relation to the discourse they are a part of. The first type of incidental comments provides information that is basically a tangential sidelight to the main theme(s) of the discourse. The information in this type of comment seems to be something extra which is tacked onto the main train of thought, a digression from the primary message of the text. The second type of incidental comment provides information which is detailed background to the main theme(s) of the text or which is additional evidence supporting the theme(s) of the text. This type of incidental comment is more of a close-up, in-depth treatment of some aspect of the larger discourse. The difference between these two types of incidental comments can be compared to the difference between painting in the background details of a work of art and embellishing the borders of the work with various figures, plants, etc., as was common in certain types of medieval art. The incidental comment that provides background to the discourse, or some supporting evidence, is akin to filling in some of the minute details of a painting. The incidental comment which provides tangential, sidelight information is like embellishing the borders of a painting—such figures seem to be only barely part of the painting itself.

The inclusion of these types of comments in a text gives some clues about the type of reader to whom the author believed he was writing. I

assume here that an author includes an incidental comment because he believes at least some of his readers would think that the information in the comment was interesting, useful, or important. Thus, the type of incidental comment that occurs in a text should indicate the type of information the author thought would interest his reader, thereby giving some indication of the expected knowledge in the foregrounded frame of the intended reader.

The incidental comment that simply provides extra tangential information most often indicates that the author wrote to a general reader, i.e., that his reader was not expected to have much complexity or completeness in his foregrounded frame.[25] In this vein, consider 7, which is repeated here as 52.

(52) Foreign domination and the poor economy of Palestine had led to a general emigration of Jews all over the Mediterranean world, the "Dispersion," so that Jewish colonies could be found almost anywhere from Cadiz to the Crimea. At Rome in the first century A.D. they had eleven or twelve synagogues. At Alexandria they formed a particularly large proportion of the population; there were a million Jews in Alexandria and Egypt altogether, and they were always a factor in municipal politics, even though their social exclusiveness prevented them from becoming a pressure-group for the acquisition of power. Everywhere they refused to be merged with the Gentile inhabitants, but adhered to their own beliefs and practices, meeting each Saturday for psalms, readings from their Scriptures followed by an exegetical sermon, and prayers. *Users of the Latin Breviary or the English Prayer Book are in important respects legatees of this way of worship.*
(Chadwick 1967:10)

The comment in the above paragraph, which connects modern Christian worship with ancient Jewish practice, is tangential information that the author inserted as an interesting sidelight. I suggest that it is this sort of sidelight comment which is normally intended for the general reader, whose foregrounded frame (in this case a Church History frame) is not expected to be overly complex. (But note that the reader *was* expected to have a fairly developed Religion or Christianity frame, based on the author's use of the technical terms *Latin Breviary* and *English Prayer Book.*)

The incidental comment which provides background details or supporting evidence reflects more specific author assumptions regarding his intended reader. When an author includes a comment in his discourse which serves to give additional background information or to give additional evidence to support a claim in the text,[26] he normally does so either because he believes his reader will find the additional information useful or interesting (in the case of background details) or he

believes that his reader might be skeptical of his conclusions and needs more evidence to be persuaded (in the case of supporting evidence). In either case, the inclusion of such an incidental comment implies that his reader was "sophisticated and informed" in the subject area of the discourse. That is, in such a case, the author assumed his reader's foregrounded frame was complex and complete.

As an example, consider 53.

(53) On the first day, August 3rd, the lake was extremely calm, with a slight tailwind *(1 M/sec)* and fifteen countries launched over fifty crews to put on a demonstration of elite rowing never before equaled in world competition.

(Pisani 1978:32)

The small incidental comment *1 M/sec* is a bit of background detail which the author probably included as an item of interest to his reader. (Another possibility is that the author was trying to back up his claim that the tailwind was slight, but this option seems less likely to me in this case.) The type of reader most likely to want the extra detail of the precise wind speed during a rowing race would be, I suspect, someone who has rowed himself and experienced conditions with various wind speeds. To such a person the precise wind speed would be of interest. Thus, I conclude from the inclusion of this comment that the reader to whom the author was writing was just such a person, whose Rowing frame was quite developed, who had probably rowed himself in various wind conditions, and who was thus interested in knowing what the wind conditions were at this particular race.

Example 54 is another illustration of an incidental author comment which implies a sophisticated, knowledgeable reader. This example is a footnote from an article in a law journal.

(54) At the same time, the framers [of the Articles of Confederation] further strengthened the budget authority,[19] and added a provision granting congressional immunity.

19. *Congress, which had previously been authorized only "to agree upon and fix the necessary sums and expenses," . . . was given the new power "to appropriate and apply" the revenues. . . .*

(Freedman 1978:145)

Here the author has added an incidental comment which gives the exact wording of the Articles of Confederation the author referred to in the body of the text. The author probably included this information to further support his argument, namely, that some changes in the successive drafts of the Articles of Confederation increased the budget

authority of the central government. Thus, it can be assumed that the author anticipated that at least some of his readers might question his conclusion. This in turn implies the author was expecting that his readers comprised a relatively sophisticated audience, whose foregrounded History and/or Constitutional Law frames were quite complex and full.

In sum, the occurrence of incidental comments in discourse gives a general indication of the type of reader that the author assumed he was writing to.[27] An incidental comment that gives tangential sidelight information suggests the author was writing to a general audience, to someone not necessarily having specialized knowledge in the subject area of the discourse. If, on the other hand, the incidental comment gives in-depth details of some aspect of the text, whether to support an argument or to provide additional background information, this comment indicates that the author conceived of his reader as being someone knowledgeable and discerning in the area in which he was writing.[28]

4.4.3 Thematic and opinion comments. While the occurrence of the previous two types of comments in a text give some indication of the author's estimation of his reader, the other two types of comments give quite different information. They are more directly reflective of the author himself.

Thematic comments seem especially useful in presenting the analyst with an explicit statement of what the author of a text thought the main point of a section of text was. Such information is an invaluable check on the other methods used to analyze the content structure of a passage. Of course, not all sections of a discourse have explicit thematic comments, and in those cases, other methods of content analysis must be used. But where there are thematic comments, they are an important clue to the content structure of the discourse as the author conceived it. Examples 10, 11, 12, 29, and 31 among others are thematic comments.

Opinion comments do not reflect the author's conception of his reader, nor his idea of the content structure of the discourse. Rather, in addition to recording the personal opinion of the author on some matter, opinion comments often give some reflection of the author's own foregrounded knowledge frame. For example, see 55. (The phrases *Chicken of the Sea* and *Van Camp's* were italicized in the original document. The italics in the latter portion of the example, however, are mine.)

(55) After the first rush to enroll for inspection, however, the industry's enthusiasm waned. When we bought the tuna for this report, only

Ralston Purina Co. brands *(Chicken of the Sea* and *Van Camp's)* remained in the program.

Although only one major canner still participates, the brief period of enthusiastic voluntarism may have helped raise the level of cleanliness throughout the industry. *But history has a nasty way of repeating itself. CU believes that inspection of seafood, like that of meats and poultry, should not depend on the industry's temporary response to a public relations problem. The public appetite, if not the public health, requires the mandatory inspection of seafood.*

(*Consumer Reports*, Jan. 1979:9)

The author comment in 55 presupposes that it is the government's responsibility to control the quality of food made available for purchase in the United States. This presupposition lies behind the opinion expressed. Author comments expressing opinions often reflect some of the author's presuppositions.

4.5 Conclusions

This study of author comments has offered several contributions to the larger study of discourse structure. What seems the most obvious contribution is the isolation of author comments as a group for special study. That the shifts of attention in a text from the discourse itself to the communication of the author and reader (that is, author comments) can be taken together and analyzed in terms of their reflection of the author's presuppositions is, as far as I can tell from the literature available on linguistic discourse analysis, a relatively new idea, and one which I suggest will prove especially valuable in the study of the pragmatic influence in texts.

This leads me to the second contribution of this study of author comments: the development of a new tool for examining the pragmatic factors affecting a discourse. The study of explanatory comments, using the principle that concepts assumed to be unknown to the reader are explained in terms of concepts assumed to be known to him, seems to me to be a significant step in the exploration of an author's assumptions regarding the knowledge of his reader, based on a specific text. The study of incidental comments, while not yielding results as clear as explanatory comments, nonetheless can give supporting evidence concerning the presumed extent of the intended reader's foregrounded frame.

Thirdly, by indicating various devices used to mark author comments, this chapter suggests an informal methodology for identifying the author comments of a text. By recognizing the types of devices which frequently mark author comments in texts, one can quickly identify passages in a text which are potentially author comments.

While not a formal methodology, since reference must be made to the meaning of the passages in question to confirm their status as author comments, nonetheless it offers a helpful starting point in the analysis of a text's author assumptions as these are encoded in comments. Finally, this study has suggested some of the factors governing the occurrence and distribution of demonstratives and extraposition sentences in discourse. The discovery of the functions of various syntactic constructions (such as the functions of modifiers and particular sentence types) is a crucial task of discourse analysis. Thus, to have associated with author comments certain syntactic constructions in English, such as extraposition sentences and demonstratives whose distribution in texts has not previously been discussed, to my knowledge, is a contribution squarely in line with one of the chief aims of discourse study.

Notes

1. Note that this is not true for nonformal or spontaneous written discourses such as letters. In these cases, the communication between writer and reader often *is in focus,* is the center of attention, as well as the letter's content itself. Thus, comments in letters probably differ significantly from comments in formal written discourses. This is an example of the communication situation affecting aspects of the discourse structure of written language, as described in chapter 1.

2. Possible exceptions to the general rule that the author and the reader's communication is out of focus in formal written discourse are the cases of behavioral and especially hortatory discourse. In these cases it is possible that both the author's relation to the reader and the content of the discourse itself are in focus.

3. Whether this *now* time corresponds to the time of writing or the time of reading is flexible. Most authors probably write as if their perspective on time and their reader's perspective roughly match. If a distinction is necessary, the author often explicitly marks which *now* he means by a phrase such as *by the time you read this, by the time this goes to press,* or *at the time of this writing.*

4. Longacre also posits two other parameters, tension and projected time, whose presence or absence can further distinguish discourse types.

5. I draw a distinction here between explanatory comments and passages of explanation that form part of the main thrust of a text. This latter type of explanation often occurs in expository discourse, in which large sections of a discourse, and even entire discourses, are devoted to explaining something. Although there will undoubtedly be fuzzy borders between these two types of explanation, some such distinction is necessary to maintain the meaning and usefulness of the concept of author comments.

6. Thematic comments also differ from other types of comments in the ways in which

they can be marked. Specifically, whereas other types of comments can be marked by graphic means such as parentheses and footnoting (cf. sec. 4.3.7), thematic comments do not occur with this type of marking.

7. Other linguists who have analyzed the distribution of various items in language use in relation to discourse are Gordon and Lakoff (1975), Hopper (1979), van Dijk (1977), and Larson (1978).

8. Lyons (1977:637) refers to the use of person markers, demonstratives, and tense/aspect markers of elements as deixis in language. He defines deixis as "the location and identification of persons, objects, events, processes and activities being talked about, or referred to, in relation to the spatiotemporal context created and sustained by the act of utterance and the participation in it, typically, of a single speaker and at least one addressee."

9. The use of certain pronouns in a discourse is not by itself diagnostic for the identification of different discourse types. Longacre's scheme (1976:202) suggests that the surface features of discourse types are emic to given languages and that the same pronoun may be shared as a characteristic by more than one discourse type.

10. I hypothesize that the characteristic deictic standpoints of different discourse types reflect differences in the notional structure (what Longacre calls "deep structure") of those types. Longacre (1976:200) discusses the fact that the notional categories of discourse types differ with regard to person and time orientation.

11. See Longacre (1979) for a fuller discussion of the past tense as the backbone tense of English narrative.

12. Wallace (forthcoming) has suggested that the functions and meanings of mood, tense, and aspect in languages may overlap, that these notions are not always the discrete categories that they have at times been presumed to be. The fact that shifts in either mood, tense, or aspect can mark author comments seems to me to be further confirmation of the intersecting nature of these categories. Lyons (1977:809) has also discussed tense and mood as being closely related.

13. Demonstratives are also considered deictics. However, they do not seem to mark comments in the same way as the shifts in person and tense/aspect/mood mentioned in section 4.3.1. Therefore, I give them separate treatment here.

14. Robin Lakoff (1974) has analyzed demonstratives in a slightly different way. She views demonstratives *this* and *that* as having three possible uses in English: a "spatiotemporal" use, a use of "emotional deixis," and a "discourse" use. Her "discourse" use corresponds most closely to Halliday and Hasan's work. The "discourse" use of a demonstrative occurs when that demonstrative refers to anything in the preceding text, whether simply a nominal, or a larger section of text.

15. Notice that while only singular demonstratives can occur in extended use to mark comments, demonstratives in their normal use can occur in plural form.

16. Corum (1975) and Michell (1976) have both analyzed certain sentence adverbs as being either "modal" or "active." The former type assign to a proposition some type of probability or likelihood, while the latter presuppose the truth of the proposition they modify. I have not found this distinction to be significant in the identification of analysis of author comments marked by sentence adverbs.

17. Many linguists in the transformational-generative tradition have examined extraposition sentences. For example, Emonds (1976), Rosenbaum (1967), Higgins (1973), Hooper and Thompson (1973), Karttunen (1970), Spears (1973), Subbarao (1973), and Ziv and Cole (1974) have all discussed the phenomenon of extraposition in sentences. However, none of these linguists, in the works cited, or elsewhere to my knowledge, has discussed the fact that these sentences often mark author comments in connected discourse.

18. It may be that the only verbs that fit into this type of extraposition sentence are verbs of saying and cognition, such as *say, know, realize, agree,* etc., which involve a form of indirect quotation.

19. Thompson (1971:86) has also noted that nonrestrictive relative clauses seem to have this function: "It has often been suggested that an NR [nonrestrictive relative clause] represents an assertion by the speaker, a comment injected into the sentence whose truth is being vouched for by the speaker independently of the content of the rest of the sentence."

20. Linda Jones (1977:178) has suggested that relative clauses in general mark a step down in thematicity. That is, material placed in a relative clause is marked as less thematic than the material surrounding it. I find it significant that my research on nonrestrictive relative clauses supports her hypothesis, in that author comments in general, and especially those marked by nonrestrictive relative clauses, usually encode information which is not central to the themeline of a discourse.

21. Some uses of the verb *seem* have been associated with extraposition sentences as in Hooper and Thompson (1973).

22. I do not consider these verbs to constitute a verb class primarily because they cannot all occur interchangeably in certain types of English sentence constructions. For example, of the verbs I mentioned, only *seem* and *appear* can occur in a sentence containing a dummy subject *it,* as in *It seems that they have gone.* These same two verbs cannot occur as predicate in a clause having a noun phrase as object, such as *This means war.*

23. Undoubtedly, there are also phonological analogs to graphic markers of author comments. For example, in spoken texts, pauses or changes in intonation are likely markers of author comments.

24. See Larry Jones (1979) for an examination of author comments in the Gospel of John.

25. This is not in any way to disparage the intelligence of the average reader. Rather, the distinction drawn here is between a *normal* amount of knowledge about a given subject (which in some areas is probably quite complex) and a *specialized* knowledge of that subject.

26. I am treating those comments which give additional background detail and those which give supporting evidence as variants of the same basic type of comment, because the type of information given in these two types of comments is very similar—they both provide further information about some aspect of the discourse. In fact, it is difficult to distinguish between these two variants in all cases. It may be that the two variants are in complementary distribution: the variant intended to give supporting evidence tends to occur when the author is arguing for some point, trying to persuade his reader, while the

variant giving background details tends to occur when the author is not arguing for a point but simply reporting, recounting, describing, etc. Such a distribution pattern may receive support from the distinction both Longacre (forthcoming) and Forster (1977) make between discourses that have tension and those that do not. Forster (1977:6) defined tension as "the struggle for dominance in a discourse between two opposing participants or ideas." Thus, the supporting evidence variant would tend to occur in discourses that had the feature [+ tension], and the background detail variant would tend to occur in discourses having the feature [– tension].

27. In the case in which *both* types of incidental comment occur in the same text, I assume that the reader was probably presumed to be a sophisticated one.

28. Of course, the inclusion of incidental comments that fill in the background details of the main body of the text does not indicate that the author anticipated that *all* of the readers of his text necessarily had knowledgeable sophisticated foregrounded frames in the relevant subject area. Rather, the occurrence of these comments in a text suggests that the author anticipated that in the relevant frames, *some* of his readers would have such developed knowledge.

Further, the occurrence of these types of comments does not give any concrete measure of the extent of knowledge the reader was expected to have. It may be that the number of incidental comments giving supportive information in a text can be interpreted to imply the degree of sophistication of the intended reader's relevant knowledge frame: the greater number of supporting evidence comments per comparable portion of text, the greater the intended reader's knowledge of the subject area was expected to be. Such a hypothesis could at this time be no more than a general rule of thumb—in our present knowledge of pragmatics even such a modest claim as this is debatable. As an initial attempt to support this claim, however, it is interesting to note that scholarly publications, which are often written to extremely restricted reading audiences, abound in footnotes which encode this type of incidental comment. This is in stark contrast to works of popular literature intended for a wide audience, which generally seem to avoid the apparatus of footnotes. However, there are several factors that militate against this general hypothesis. One factor to take into account in analyzing the proportions of incidental comments to unit of text for various discourses is the fact that authors tend to vary in their thoroughness and expansiveness with regard to the inclusion of footnotes. Still another factor to be taken into account is the fact that, either from books or from teachers, many writers probably have learned some set notions about what sort of information goes in a footnote and what does not. Varying ideas on the content of footnotes affect the data somewhat.

5 Conclusions and Applications

5.0 Introduction

The unifying thrust of this study has been the analysis of pragmatic influences in monolog discourse. The first chapter introduced this subject by considering the larger question of pragmatic influences in language communication as a whole. Chapter 2 provided a theoretical framework for the primary focus of this study—the influence of the communication situation, especially an author's concept of his reader's knowledge, on written monolog. Chapters 3 and 4 dealt with some specific grammatical and lexical characteristics of English discourse reflective of an author's assumptions regarding the knowledge of his reader. In this final chapter, I draw the study together by first presenting some general conclusions, including a set of principles for analyzing a text's implicit author assumptions about the reader's foregrounded frame. Some possible applications of this type of analysis to other disciplines, such as rhetoric and philology, are offered. Finally, the potential usefulness of this study is exemplified in its application to the analysis of author assumptions in a brief, but complete, English text.

5.1 Conclusions of the Study

5.1.1 Theoretical conclusions. Two broad theoretical conclusions can be drawn from this study of pragmatic aspects of the structure of English texts. First of all, this study reinforces the assertion made by sociolinguists and discourse linguists alike, that the context of an utterance influences the shape of that utterance. Taking an author's assumptions about his reader's knowledge to be part of the communicative context of written works, it is shown here how these assumptions affect the form of first mention references and also the occurrence and content of various types of author comments in a written text. The effects of more general features of the communicative context, such as use of the vocal-auditory track and the appropriateness of turn taking,

on the form of language communication has also been discussed (see chapter 1).

Secondly, this study provides strong support for the hypothesis that frames are a basic type of knowledge structure. The notions of frame, cue, and foregrounding have been shown to be crucial to an understanding of the forms of first mention references and author comments in written texts (see chapters 3 and 4). The fact that an explanation of these linguistic forms requires some notion comparable to frame is evidence for the validity of the theory of frames as a knowledge structure.

5.1.2 Methodological conclusions. Besides the theoretical conclusions mentioned above, I also propose some methodological conclusions in the form of a set of heuristic principles for analyzing the author assumptions about reader knowledge which are implied in a specific text. The principles suggested here are basic rules for interpreting the author assumptions implied by specific devices of grammar and content structure as these devices are normally used in written texts.

These interpretive principles essentially summarize the analyses presented in chapters 3 and 4 of this study. These rules are *not* claimed to be a rigid, formal discovery procedure, capable of successful application in all circumstances. Rather, each rule suggests an interpretation for a device in its *normal use* in written texts, that is, the use which appeared most frequently in my data.

Further, these principles are only fully applicable to the analysis of English texts. Indeed, many aspects of the principles are emic to English, e.g., the use of definite and indefinite articles, and the function of various forms of the proper name. Similarly, the details of the analysis of author comments and technical terms may be emic to English. I suggest, however, that the examination of first mention references, cues, author comments, and technical terms in general, is a valid starting point for the analysis of author assumptions about the reader's foregrounded frame for a text in any language.

The interpretive principles are as follows:

(1) If a first mention reference introduces a topic in a discourse, rather than expanding on a topic already under discussion, or if it occurs at the very beginning of a discourse, that reference normally is a cue. (A cue functions to foreground a frame.)

(Note that principles 2–6 refer to noncue first mention references.)

(2) If a first mention reference includes a definite article, the author normally has assumed that the referent is the only item of its kind in the reader's foregrounded frame.[1]

(3) If a first mention reference contains a possessive pronoun, the

author normally has assumed that the referent is a part of the reader's foregrounded frame.

(4) If a first mention reference contains an indefinite article, the author normally has assumed *either* that the referent constitutes a subset of a group of items in the reader's foregrounded frame, *or* that the referent is not locatable in the reader's foregrounded frame.

(5) If a first mention reference contains a proper name, and all the characteristics of the referent needed for full understanding of the text are not made explicit, the author normally has assumed that the referent and the missing characteristics are part of the reader's foregrounded frame. (Sometimes, the proper name in this case is in an abbreviated form, such as only first name or only last name.)

(6) If, on the other hand, a first mention reference includes a proper name and all the characteristics of the referent needed for full understanding of the text are made explicit, the author normally has assumed that the referent is not part of the reader's foregrounded frame. (Sometimes, the proper name in this case is in its full term, perhaps including title.)

(7) If a technical term is used without definition in the discourse, the author normally has assumed that that term is a part of the reader's foregrounded frame.

(8) If, however, a technical term is explicitly defined in a discourse, the author normally has assumed that that term is not a part of the reader's foregrounded frame.

(9) If a concept is explained or elaborated by means of an explanatory comment, the author normally has assumed that that concept, or at least some of its features, is not part of the reader's foregrounded frame.

(10) If, on the other hand, a concept occurs as part of an explanatory comment, the author normally has assumed that that concept was part of the reader's foregrounded frame.

(11) If incidental comments that provide additional background or supporting evidence for the discourse occur, the author normally has assumed that the content organization of the reader's foregrounded frame is more complex than that of the average general reader.

(12) If incidental comments that give extra tangential information to the discourse occur, the author normally has assumed that the reader's foregrounded frame is comparable in complexity to that of the average general reader.[2]

One important guideline in successfully applying these principles is that the interpretation of author assumptions in a text requires a knowledge of the text as a whole. A knowledge of the entire text is necessary at several stages in the analysis of author assumptions about the reader's knowledge.

For example, the analysis of first mention references containing

proper names requires an examination of an entire text, in order to ascertain whether all the characteristics of the referent which must be known for full understanding of the text are made explicit or not. If some characteristics of the referent seem to be required for full understanding, but are not mentioned anywhere in the text, these characteristics are normally part of the author's assumptions about the prior knowledge of the reader. Without a knowledge of the entire text, the type of author assumption implied by a first mention use of a proper name cannot be determined.

Another aspect of the analysis of author assumptions that requires a knowledge of the complete text is the interpretation of ambiguous devices in a text. Some uses of indefinite first mention references and author comments can be interpreted to imply two or more different author assumptions. Which of the two interpretations is more likely to be correct often may be determined by examining other parts of the text, where the devices used yield a straightforward, unambiguous interpretation (as, for instance, is the case with definite articles). If the interpretation of the clear cases indicates that the author assumed his reader's foregrounded frame was quite sophisticated, then, in the ambiguous cases, the interpretation attributing the greater degree of complexity to the reader's foregrounded frame is likely to be the correct one; and if the clear cases indicate the author assumed his reader's foregrounded frame was fairly unsophisticated, then in the ambiguous cases this is likely to be the case as well. A related guideline for the interpretation of ambiguities is that, in an ambiguous case, the interpretation that best fits the meaning, or thematic development, of the text as a whole is to be preferred.[3]

Finally, a knowledge of the entire analyzed text is necessary in order to formulate a conceptualization of the author's image of the typical reader of the text. After the author assumptions about the reader's foregrounded frame are determined (on the basis of first mention references and author comments), they can be consolidated and integrated to form a composite picture of the type of person who the author assumed would be reading his text.

5.2 Applications of This Study to Other Disciplines

The analysis of author assumptions about the reader's foregrounded frame in a text is an analytical procedure that may have some useful applications to various fields of study outside of linguistics. One possible field of application is to the field of rhetoric.

A crucial consideration in rhetoric is an awareness of the type of audience one is addressing.[4] "Since effective communication requires that the writer develop his discourse in terms of what he shares with the reader, he must first know what features are shared. . . . The writer must anticipate the reader's responses before he presents his ideas. To

the extent that he fails to anticipate them accurately, he fails to communicate" (Young, Becker, Pike 1970:178).

When a discourse fails to communicate to its intended reader, there may be one of two sources for the problem: an author may inaccurately appraise the degree of sophistication of his reader's foregrounded frame, or he may inadvertently produce a text which inaccurately portrays his perhaps correct assumptions about that frame. The present study offers no preventive measures for incorrect assumptions about the knowledge of the reader.[5] However, it may offer some checks against producing a text that is an inaccurate representation of the author's assumptions about the reader's foregrounded frame. Specifically, this study provides a systematic method of determining what a text implies about its author's assumptions regarding the reader's knowledge. Thus, in editing a manuscript, the author could use this methodology to check that the text correctly represented his/her assumptions regarding the reader's foregrounded frame. Such a checking process might be useful not only in editing manuscripts, but also in teaching composition, to help in evaluating a student's success in writing a text to a specific type of audience.

Another important application of a methodology for analyzing an author's assumptions about the reader's foregrounded frame in a text is in the area of philological studies. Philologists interested in classical and medieval literature often study texts whose authors and intended readers are unknown. By examining the first mention references, author comments, and technical terms of such texts, it may be possible for scholars to reconstruct, so to speak, some of the characteristics of the intended reader of an ancient text in a thorough and exhaustive manner. Such reconstructions could have a significant impact on the philological interpretation of various texts. Consider, for example, the ancient Greek medical writings attributed to Hippocrates. Some of these works, such as *Ancient Medicine,* are very general, dealing with the broad issues of healing and health. Others are quite specific, dealing with the treatment of specific diseases and injuries. It would be interesting to analyze what assumptions the author(s) of these various works made concerning the knowledge of his (their) readers. Perhaps some of the works were written to accomplished physicians, as reference works. Others may have been written for the training of physicians. Still others may have been written to present the medical profession to the average general reader of that time. The application of the principles of this study could provide some very relevant data in this sort of interpretation of an ancient text.

There may be applications of this study to still other disciplines. In any case, it seems there is a good possibility that it would be found useful in the two areas mentioned above—philology and rhetoric.

5.3 The Analysis of an English Text

The purpose of this section is to present a thorough, systematic analysis of the author assumptions about the reader's foregrounded frame in a short, but complete text. This analysis is meant to serve as a model for the application of this methodology to an entire text, whether that application is to serve one of the interdisciplinary purposes suggested in section 5.2 or as a basis for further linguistic research.

The text, which appears in full in section 5.3.1, is a critical note from an edition of the *Journal of Biblical Literature* (September 1979, Vol. 98:409). This journal is circulated primarily to members of the Society of Biblical Literature, a group of biblical scholars. Note that both the complete text and its footnotes, which are appended at the end of the text proper, are given.

The analysis of the text is based on an examination of the various lexical and grammatical devices that can encode author assumptions about the reader's foregrounded frame. The analysis will be organized into the broad categories of first mention references, technical terms, and author comments. I conclude with a summary of what the text implies about the assumptions of its author regarding the reader's foregrounded frame.

5.3.1 The sample text. A few notes regarding the format of the text are needed. I have numbered portions of the text proper for convenience of reference in my analysis (these generally correspond to sentences). Each number occurs at the beginning of the portion and is followed immediately by a period. These numbers are easily distinguished from the footnote references within the text itself, which appear as raised numbers without following periods. For instance, footnote reference 6 occurs in the portion labeled (11) and footnote reference 7 occurs in (24). Lowered numbers are part of the technical designations of various ancient manuscripts.

Permission to reprint the text in full was kindly given by both the publisher, the Society of Biblical Literature, and the author, C. Shannon Morgan.

"When Abiathar Was High Priest" (Mark 2:26)

1. Matthew and Luke agree together in their respective parallels against Mark in the omission of ἐπὶ Ἀβιαθὰρ ἀρχιερέως in Mark 2:26.

2. In discussing the Griesbach hypothesis as advocated by W. R. Farmer,[1] Charles H. Talbert[2] wrote: 3. "Number 4 [directional

1. W. R. Farmer, *The Synoptic Problem* (New York: Macmillan, 1964) and an unpublished working paper presented to the task force of SBL on the Order of the Gospels in October 1970.

indicator] consists of the agreement of Matthew and Luke in their omission of the phrase ἐπὶ Ἀβιαθὰρ ἀρχιερέως in Mark 2: 26.

4. Inclusion of this phrase is a Marcan error since at that time, according to 1 Sam. 21:1, 22:20, Abiathar's father, Ahimelech, held office" (pp. 355–56).

5. Attempting to disprove Talbert's statement, G. W. Buchanan[3] retorted: 6. "The suggestion that Matthew and Luke have omitted the reference to Abiathar because Ahimelech was really the priest in charge is not certain. 7. According to the LXX, well-known to all three evangelists, the priest who gave David the Bread of the Presence was Abiathar. 8. It is not likely that either Matthew or Luke would have omitted the LXX account just because it did not agree with the MT" (p. 562).

9. One wonders what LXX-text was well-known to the three evangelists, since the LXX (Rahlfs's edition)[4] states that Ahimelech was the priest in the passage in question: 1 Kgdms 21:1: Αβιμελεχ (bis)—"Abimelech"[5]; 21:7: καὶ ἔδωκεν αὐτῷ Αβιμελεχ ὁ ἱερεὺς τοὺς ἄρτους τῆς προθέσεως. . . . 10. And there is no indication in the critical notes that other LXX-mss read "Abiathar."

11. This is crystal clear from the Brooke, McLean, Thackeray edition of the LXX,[6] which prints the text of Codex B and gives the variants of the chief ancient authorities of the text of the LXX. 12. In 1 Kgdms 21:1(2) B reads for the first appearance of the name in the verse: Ἀβιμέλεχ. 13. The variants are: αμιμελεχ A; αχιμελεχ Nabfjg-oq-wzc$_2$e$_2$ A C E Or-gr Eus. 14. For the second appearance of the name in the verse B reads: Ἀβειμέλεχ. 15. L agrees: Abimelech (itacism[3]), and m* omits. 16. The variants are: αχιμελεχ Nabfgjlm^{a}nq-wz A C E Or-gr Eus; ο αχειμελεχ oc$_2$e$_2$.

17. In 1 Kgdms 21:6(7) B reads: Ἀβειμέλεχ. 18. The variants are: αβιμελεχ a$_2$; αχιμελεχ Nabfgjl-oq-wzc$_2$e$_2$ A C E Or-gr Eus.

19. This investigation reveals emphatically that no text of the LXX reads "Abiathar" in 1 Kgdms 21:1(2) or 21:6(7).

2. C. H. Talbert and E. V. McKnight, "Can the Griesbach Hypothesis Be Falsified?" *JBL* 91 (1972) 338–68.

3. G. W. Buchanan, "Has the Griesbach Hypothesis Been Falsified?" *JBL* 93 (1974) 550–72.

4. A. Rahlfs, *Septuaginta* (Stuttgart: Privileg. Wurtt. Bibelanstalt, 1935, 1962).

5. Another transliteration among others is Αχιμελεχ in 1 Kgdms. 22;14, 16, 20; 23:6, all in ms A. The ח has been transliterated as χ, which assures us that the priest was Ahimelech.

6. A. E. Brooke, N. McLean, H. St. John Thackeray, *The Old Testament in Greek* (London: Cambridge University, 1927).

20. The LXX (in all its known variants) agrees with the MT: אחימלך (Ahimelech). 21. Mark was in error when he named Abiathar as the high priest. 22. Matthew (12:4) and Luke (6:4), whether familiar with the LXX-text or the MT-text, simply corrected the error by omission. 23. Later scribes in Mark 2:26 also corrected the error by omission in the following NT-mss: D W it sy^s. 24. That the reading "Abiathar" was not in the original Mark (Urmarkus), but was a later addition to Mark, as suggested by Bundy,[7] has not found general acceptance by scholars.

Clarkesville, GA 30523 C. Shannon Morgan

7. W. E. Bundy, *Jesus and the First Three Gospels* (Cambridge: Harvard University, 1955) 178: "The error mentioning Abiathar as high priest does not reappear in Matthew and Luke, and it may not have been in their Mark . . . ; it may be a later addition to Mark."

5.3.2 First mention references in the sample text. As discussed in chapter 3, the first mention references of a text are a crucial indicator of the author's assumptions regarding his reader's knowledge. The first mention references in the sample text, which I henceforth call the Abiathar text, give an accurate reflection of some of the items which the author of the text assumed were a part of the reader's foregrounded frame. Below I discuss each type of first mention reference found in the Abiathar text: cues, definite reference, indefinite reference, possessive pronouns, and proper names.

As mentioned in section 5.1, the first few references in a text often function as cues, signaling the reader to foreground a particular frame relevant to the following text. In the Abiathar text, the reader's Bible frame[6] is cued by the proper names of three biblical books, *Matthew, Luke,* and *Mark* (sentence 1). The phrases *their respective parallels* and *the omission of* (also sentence 1) further cues the reader to that particular aspect of the reader's Bible frame which the text focuses on, the fact that in parallel accounts of the same incident in the Gospels, two of the Gospels, Matthew and Luke, omit a phrase that the third, Mark, includes. The Abiathar text as a whole discusses various explanations of this discrepancy.

The relevant frame(s) having been cued, the forms of subsequent first mention references in the Abiathar text depend on the relation of each individual referent to the reader's foregrounded frame. As discussed in section 5.1, first mention references containing a definite article or a possessive pronoun refer to items that the author assumed to be in the reader's foregrounded frame. First mention references with an

indefinite article can refer either exclusively—to one item among several in the reader's foregrounded frame—or to an item assumed not to be locatable at all in the reader's foregrounded frame. Finally, first mention references with proper names indicate that the reader's foregrounded frame was assumed to include all of the relevant characteristics of the referent that are not explicitly mentioned in the text.

Many of the first mention references in the Abiathar text contain definite articles, indicating that the author assumed that many of the items he discussed in the text were a part of the reader's foregrounded Bible frame. One such reference is *the Griesbach hypothesis* (sentence 2). The use of the definite article in this reference indicates that the author assumed that the reader's foregrounded Bible frame included knowledge of what the Griesbach hypothesis was. (That this is so is further corroborated by the fact that no explanation is offered for the Griesbach hypothesis.) Other definite references to items assumed to be in the reader's Bible frame are *the LXX* (sentence 7),[7] and *the MT* (8). These are technical abbreviations for different texts of the Old Testament: *the LXX* is an abbreviation for the Septuagint, an early Greek translation of the Old Testament; *the MT* is a technical abbreviation for the Masoretic text, which is a standard Hebrew text of the Old Testament.

Still other definite first mention references include *the priest in charge* (6), *the Bread of the Presence* (7), *the critical notes* (10), *the Brooke, McLean, Thackeray edition of the LXX* (11),[8] *the variants* (11), and *the chief ancient authorities* (11). Each of these items was probably assumed to be in the reader's foregrounded Bible frame.

There is only one first mention reference in the text which contains an indefinite article— *a Marcan error,* in sentence 4. The interpretation of the assumptions implied by this comment is unclear in that either of two interpretations could fit the meaning of the text as a whole. If the indefinite article *a* is used exclusively, the expression implies that the author assumed his reader's foregrounded frame contained knowledge of several errors in the Gospel of Mark. If on the other hand, *a* is used in its nonlocatable function, the expression suggests that the author assumed that knowledge of errors was not a part of the reader's foregrounded Bible frame. There is some evidence that the former interpretation—that the author assumed the reader's frame did contain knowledge of Marcan errors—is more likely. Specifically, as is shown in detail below, the bulk of the author assumptions implied in the text as a whole indicate that the author presumed he was writing to a reader with a highly sophisticated knowledge of the Bible. For this reason, it seems to me that the preferable interpretation in this case is that the author, in line with his other assumptions about his reader's knowledge, has also assumed that the reader had some prior expectations that the Gospel of Mark contained several errors.

Several proper names are used in first mention references in the Abiathar text. In the case of some of these references, the text itself provides all the relevant information about the referents needed for complete understanding (e.g., gives their opinions in quotations, in paraphrases, etc.): *W. R. Farmer* (2), *Charles Talbert* (2), and *G. W. Buchanan* (5). Thus, it is probable that the reader's foregrounded Bible frame was not expected to include much, if any, knowledge of these men. This interpretation is confirmed in part by the use of relatively full names for each of these three references.

Likewise, *Rahlfs* (9) and *Bundy* (24) are first mention references for which the text provides all the information necessary for full understanding. In the case of Bundy, the opinion of his which was relevant to the discussion is supplied in 24 and elaborated in footnote 7. In the case of Rahlfs, all that is necessary to know about him to fully understand the text is that he edited a critical edition of the LXX, and this information is indicated by the use of the possessive expression *Rahlfs's edition* (9) (cf. also footnote 4 in the Abiathar text).

Another abbreviated proper name reference is *Griesbach* (2).[9] In this case the text supplies almost no information about the referent. The crucial information about this referent, which is necessary to understanding the text but which the author does not give, is the content of the hypothesis named after Griesbach. The author assumed this was part of the reader's foregrounded Bible frame. Thus, in this case, knowledge assumed to be part of the reader's foregrounded Bible frame is indicated not only by the use of a definite article *the* in a first mention reference, but also by use of a proper name, *Griesbach,* which is not discussed or explained in the text.

Other proper names in the Abiathar text include the names of various biblical documents. The first mention use of the names *Matthew, Luke,* and *Mark* (all sentence 1) without elaboration in the text indicates that the author assumed that the reader's foregrounded Bible frame included the biblical documents having these names. The use of the abbreviated names *1 Sam* (4) and *1 Kgdms* (9) shows that the author also assumed the reader's foregrounded frame included knowledge of these documents. More interestingly, the use of these latter two names also indicates that the reader's foregrounded Bible frame was to have included knowledge that these names refer to different versions of the same Old Testament document. *1 Sam* (4) refers to that document in its Hebrew version and *1 Kgdms* (9) to its corresponding early Greek translation in the Septuagint *(LXX).* This relation between *1 Sam* and *1 Kgdms* is nowhere made explicit in the Abiathar text but is certainly necessary for a complete understanding of that text.[10]

Names for biblical characters also appear in the Abiathar text without much elaboration, implying that the reader's foregrounded

Bible frame included knowledge of these referents and their relations to one another. Such names include *Abiathar* (4), *Ahimelech* (4), and *David* (7).[11]

Finally, several technical names[12] for ancient manuscripts occur in the Abiathar text: *B* (11); *A, C, E, Or-gr, Eus,* and *Nabfjg-oq-wzc$_2$e$_2$* (all in sentence 13); *L* and *m** (in 15); *Nabfgjlm^{a}nq-wz* (16); *Nabfgjl-oq-wzc$_2$e$_2$* (18); *D, W, it,* and *sy^s* (all in 23). While almost every letter above is associated with one or another variant of the name *Ahimelech* , a crucial characteristic associated with the referents of these names is left implicit in the text: the knowledge that these various capital and lower case letters are in fact names for ancient manuscripts of the LXX (or of the New Testament, as in 23) is assumed by the author to be part of the reader's foregrounded Bible frame. Without such knowledge, the entire argument of the Abiathar text is essentially meaningless.

What, then, can be said regarding author assumptions about the reader's foregrounded Bible frame, based on the first mention references in the Abiathar text? Generally, it seems reasonable to conclude that the author of the Abiathar text assumed his reader's foregrounded Bible frame contained a highly specialized and sophisticated knowledge of the Bible. This includes specific knowledge of the story of David's interaction with Abiathar, and the names of several Bible books. Further, the reader was assumed to have known much about modern practices in publishing ancient texts, such as a knowledge of variants, numerous source manuscripts, and the inclusion of critical notes in the published version of the text. Finally, the author assumed his reader's Bible frame included knowledge of certain scholarly work done on the Bible, in particular, the Griesbach hypothesis concerning the Synoptic Gospels.

5.3.3 Technical terms in the sample text. The use of several technical terms in the sample text also indicates that its author assumed his reader's foregrounded Bible frame was very complex and sophisticated. The technical terms that appear in the Abiathar text can be divided into two basic categories: those terms referring to items mentioned in the Bible, and those terms that refer to aspects of the form in which the Bible appears.

There is only one technical term that refers to an item discussed in the Bible, *the Bread of the Presence* (7). This technical expression refers to special loaves of bread which played a part in the worship customs of ancient Israel. Its use in the Abiathar text without definition suggests that the reader's foregrounded frame was assumed to include some knowledge of ancient Israelite worship customs.

Several technical terms occur in the Abiathar text that refer to aspects of the form of the Bible, for example, *the LXX* (7) and *the MT*

(8), mentioned earlier. It is significant that these terms occur in the text in abbreviated form and without definition, as this implies that the reader's foregrounded frame was to have included not only knowledge of the referents themselves, but also knowledge of their technical labels. Likewise, the abbreviation *NT-mss* (23), meaning New Testament manuscripts, occurs without definition in the Abiathar text, suggesting that the reader was to have been familiar with this technical abbreviation as well.

The term *codex* (11) is used technically to refer to a type of ancient manuscript. *Itacism* (15) is a technical term for a type of variant found in ancient manuscripts.

Finally, the German word *Urmarkus* in 24 is a technical term meaning "the original Mark," or "the Gospel of Mark as it was originally written." However, since this term is part of an author comment, it is discussed in section 5.3.4.

Use of the various technical terms in the Abiathar text suggests two things about the author's assumptions regarding the reader's foregrounded Bible frame. First, as has been mentioned above, the use of each of these terms without being defined in the text indicates that their definitions were assumed to be part of the reader's Bible frame. Second, the occurrence of so many undefined technical terms in so short a text suggests that the author assumed the reader's Bible frame to be very complex, containing much specialized, technical knowledge about the Bible.

5.3.4 Author comments in the sample text. As discussed in chapter 4, the author comments in a text are concentrations of data concerning author assumptions about the reader's foregrounded frame. It may be recalled from that discussion that there are four basic types of author comments that seem to occur frequently in English texts: opinion, thematic, explanatory, and incidental. All four types of comments occur in the Abiathar text—one opinion comment, two thematic comments, one or two explanatory comments, and several incidental comments.

Incidental comments (discussed in detail in secs. 4.2.3 and 4.4.2) are of two basic types, distinguished in terms of their function. One type supplies information which is only tangentially related to the content of the text proper. The other type either provides additional background for some aspect of the text or gives evidence supporting some assertion in the text. The use of the first type of incidental comment tends to imply that the reader's foregrounded frame was not expected to include significant amounts of specialized knowledge; rather, the author viewed that frame as being no more complex or complete than that of any average general reader. However, the occurrence

of the second type of incidental comment suggests that the author anticipated that the reader's foregrounded frame would contain more than just a basic amount of knowledge about that subject; he assumed that his reader's foregrounded frame included knowledge indicative of a person with a certain degree of specialization in that field.

All of the incidental comments in the Abiathar text are of this second type—the type that gives background details or supporting evidence. The most obvious incidental comments that function in this way are the footnotes. Most of the footnotes in the Abiathar text (1, 2, 3, 4, 6) give bibliographical references for works cited in the text proper.[13] These references support and document the author's arguments in the text proper. Likewise, footnote 7, which has a bibliographical reference and a quotation, gives support to the author's interpretation of Bundy by showing his source explicitly. Footnote 5 is interpreted as an incidental comment that adds background information to the text. The background details given in this case concern further variants of the name *Ahimelech* that are found in the LXX.

Other incidental comments besides the footnotes in the Abiathar text also supply either supporting evidence or background details. For example, one comment, *(Rahlfs's edition)* in sentence 9, supplies background detail concerning which edition of the LXX the author was citing from. Note that this comment is marked graphically by means of parentheses. Another incidental comment, also marked by parentheses, is *(itacism?)* in sentence 15. This comment gives the additional background detail that the variant immediately preceding the comment—*Abimelech*—may have been formed due to an itacism. That is, this variant may have been formed by the erroneous substitution of the Greek letter *iota* for another, similar sounding vowel or vowel cluster in the original document.

The occurrence of incidental comments in the Abiathar text, all of which supply supporting documentation and/or additional background, suggests that the author assumed that the reader's foregrounded Bible frame contained much highly specialized knowledge. This suggestion is made more probable by the number of incidental comments of this type (ten) that occur in this relatively short text.[14]

The Abiathar text also contains one clear explanatory comment. Explanatory comments normally are significant in that they mark author assumptions about what the reader's foregrounded frame did not contain (i.e., what was being explained), as well as assumptions about what it did contain (i.e., the concepts used in the explanation itself). However, the explanatory comment in the Abiathar text may not be as fruitful as one might expect in this regard.

The only clear explanatory comment in the Abiathar text is found in (20), marked by parentheses—*(Ahimelech)*.[15] This comment explains,

or rather translates, the Hebrew expression immediately preceding it. Thus, it seems that at least some of the readers were not expected to have a knowledge of Hebrew (see sec. 5.3.5 for further comment).

The parenthetical comment in 24, *(Urmarkus)*, is ambiguous with regard to its function in the Abiathar text. It could serve as an incidental comment, giving the reader the additional background information that the German term for "the original Mark" is *Urmarkus*. On the other hand, this comment could be explanatory in function, identifying the concept "original Mark" with a technical term assumed to be familiar to the reader, *Urmarkus*. Evidence from the text as a whole indicates to me that the latter analysis, that *(Urmarkus)* is an explanatory comment, is to be preferred. As we have noted, the bulk of the assumptions implied in the Abiathar text suggest that the author assumed his reader had a highly specialized Bible frame. Thus, the analysis of the comment in 24 which suggests a greater complexity in the reader's foregrounded frame would seem to be most plausible in this case. If interpreted as an incidental comment, *(Urmarkus)* would imply simply that the author assumed that his reader might have some interest in knowing what the German term for a certain concept is. But, if this comment is analyzed as having an explanatory function, it implies that the reader's foregrounded frame was assumed to include knowledge of this technical term. The comment in this case would function to associate *the original Mark* with a technical term assumed to be familiar to the reader. Thus, classifying *(Urmarkus)* as an explanatory comment is the more consistent analysis in this case.

There is one portion of the Abiathar text that may be an opinion comment:[16] *It is not likely that either Matthew or Luke would have omitted the LXX account just because it did not agree with the MT* (8). As discussed in section 4.4.3, opinion comments often indicate presuppositions which the author himself had concerning the topic of discussion. In this case, since the opinion comment occurs within a direct quotation, the author whose opinion it expresses and whose presuppositions it implies is the author of the source document, rather than the author of the Abiathar text. The comment suggests that the author of the quotation believed that members of the early church in general regarded the Greek translation of the Old Testament *(the LXX)* to be equal in authority to the Hebrew version *(the MT)*. Note the marking of this comment by the extraposition construction *It is not likely that* and by the mood shift (signaled by the use of *would*).

There are two thematic comments in the Abiathar text. The important value of thematic comments is that they make explicit the main points, or themes, of a text as the author perceives them. In the case of the Abiathar text, both thematic comments refer to the same theme in the text.

The first thematic comment occurs in (19): *This investigation reveals emphatically that no text of the LXX reads "Abiathar" in 1 Kgdms 21:1(2) or 21:6(7).* It is marked by a demonstrative modifying a noun, *this investigation,* which refers to the preceding portion of text, probably sentences 9–18. This sentence summarizes one of the major themes developed in the text, namely, that *no* variants of the David and Ahimelech story in the LXX replaced the name *Ahimelech* with the name *Abiathar.* This thematic comment also has some overtones of an author opinion, communicated primarily by the adverb *emphatically.*

The second thematic comment in the Abiathar text—*(in all its known variants)* in sentence 20—is shorter than the first, but it nonetheless reiterates the same point, that *no* variants were found to have replaced *Ahimelech* with *Abiathar.*

In sum, then, the author comments in the Abiathar text, especially the incidental comments, seem to support the conclusions reached through the analysis in sections 5.3.2 and 5.3.3 of its first mention references and technical terms—that is, the author of the text assumed his reader's foregrounded Bible frame was complex and sophisticated, reflecting specialized knowledge of biblical studies.

5.3.5 Some additional observations. Some additional observations that do not fall into any of the categories previously discussed, but that appear to be significant in discovering author assumptions about the reader's foregrounded frame in the Abiathar text, seem to be appropriate here. These observations center on the use of several different foreign languages in the Abiathar text.

Phrases from three different foreign lanugages occur in the Abiathar text: Greek, Hebrew, and German. Sentences 1, 3, and 9 all contain Greek phrases or clauses without translations. Greek versions of the name *Ahimelech* occur several times in 12–18. In 20, the Hebrew version of the name *Ahimelech* (in Hebrew script) occurs, with an explanatory transliteration following. Also in footnote 5, a Hebrew letter occurs as an integral part of that comment. Finally, the German word *Urmarkus* occurs in 24. This word is the German equivalent of the English phrase that precedes it in the text, *the original Mark.*

What does the use of foreign language material in a text imply concerning author assumptions about the reader's foregrounded frame? I suggest that the interpretation of foreign language expressions in a text resembles the interpretation of technical terminology. As discussed more fully in sections 3.2.5 and 5.3.3, if a technical term occurs in a text with an explicit definition, that term was probably not assumed to be a part of the reader's foregrounded frame. If, on the other hand, a technical term occurs without a definition, then the author probably

assumed that the reader's foregrounded frame did include knowledge of that term. In the same way, if a foreign language word or phrase occurs with translation in a text, then the author probably assumed that at least some of his readers would not know that language. If, on the other hand, the foreign language word or phrase occurs without translation, then the assumption appears to be that the reader would know the language in question.

There seems to be at least one difference between the interpretation of technical terms and foreign language phrases in a text. While the simple occurrence of a technical term in a text does not necessarily imply that the author expected any of his readers to know that term, especially if it occurs with an explicit definition, the occurrence of a foreign language word or phrase, whether it occurs with a translation or not, probably implies that at least some of the readers were expected to know that language. Otherwise there would be no point in including the foreign language phrase in the text in the first place.

Applying these principles to the Abiathar text, we can presume from the fact that no Greek words or phrases are translated that the reader was expected to know the Greek language. On the other hand, since the author transliterated the Hebrew word in 20 into its English equivalent, it seems likely that at least some of the readers of the Abiathar text were assumed not to know Hebrew. Finally, the occurrence of the German technical term *Urmarkus* in 24 is an indeterminate case, giving no indication concerning whether the reader was expected to know German or not. The word's use in an explanatory comment (see sec. 5.3.4) shows that the reader was expected to know *this particular German word,* but due to its technical nature, it is possible that the reader could be expected to know it without having any other knowledge of German.

5.3.6 Conclusions. The conclusions to be drawn from this analysis of the Abiathar text are by now clear-cut: the author of the text assumed his reader's foregrounded Bible frame included considerable specialized knowledge. This included a familiarity with the composition of critical editions of ancient texts, a knowledge of the content of the Bible, and the significant scholarly work in that field. Also, the reader seemingly was expected to have known Greek and possibly, though not necessarily, to know Hebrew and German as well. That these conclusions are confirmed by our outside knowledge of the intended audience of this work (the subscribers of a scholarly theological journal) is an encouraging sign that the principles used here in analyzing author assumptions in an English text are valid and workable.

5.4 Toward an Interdisciplinary Approach

In many ways this study has been covertly interdisciplinary. Its twin roots sink deeply in the soil of linguistic discourse analysis and that of the semiotic and philosophical notion of pragmatics. Further, some aspects of this study, such as the organization of knowledge into frames, have been nourished from widely diverse disciplines, from anthropology and sociology to artificial intelligence.

The interdisciplinary flavor of this study is especially appropriate, in that one of the new frontiers of linguistics, discourse analysis, is in fact a part of a larger frontier, the study of how people think and how they express their thoughts, which borders on numerous scholarly disciplines. In exploring this new territory, the discourse linguist (or anthropologist, psychologist, etc.) who chooses to remain close to his own linguistic (or anthropological, psychological, etc.) border will be, I believe, infinitely the poorer. This study, then, is intended to be one step among many towards the interdisciplinary integration of discourse analysis with the social sciences and humanities.

Notes

1. An item is part of a person's frame if the person expects that item to occur whenever the frame as a whole is referred to. Thus, since pages are normally part of a person's Book frame, whenever he encounters or talks about books, he expects pages to be present also. Other items, which may or may not occur when the frame is being referred to, are not here called parts of that frame, but rather are said to be appropriately associated with that frame. See section 2.1.2 for further discussion of these points.

2. As mentioned in chapter 4, footnote 27, some texts may contain incidental comments of both types—those which give extra tangential information, and those which give additional background. In such cases, I would rely heavily on the occurrence of comments giving in-depth background and suggest that the author assumed that his reader's foregrounded frame contained fairly sophisticated knowledge. In other words, the comments giving in-depth background carry more weight analytically than do the comments which give tangential information. It is interesting to note, however, that in the course of the analysis of author comments for this study, I found only a few cases in which a text had both types of incidental comments. It may be that the occurrence of these two types in the same text is rare, at least in English.

3. Obviously, a person's subjective interpretation of the "meaning of the text as a whole" is involved here. However, since any analysis of content structure in texts demands the use of subjectivity in interpreting meaning, I view this simply as a hazard of the occupation, so to speak, rather than a threat to the validity of this study.

4. For some discussion of the importance of audience by rhetoricians, see Bitzer (1968); Perelman and Olbrechts-Tyteca (1969); Snipes (1970); Young, Becker, and Pike (1970); Johannesen (1974); Hirsch (1977); Makay (1977); and Overington (1977).

5. See Young, Becker, and Pike (1970:179) for suggestions in this area.

6. Actually the Bible frame may be a subframe of the Christianity frame, which in turn would be a subframe of the Religion frame of most readers. Using the broader frame, however, does not seem to serve a constructive purpose in this case. I use the term *Bible frame* here to mean essentially "knowledge of the Bible."

7. Items that are referred to initially in direct quotations can nonetheless be first mention references in a text. For the most part, I treat such references here no differently than first mention references that are not part of direct quotations. However, at times first mention references within quotations may be off-norm occurrences that do not easily fit the principles of interpretation discussed in section 5.1.

8. Cf. footnote 13, this chapter.

9. On the other hand, it may be that *Griesbach* no longer functions as the proper name of a referent in the reader's foregrounded frame; instead, it may be that *the Griesbach hypothesis* is simply a technical expression for a certain hypothesis. In other words, *Griesbach* may not be expected to function in the reader's Bible frame as the proper name of any individual. Rather, it may simply be part of a technical expression for a particular hypothesis and is only recognized in the context of that expression. This is analogous to the phrase *a Mason jar*, referring to a special type of jar used in canning food, which has a proper name, *Mason*, functioning as part of a technical expression. This name probably has no referent itself for most persons who do canning. It is not possible from the text to determine whether *Griesbach* functions in this way or not.

10. See Pike and Pike (1977:381) and Paducĕva (1967) for fuller discussions of paraphrase relations between references in discourse.

11. One aspect of their relationships, that Ahimelech was Abiathar's father, is mentioned explicitly in the text (sentence 4). However, the story of David's interaction with Ahimelech, which is important in comprehending the text, is left entirely unexplained, and thus assumed to be in the reader's Bible frame.

12. Technical names are a cross between technical terms and proper names. They are like technical terms in that they are especially associated with some particular frame. Thus, the technical names (*A, B, C,* etc.) in the Abiathar text are especially associated with the reader's Bible frame. On the other hand, they are like proper names in that they are not lexical items which can refer to a class of objects, but rather serve as a label identifying one particular object. Use of technical names, like technical terms, implies that the reader's foregrounded frame was assumed to be quite complex.

13. A difficult comment to interpret is footnote 6 of the text, which refers to the phrase *the Brooke, McLean, Thackeray edition of the LXX* in sentence 11. The fact that this phrase is a definite first mention reference implies that the reader's foregrounded frame included knowledge of this edition of the LXX. However, this interpretation appears to be contradicted by the fact that, normally, when information is given in an incidental comment such as footnote 6, that information is presumably *not* part of the reader's foregrounded frame. The correct interpretation of this off-norm situation requires the consideration of more than one type of reader. The fact that the first mention reference *the Brooke, McLean, Thackeray edition of the LXX* in sentence 11 contains a definite article indicates that the majority of the author's readers were assumed to have some knowledge of that edition of the LXX. However, in compliance with the conventions of scholarly

writing, and as a courtesy to the few who might *not* know about this work, the author also has included the full bibliographical reference in a footnote.

14. Before leaving the discussion of incidental comments in the Abiathar text, it is important to note one portion of the text which initially may appear to be an incidental comment but, on further examination, proves not to be. This is the portion from sentences 11 through 18, which lists variants of the name *Ahimelech* found in LXX manuscripts. This portion at first appears to be a comment in that it is marked by the demonstrative *this* in extended use. Furthermore, since several other portions in the text are clearly incidental comments with a role of giving supporting evidence, it might seem plausible to also interpret the portion in 11–18 as an incidental comment giving supporting evidence. However, there is a significant problem with this interpretation: this portion is probably too prominent in the message of the entire text to consider it merely an incidental comment, an interruption of the main theme development. Its prominence is seen in two ways: first, the size of this portion is larger in relation the size of the whole text than is normal for a comment. Second, the evidence which this list of variants provides is crucial to a key thematic assertion in the text, namely, that none of the manuscripts of the LXX substitute *Abiathar* for *Ahimelech* in 1 Kgdms 21. In other words, this portion does not have the role of simply giving extra supporting evidence to satisfy a critical reader as an incidental comment might; rather, it has the role of supplying the essential evidence needed to support a claim thematic for the whole text. Thus, because this portion seems so thematically prominent in the Abiathar text, it probably should not be interpreted as an incidental comment.

15. Another possible explanatory author comment is found in sentence 3: *[directional indicator]*. This comment explains what the phrase *number 4* refers to. The explanation seems both terse and vague and as a result, does not lend itself to any clear interpretation in terms of author assumptions about the reader's foregrounded frame. I hypothesize that the reader probably was not expected to know the referent of the phrase *number 4*, and that the explanation is terse because knowledge of this referent is inconsequential to the primary thrust of the quotation as it appears in the Abiathar text.

16. Since it occurs at the end of a direct quotation, only an examination of the original context can ascertain if this indeed is a comment, or not.

[blank]

References

Agar, Michael. 1973. *Ripping and Running, a Formal Ethnography of Urban Heroin Addicts*. New York: Seminar Press.

Austin, J. L. 1962. *How to Do Things with Words*. Ed. by J. O. Urmson. New York: Oxford University Press.

Bartlett, F. C. 1932. *Remembering*. London: Cambridge University Press.

Becker, Alton L. 1979. "Text-building, Epistemology, and Aesthetics in Javanese Shadow Theatre." *The Imagination of Reality: Essays in Southeast Asian Coherence Systems*, ed. by Alton L. Becker and Aram A. Yengoyan, pp. 211–43. Norwood, New Jersey: Ablex. Also in *Dispositio* 5:137–68 (1980).

Beekman, John and John Callow. 1979. "The Semantic Structure of Written Communication." Prepublication draft. Dallas: Summer Institute of Linguistics.

Bierwisch, Manfred and Karl Erich Heidolph, eds. 1970. *Progress in Linguistics: a Collection of Papers*. The Hague: Mouton.

Bitzer, Lloyd F. 1968. "The Rhetorical Situation." *Philosophy and Rhetoric*. 1: 1–14.

Brend, Ruth M., ed. 1972. *Kenneth L. Pike: Selected Writings*. (Janua Linguarum, 55.) The Hague: Mouton.

Brown, Roger and Albert Gilman. 1960. "The Pronouns of Power and Solidarity." *Style in Language*, ed. by Sebeok, pp. 253–76. Cambridge, Mass.: MIT Press.

Callow, Kathleen. 1974. *Discourse Considerations in Translating the Word of God*. Grand Rapids, Michigan: Zondervan.

Carnap, Rudolf. 1961. *Introduction to Semantics and Formalization of Logic*. Cambridge, Mass.: Harvard University Press.

Chafe, Wallace L. 1970. *Meaning and the Structure of Language*. Chicago: University of Chicago Press.

———. 1972. "Discourse Structure and Human Knowledge." *Language Comprehension and the Acquisition of Knowledge*, ed. by John Carroll and Roy Freedle, pp. 41–69. Washington: John Wiley and Sons.

Christensen, Francis and Bonniejean Christensen. 1978. *Notes Toward a New Rhetoric: Nine Essays For Teachers*. 2nd ed. New York: Harper and Row.

Cole, Peter, ed. 1978. *Pragmatics*. (Syntax and Semantics, 9.) New York: Academic Press.

Cole, Peter and Jerry L. Morgan, eds. 1975. *Speech Acts*. (Syntax and Semantics, 3.) New York: Academic Press.

Cooper, David E. 1974. *Presupposition*. (Janua Linguarum, 203.) The Hague: Mouton.

Corum, Claudia. 1975. "A Pragmatic Analysis of Parenthetic Adjuncts." *Papers From the Eleventh Regional Meeting Chicago Linguistic Society*, pp. 133–41. Chicago: Chicago Linguistic Society.

van Dijk, Teun A. 1972. *Some Aspects of Text Grammars: a Study in Theoretical Linguistics and Poetics*. The Hague: Mouton.

———. 1977. *Text and Context: Explorations in the Semantics and Pragmatics of Discourse*. (Longman Linguistics Library, 21.) London: Longman.

Emonds, Joseph E. 1976. *A Transformational Approach to English Syntax: Root, Structure-preserving, and Local Transformations*. New York: Academic Press.

Erickson, Carol J. and Evelyn G. Pike. 1976. "Semantic and Grammatical Structures in an Isirawa Narrative." *From Baudi to Indonesian*, ed. by Ignatius Suharno and Kenneth L. Pike, pp. 63–93. Irian Jaya: Cenderawasih University and Summer Institute of Linguistics.

Fillmore, Charles J. and D. Terence Langendoen, eds. 1971. *Studies in Linguistic Semantics*. New York: Holt, Rinehart and Winston.

Forster, Keith. 1977. "The Narrative Folklore Discourse in Border Cuna." *Discourse Grammar*, ed. by Longacre and Woods, part 2, pp. 1–23.

Friedman, Lynn A. 1976. "The Manifestation of Subject, Object, and Topic in the American Sign Language." *Subject and Topic*, ed. by Charles N. Li, pp. 125–48. New York: Academic Press.

Friedrich, Paul. 1972. "Social Context and Semantic Feature: The Russian Pronominal Usage." *Directions in Sociolinguistics*, ed. by Gumperz and Hymes, pp. 270–300.

Givón, Talmy. 1974. "Toward a Discourse Definition of Syntax." Manuscript. Los Angeles: University of California Dept. of Linguistics.

Goffman, Erving. 1974. *Frame Analysis: An Essay on the Organization of Experience*. New York: Harper and Row.

Gordon, David and George Lakoff. 1975. "Conversational Postulates." *Speech acts*, ed. by Cole and Morgan, pp. 83–106.

Gray, Bennison. 1977. *The Grammatical Foundations of Rhetoric: Discourse Analysis*. The Hague: Mouton.

Grice, H. P. 1975. "Logic and Conversation." *Speech acts*, ed. by Cole and Morgan, pp. 41–58.

Grimes, Joseph E. 1975. *The Thread of Discourse*. (Janua Linguarum, 207.) The Hague: Mouton.

———, ed. 1978. *Papers on Discourse*. (SIL Publications in Linguistics, 51.) Dallas and Arlington: Summer Institute of Linguistics and University of Texas at Arlington.

Gumperz, John J. and Eduardo Hernandez-Chavez. 1972. "Bilingualism, Bidialectism and Classroom Interaction." *Functions of Language in the Classroom*, ed. by Courtney Cazden, Vera John, and Dell Hymes, pp. 84–108. New York: Teachers College Press.

——— and Dell Hymes. 1972. *Directions in Sociolinguistics*. New York: Holt, Rinehart and Winston.

Halliday, Michael A. K. and Ruqaiya Hasan. 1976. *Cohesion in English*. London: Longman.

Hawkins, John A. 1976. "On Explaining Some Ungrammatical Sequences of Article and Modifier in English." *Papers from the Twelfth Regional Meeting Chicago Linguistic Society*, pp. 287–301. Chicago: Chicago Linguistic Society.

———. 1978. *Definiteness and Indefiniteness: A Study in Reference and Grammaticality Prediction*. Atlantic Highlands, New Jersey: Humanities Press.

Higgins, F.R. 1973. "On J. Emonds' Analysis of Extraposition." *Syntax and Semantics*, vol. 2, ed. by John P. Kimball, pp. 149–95. New York: Seminar Press.

Hinds, John. 1976. *Aspects of Japanese Discourse Structure*. Tokyo: Kaitakusha.

———. 1979. "Ellipsis and Prior Mention in Japanese Conversation." *The Fifth LACUS Forum 1978*, ed. by Wolfgang Wölck and Paul L. Garvin, pp. 318–35. Columbia, South Carolina: Hornbeam Press.

Hirsch, E. D., Jr. 1977. *The Philosophy of Composition*. Chicago: University of Chicago Press.

Hooper, Joan B. and Sandra A. Thompson. 1973. "On the Applicability of Root Transformations." *Linguistic Inquiry* 4.465–97.

Hopper, Paul J. 1979. "Aspect and Foregrounding in Discourse." *Discourse and Syntax*, ed. by Talmy Givón, pp. 213–41. (Syntax and Semantics, 12.) New York: Academic Press.

Howland, Lillian G. Forthcoming. "The Interlocking of Real and Imaginary Worlds in the Referential Structure of a Carib Story." To appear in *Language and Communication.*

Hymes, Dell. 1971. *On Communicative Competence.* Philadelphia: University of Pennsylvania Press.

———. 1972. "Models of the Interaction of Language and Social Life." *Directions in Sociolinguistics,* ed. by Gumperz and Hymes, pp. 35–71.

Johannesen, Richard L. 1974. "Attitude of Speaker Toward Audience: A Significant Concept for Contemporary Rhetorical Theory and Criticism." *Central States Speech Journal* 25.2.95–104.

Johnson (Jones), Linda Kay and Richard L. Bayless. 1976. "The Referential Hierarchy: Theoretical Concepts from a Tagmemic Perspective." *Folia Linguistica* 10.289–320.

Jones, Larry B. 1979. "Pragmatic Information in the Fourth Gospel." *Research Papers of the Texas SIL at Dallas* 8.29–41. Dallas: Summer Institute of Linguistics.

———. Forthcoming. "Pragmatic Influences on English Written Discourse." To appear in *The Sixth LACUS Forum 1979.*

Jones, Larry B. and Linda K. Jones. 1979. "Multiple Levels of Information in Discourse." *Discourse Studies in Mesoamerican Languages,* ed. by L. K. Jones, vol. 1, pp. 3–27.

Jones, Linda K., ed. 1979. *Theme in English Expository Discourse.* (Edward Sapir Monograph Series in Language, Culture, and Cognition, 2.) Lake Bluff, Ill.: Jupiter Press.

———, ed. 1979. *Discourse Studies in Mesoamerican Languages.* (Vol. 1: Discussion; Vol. 2: Texts.) (SIL Publications in Linguistics, 58.) Dallas and Arlington: Summer Institute of Linguistics and University of Texas at Arlington.

Joos, Martin. 1962. *The Five Clocks.* (Publications in Anthropology, Folklore and Linguistics, 22.) Bloomington, Ind.: Indiana University Research Center. Also Part 5 of *IJAL,* vol. 28, no. 2.

Karttunen, Lauri. 1970. "On the Semantics of Complement Sentences." *Papers from the Sixth Regional Meeting Chicago Linguistic Society,* pp. 328–39. Chicago: Chicago Linguistic Society.

Keenan, Edward L. 1971. "Two Kinds of Presupposition in Natural Language." *Studies in Linguistic Semantics,* ed. by Fillmore and Langendoen, pp. 44–52.

Keenan, Elinor O. 1977. "Why Look at Unplanned and Planned Discourse?" *Discourse Across Time and Space,* ed. by Elinor Ochs Keenan and Tina L. Bennett, pp. 1–41. (Southern California Occasional Papers in Linguistics, 5.) Los Angeles: University of Southern California Dept. of Linguistics.

Kempson, Ruth M. 1975. *Presupposition and the Delimitation of Semantics.* New York: Cambridge University Press.

Kuhn, Thomas S. 1970. *The Structure of Scientific Revolutions.* 2nd ed. (International Encyclopedia of Unified Science, vol. 2, no. 2.) Chicago: University of Chicago Press.

Labov, William and David Fanshel. 1977. *Therapeutic Discourse: Psychotherapy as Conversation.* New York: Academic Press.

Lakoff, Robin. 1974. "Remarks on *This* and *That*." *Papers from the Tenth Regional Meeting Chicago Linguistic Society,* pp. 345–56. Chicago: Chicago Linguistic Society.

Larson, Mildred L. 1978. *The Functions of Reported Speech in Discourse.* (SIL Publications in Linguistics, 59.) Dallas and Arlington: Summer Institute of Linguistics and University of Texas at Arlington.

Linde, Charlotte. 1974. "Information Structures in Discourse." Paper read at the N-WAVE 3 Conference, Georgetown University.

Lindenfeld, Jacqueline. 1972. "The Social Conditioning of a Syntactic Variation in French." *Advances in the Sociology of Language 2: Selected Studies and Applications,* ed. by Joshua Fishman, pp. 77–90. The Hague: Mouton.

Longacre, Robert E. 1964. "Prolegomena to Lexical Structure." *Linguistics* 5.5–24.

———. 1972. *Hierarchy and Universality of Discourse Constituents in New Guinea Languages.* (Vol. 1: Discussion; Vol. 2: Texts.) Washington, D.C.: Georgetown University Press.

———. 1976. *An Anatomy of Speech Notions.* Lisse, the Netherlands: Peter de Ridder Press.

———. 1977. "Discourse Genre." Paper read at the 12th International Congress of Linguists in Vienna.

———. 1979. "Why We Need a Vertical Revolution in Linguistics." *The Fifth LACUS Forum 1978,* ed. by Wolfgang Wölck and Paul L. Garvin, pp. 247–70. Columbia, South Carolina: Hornbeam Press.

———. Forthcoming. "The Grammar of Discourse."

——— and Stephen Levinsohn. 1978. "Field Analysis of Discourse." *Current Trends in Textlinguistics,* ed. by Wolfgang U. Dressler, pp. 103–22. Berlin: Walter de Gruyter.

——— and Frances Woods, eds. 1976–77. *Discourse Grammar: Studies in Indigenous Languages of Colombia, Panama, and Ecuador,* 3 parts. (SIL Publications in Linguistics, 52.) Dallas and Arlington: Summer Institute of Linguistics and University of Texas at Arlington.

Lyons, John. 1977. *Semantics.* 2 vols. Cambridge: Cambridge University Press.

McArthur, Harry S. 1979. "The Role of Aspect in Distinguishing Aguacatec Discourse Types." *Discourse Studies in Mesoamerican Languages*, ed. by L. K. Jones, vol. 1, pp. 97–121.

Mahaffy, Samuel G. 1977. "The Structure of Abstracts." *University of Michigan Papers in Linguistics*, ed. by Kenneth L. Pike, pp. 35–36. (Special Publications in Applied Linguistics, 1.) Ann Arbor, Mich.: University of Michigan Dept. of Linguistics.

Makay, John J. 1977. *Speaking With an Audience: Communicating Ideas and Attitudes*. New York: Harper and Row.

Michell, Gillian. 1976. "Indicating the Truth of Propositions: A Pragmatic Function of Sentence Adverbs." *Papers from the Twelfth Regional Meeting Chicago Linguistic Society*, pp. 495–505. Chicago: Chicago Linguistic Society.

Miller, George A., Eugene Galanter, and Karl H. Pribram. 1972. "Plans." *Culture and Cognition: Rules, Maps, and Plans*, ed. by James P. Spradley, pp. 52–64. San Francisco: Chandler.

Minsky, M. 1980. "A Framework for Representing Knowledge." *Frame Conceptions and Text Understanding*, ed. by Dieter Metzing, pp. 1–25. (Research in Text Theory, 5.) New York: Walter de Gruyter.

Nunberg, Geoffrey D. 1978. *The Pragmatics of Reference*. Bloomington, Ind.: Indiana University Linguistics Club.

Overington, Michael A. 1977. "The Scientific Community as Audience: Toward a Rhetorical Analysis of Science." *Philosophy and Rhetoric* 10.143–64.

Paducêva, E. V. 1970. "Anaphoric Relations and Their Representation in the Deep Structure of a Text." *Progress in Linguistics*, ed. by Bierwisch and Heidolph, pp. 224–32.

Perelman, C. and L. Olbrechts-Tyteca. 1969. *The New Rhetoric: A Treatise on Argumentation*. Notre Dame: University of Notre Dame.

Perlmutter, David M. 1970. "On the Article in English." *Progress in Linguistics*, ed. by Bierwisch and Heidolph, pp. 233–48.

Pike, Kenneth L. 1960. "Nucleation." *The Modern Language Journal* 44.291–95. Also reprinted 1972 in *Kenneth L. Pike: Selected Writings*, ed. by Brend, pp. 144–50.

———. 1964. "Beyond the Sentence." *College Composition and Communication* 15.129–35. Also reprinted 1972 in *Kenneth L. Pike: Selected Writings*, ed. by Brend, pp. 192–99.

———. 1967. *Language in Relation to a Unified Theory of the Structure of Human Behavior*. 2nd rev. ed. (Janua Linguarum, 24.) The Hague: Mouton.

———. 1981. "Nonsense in the Service of Sense." *Language and Communication. 1:2–3.179–88*

——— and Evelyn G. Pike. 1977. *Grammatical Analysis.* (SIL Publications in Linguistics, 53.) Dallas and Arlington: Summer Institute of Linguistics and University of Texas at Arlington.

Pratt, Mary Louise. 1977. *Toward a Speech Act Theory of Literary Discourse.* Bloomington, Ind.: Indiana University Press.

Ricoeur, Paul. 1976. *Interpretation Theory: Discourse and the Surplus of Meaning.* Fort Worth: Texas Christian University Press.

Rosenbaum, Peter S. 1967. *The Grammar of English Predicate Complement Constructions.* (Research Monograph, 47.) Cambridge, Mass.: MIT Press.

Ross, John Robert. 1970. "On Declarative Sentences." *Readings in English Transformational Grammar,* ed. by Roderick Jacobs and Peter Rosenbaum, pp. 222–72. Waltham, Mass.: Ginn.

Rumelhart, David and Andrew Ortorny. 1977. "The Representation of Knowledge in Memory." *Schooling and the Acquisition of Knowledge,* ed. by Richard Anderson, Rand Spiro and William Montague, pp. 99–135. Hillsdale, New Jersey: Lawrence Erlbaum.

Russell, Bertrand. 1905. "On Denoting." *Mind* 14.479–93.

Schank, Roger C. and Robert P. Abelson. 1977. *Scripts, Plans, Goals and Understanding: An Inquiry into Human Knowledge Structures.* Hillsdale, New Jersey: Lawrence Erlbaum.

Schegloff, Emanuel and Harvey Sacks. 1973. "Opening up Closings." *Semiotica* 9.289–327.

Schram, Judith L. and Linda K. Jones. 1979. "Participant Reference in Narrative Discourse in Mazatec of Jalapa de Diaz." *Discourse Studies in Mesoamerican Languages,* ed. by L. K. Jones, vol. 1, pp. 269–89.

Searle, John. 1958. "Proper Names." *Mind* 67.166–73.

———. 1969. *Speech Acts: An Essay in the Philosophy of Language.* London and New York: Cambridge University Press.

Sebeok, Thomas A., ed. 1960. *Style in Language.* Cambridge, Mass.: MIT Press.

Sellars, Wilifred. 1954. "Presupposing." *The Philosophical Review* 63.197–215.

Snipes, Wilson E. 1970. *Writer and Audience: Forms of Non-fiction Prose.* New York: Holt, Rinehart and Winston.

Spears, Arthur K. 1973. "Complements of *Significant*-Class Predicates: A Study in the Semantics of Complementation." *Papers from the Ninth Regional Meeting Chicago Linguistic Society,* pp. 627–38. Chicago: Chicago Linguistic Society.

Strawson, P. F. 1950. "On Referring." *Mind* 59.320–44. Also reprinted 1971 in *Logico-linguistic Papers,* by Strawson, pp. 1–27.

———. 1953. "Particular and General." *Proceedings of the Aristotelian Society*. Also reprinted 1971 in *Logico-linguistic Papers*, by Strawson, pp. 28–52.

———. 1954. "A Reply to Mr. Sellars." *The Philosophical Review* 63.216–31.

———. 1971. *Logico-linguistic Papers*. London: Methuen.

Subbarao, Karumuri. 1973. "On the Inadequacy of the Structure-preserving Constraint with Reference to Extraposition." *Papers from the Ninth Regional Meeting Chicago Linguistic Society*, pp. 639–51. Chicago: Chicago Linguistic Society.

Tanner, N. 1967. "Speech and Society Among the Indonesian Elite: A Case Study of a Multilingual Community." *Anthropological Linguistics* 9.3.15–39.

Thompson, Sandra A. 1971. "The Deep Structure of Relative Clauses." *Studies in Linguistic Semantics*, ed. by Fillmore and Langendoen, pp. 78–94.

Voegelin, C. F. 1960. "Casual and Noncasual Utterances Within Unified Structure." *Style in Language*, ed. by Sebeok, pp. 57–68.

Wallace, Stephen. 1976. "The Linguistic Modernization of Jakarta." Paper read at the Conference on Indonesian Studies, University of Wisconsin-Madison.

———. 1979. "Voice, Mode, or Aspect?: the Semantics of Verbal Prefixes in Jakarta Malay." *Contributions to Grammatical Studies: Semantics and Syntax*, ed. by Frans van Coetsen and Linda R. Waugh, pp. 151–78. Leiden: E. J. Brill.

———. Forthcoming. "Figure and Ground: the Interrelationships of Linguistic Categories." To appear in *Proceedings of the UCLA Symposium on Tense and Aspect*, ed. by Paul J. Hopper.

Wiebe, Neil. 1977. "The Structure of Events and Participants in Cayapa Narrative Discourse." *Discourse Grammar*, ed. by Longacre and Woods, part 2, pp. 191–227.

Winograd, Terry. 1976. *Understanding Natural Language*. New York: Academic Press. [Orig. published as vol. 3, no. 1 of *Cognitive Psychology*.]

Yorkey, Richard. 1979. "How to Prepare and Present a Professional Paper." *Notes on Linguistics* 9.29–32.

Young, Richard E., Alton L. Becker, and Kenneth L. Pike. 1970. *Rhetoric: Discovery and Change*. New York: Harcourt, Brace and World.

Ziv, Yael and Peter Cole. 1974. "Relative Extraposition and the Scope of Definite Description in Hebrew and English." *Papers from the Tenth Regional Meeting Chicago Linguistic Society*, pp. 772–86. Chicago: Chicago Linguistic Society.

Texts References

Ayre, Anne. 1979. Letter from the National Cancer Cytology Center.

Brandon Sun. 1976. March 17th issue.

Bunyan, John. 1678. *The Pilgrim's Progress*. Reprinted 1957, New York: Pocket Books.

Campbell, William C. 1979. "Groundless Litigation and the Malicious Prosecution Debate: A Historical Analysis." *Yale Law Journal* 88.1218–37.

Chadwick, Henry. 1967. *The Early Church*. (The Pelican History of the Church, 1.) Baltimore: Penguin Books.

Consumer Reports. 1979. January and August issues.

Crandell, Susan. 1979. "T-tail Arrow." *Flying* 104.6.32–37.

Crying Wind. 1977. *Crying Wind*. Chicago: Moody Press.

Emergency Medicine. 1979. September 15 issue (vol. 11, no. 9).

Faust, Clarence H. and Thomas H. Johnson. 1962. *Jonathan Edwards*. Rev. ed. (American Century Series.) New York: Hill and Wang.

Feld, Bernard T. and Kosta Tsipis. 1979. "Land-based Intercontinental Ballistic Missiles." *Scientific American* 241.5.50–61.

Fixx, James F. 1979. *The Complete Runner's Day-by-day Log and Calendar 1979*. New York: Random House.

———. 1980. *The Complete Runner's Day-by-day Log and Calendar 1980*. New York: Random House.

Freedman, Eric. M. 1978. "The United States and the Articles of Confederation: Drifting Toward Anarchy or Inching Toward Commonwealth?" *Yale Law Journal* 88.142–66.

Leckie, Robert. 1963. *The War in Korea, 1950–1953*. New York: Random House.

Meier, David L. and Rashid A. Sunyaev. 1979. "Primeval Galaxies." *Scientific American* 241.5.130–44.

Metzger, Bruce. 1965. *The New Testament: Its Background, Growth, and Content*. New York: Abingdon Press.

Morgan, C. Shannon. 1979. "'When Abiathar Was High Priest' (Mark 2:26)." *Journal of Biblical Literature* 98.409–10.

Phillips, E. D. 1973. *Aspects of Greek Medicine*. New York: St. Martin's Press.

Pisani, Joe. 1978. "1978 Light Worlds." *The Oarsman* 10.5.31–34.

Wall Street Journal. 1979. November 7 issue.

Warner, Anne. 1978. "Women's World Championships." *The Oarsman* 10.6.12–16.

White, Theodore H. 1961. *The Making of the President, 1960*. New York: Atheneum Press.