A PERFORMATIVE THEORY OF DISCOURSE

by

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ABSTRACT

This thesis formulates an account of two language abilities shared by adult speakers of English. First, language users are able to recognize when a text is contiguous from utterance to utterance. Second, users are also able to decide when a discourse as a whole is well-formed. As previous work in either area has been minimal, a central problem becomes that of discovering and demonstrating how strong, and of what order, adequate theories of these intuitions must be. Thus, Part I, which takes up the first of the abilities above, attempts to revise and strengthen current models of conjunction, extending them to handle successive sentence decisions. Part II subsequently attempts to develop a theory of expository performance to handle the larger discourse intuitions.

Part I begins with a large corpus of grammatical, but unacceptable, successive sentence pairs. After moving first from strictly syntactic constraints through progressively stronger criteria, until reaching pragmatics and context, it makes the case that only a context-sensitive theory is
adequate to block the generation of sentence pairs with content anomalies.

However, as Part II argues, content relations between sentences in a discourse are not the only meaning relations of which a reader must be aware. Each utterance also has its own force, by which we know what a speaker intended to do in uttering what he has. Through examples I show that force considerations are ultimately prime in all acceptability decisions. Content analysis inaccurately predicts that if content meaning relations can be found between its successive sentence pairs the discourse comprised of the pairs will be acceptable, and if not, then the discourse will be anomalous. Nevertheless, texts with apparently anomalous content relations between sentences may be acceptable, given certain performative intentions of the speaker, and texts which appear to be acceptable may fail on performative grounds.

Part II also contains an analysis of the necessary organization and ordering of certain expository actions in written texts, given a speaker's expository intentions for his discourse as a whole. In particular, I look at the discourse action of arguing, which obligatorily involves making a claim and giving reasons for belief, as well as the optional actions of making distinctions, explaining, admitting, contradicting, and others. In the final chapter, I bring
together the two parts of the thesis, showing that conjunction or successive sentence relations must be consistent with a discourse's underlying performative structure, and are to some extent determined by that performative structure.
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Chapter 1

THE RATIONALE FOR DISCOURSE GRAMMAR

The Historical Perspective

A history of linguistics would show that many areas of language use, until recently, were considered to be outside the domain of strictly "linguistic" theory. As discourse has been one of these, it is perhaps in order to review the principal reasons why many grammarians are only now acknowledging this area and its problems as profitable for study. Among such reasons, undoubtedly the most influential was the assumption that the sentence, rather than a longer text or speech event, is the largest unit that linguistics is motivated in handling.

Jespersen¹ and Bloomfield,² for example, took the sentence to be the largest "grammatical" construction. Chomsky substantiated this position by positing that a grammar is formally a theory of sentences and that any language L is made up of the sentences of L.³ Subsequently, Katz and Fodor actually argued against a discourse grammar, not because
it was unimportant for a theory of language, but because they judged it to be beyond the bounds of a grammar of a language. And others, like Householder, claimed that the grammatical restrictions on sentences in sequence were too few and trivial to be accounted for by anything more than several transformational rules appended to the standard grammar.

The historical arguments which tended to disqualify discourse from inclusion in the grammar have been abstracted by Joseph Williams into the following:

a) Sentences are grammatical constitutes without being grammatical constituents.

b) The grammatical relationships between sentences are therefore non-existent or trivial.

c) A grammar is therefore a theory of individual sentences; and since everything we can say about a sentence in context can be included among the possible statements we can make about a sentence in isolation, there is no need to include context as a relevant problem in the description (i.e., generation) of sentences.

Other linguists, of course, held opinions radically different from these; some predicted that the study of sentences in sequence would become an important part of linguistic theory and grammar. Fries and Francis took such a position, for example, although neither pursued the subject with Zellig Harris' insistence. Making assertions like "since there are distributional limitations upon the utterances with respect
to each other within a discourse, they could be studied with the method of descriptive linguistics," and actively committing time to research, his were the groundbreaking efforts in the field. Much of the material to follow owes its impetus to disagreements with his methods.

As the analysis of syntax (within the boundaries of a sentence grammar) became more elaborate, certain unresolved problems required the addition of semantic considerations to the grammar, while still other problems led directly to contextual considerations. For instance, reference problems like those posed by (1) below easily resisted efforts to find their solutions within the ordinary sentence-in-isolation framework:

1) And consequently, they'd better do otherwise or the same thing will happen again.

Such cases led directly to the need for contextual recovery.

Pronominal reference, deixis, anaphora, and sentence adverbialization, as in (1), each leads beyond the bounds of sentence grammar in general, and sentence syntax in particular. Nevertheless, each involves a question of reference, suggesting that discourse analysis or the pursuit of their adequate descriptions could be limited strictly to referential treatments. Such is not the case. Although the mysteries of pronominalization are presently far from clarification, looking for identical NPs within the domain of a
discourse will not be substantially different from looking for those to be found within a single sentence. Furthermore, contextual analysis should not be expected to be able to resolve referential ambiguity for any given sentence. Instead, the references which are substantially beyond the descriptive power of a sentence grammar have to do with purely linguistic objects, like conclusions, objections, arguments, descriptions, examples, summaries, and others. These are peculiar to discourse, and their referents often contain entire sets of sentences, in which utterances are ordered according to determining conventions.

Nevertheless, both time and location deixis pose problems in discourse in their own right, as utterances such as "the above description" and "I now turn to" are by no means exceptional in longer texts. Both problems are related to anaphora, which seems to be permissible only in those cases in which the audience may be expected to supply either through memory or inference from context the deleted structure or material. This observation stands in sharp contrast with the older doctrine of recoverability; presently an operation more like that known as reconstruction, in which one relies on presupposition and deduction, is at issue. Furthermore, contrary to previous belief, anaphora is not an optional operation. Grice has pointed out that a rule operates in conversation such that a speaker may not tell
an audience more than it needs to know for understanding. Where the speaker should delete and fails to do so, the repetition of the same message unit inevitably leads the audience to confusion, expecting that more is meant by its second occurrence than they are able to find there.

Thus, the historical perspective registers a slow but substantial adjustment in the attitude of linguists toward areas like that of context and discourse. Certain regularities in the behavior of speakers for which contextual information is required, certain references that need context for location, and the broadening of semantic inquiry in itself each point toward the need for a grammar which allows contextual recourse where necessary. What such a grammar must include as theoretical objects and what its eventual consequences for current theory are fall well beyond the scope of the present work. Nevertheless, given the present direction toward pragmatic areas and toward more sophisticated descriptions of various language abilities, a contextually-based grammar may be expected to have considerable merit.

For example (again from a historical perspective), several grammarians at the University of Pennsylvania have argued that even the notion that the sentences of English form a recursive set, a primitive for sentence grammatical theory, is indefensible. The global structure of the set of English sentences, according to Richard Smaby, is much weaker
than a recursively enumerable set, and it is impossible axiomatically to specify which kernel sentences can co-occur in more complex sentences. He points out that if we allow any sentences to be conjoined by any conjunction, we produce results like:

John opened a door and organic chemistry was required of all students, because if seventeen were not a prime, then the dairy association would have to back down. Thus, we can conclude that television will have a beneficial effect on the nation's young. 13

A grammar of discourse, following the implications of examples like the one above, should be expected to find its way into the main stream of linguistic work. As its subject matter gains recognition it should come to be of interest to many areas where it is now only peripheral or even considered irrelevant.

The Need for a Semantics of Conjunction in Discourse

As a historical overview can give the misleading impression of innovation, where in fact only a progressive development has taken place, the previous section could give the impression that a discourse grammar will be markedly original or alien from current methods. For this work exactly the opposite is the case, since it draws unsparingly from previous efforts in both syntax and semantics. In fact, in Part I, various examples are offered by way of showing that an
improved grammar of conjoined sentences, along lines already established, can adequately account for anomalies, should they exist, in most successive sentence pairs. This is to say that in general a conjunction grammar can be sufficiently powerful to block the generation of most anomalous cases.

In this section, I briefly review recent progress in conjunction studies, and offer some preliminary revisions with regard to the notions of successive sentences, coordination and subordination. Perhaps the most far-reaching trend in studies of conjunction is the introduction of a semantic analysis for this area. In an area which had previously been dominated by coordination, or other principally syntactic treatments, the onset of semantic considerations allowed a much more convincing explanation of why certain conjoined clauses were peculiar. To this end, Robin Lakoff's work in making elementary distinctions between types of conjunction from a semantic point of view, as well as in introducing issues of pragmatics, has been vital. In essence, the (admittedly fragmentary) model that is now available is a device that generates acceptability decisions about particular conjuncts on the basis of logical formulae. The acceptability of the conjoined clauses depends on the establishing of an identity relation between them, given the assistance of presuppositions and the hearer's information.
Her model is based on at least three criteria: semantic conditions for acceptability, like "relevance"; pragmatic areas of knowledge, including global memory; and language conventions on which the hearer must rely for drawing needed presuppositions. From these three criteria, it follows that the object of grammatical description, where conjunction is concerned, must be the ability of the speaker to use conjunction correctly in context. Compare test sentences like Tom went to the store and Mike went to the store with their reduced counterparts, Tom and Mike went to the store. As such pairs are not synonymous, it is clear that syntactic operations like coordination reduction must depend on considerations other than syntactic ones for acceptability of result. Speakers can use Tom and Mike went to the store in situations in which the speaker wants to communicate that they went to the store together.

Turning to successive sentences, the immediate problem, much less work has been undertaken. Compared to studies on conjunction, analysis of sentence pairs has been limited primarily to questions and answers and a necessarily ad hoc series of observations on when replies are reasonable. Nevertheless, it seems to be the case that many sentence pairs in discourse that are not conjoined could be conjoined with no loss of sense. Whether or not these are conjoined by a speaker
may in fact be a matter of output constraints, like utterance length, stylistic intentions, etc. Compare (2) and (3):

2) Whitehead said that a law of nature begins as an hypothesis and ends as a "fact." This observation tends to give perspective to the "facts" of physics.

3) Whitehead said that a law of nature begins as an hypothesis and ends as a "fact;" this observation tends to give perspective to the facts of physics.

However, relations between successive sentences in discourse are not only a matter of conjoining clauses or not. Notice that (4) contains sentences that when joined, as in (5), stand in what is commonly called a subordination relation. In past structural descriptions, these clauses were represented as embedded:

4) John took his T.V. set to the repairman for a checkout. He had bet $50 on the game and he wanted to make certain that he would watch it.

5) John took his T.V. set to the repairman for a checkout because he had bet $50 on the game and he wanted to make certain that he would watch it.

For the purposes of defining "subordination" for discourse grammar, it is important to notice that the only clauses which are never separable in discourse and which are taken commonly as subordinate in sentence grammar are the restrictive clauses,¹⁶ (whereas noun clauses and adverbial clauses may be separable):
6a) *The man was a friend of ours. The man died. (The man who died was a friend of ours.)*

b) I know that Moby Dick has a brother.

c) There's no truth in what he says.

7a) Since Harry was a big game hunter he knew where to find the elephants.

b) Harry was a big game hunter. He knew where to find the elephants.

8a) Everyone knew what John believed. He felt that using guns to settle wage disputes was silly.

b) Everyone knew that John believed that using guns to settle wage disputes was silly.

(6a) should properly read "a man was a friend" because the, when it appears without a restrictive clause, signals that the needed restrictive clause has appeared as information earlier in the discourse. Otherwise, one could not know who "the" man was. Although work has been done recently to show that the deep structure of relative clauses might be a conjunction construction, the inseparability of the restrictive relative clause would tend to indicate that it is more closely bound to the NP than has been thought. (9) offers a typical example of an antecedent relative clause to which the refers:

9) Harry had never seen the person who robbed the bank before in his life. Nevertheless, he felt that the man was strangely familiar.

With a notable exception, grammatical treatments of sentence pairs have confined themselves to such phenomena without questioning why discourses, composed of such sentences, are
connected and reasonable. Only the Transformational and Discourse Analysis Project at the University of Pennsylvania has maintained that speakers produce discourses instead of single sentences, that transforms are secondary to paraphrase relations, and that specification of a speaker's discourse abilities is more important than the description of internal constraints on language structure. While efforts by those of the generative-semantic persuasion have begun to give this sort of position the attention it deserves, the question of why a speaker uses sentences in the order he does has been considered more properly a study for the psychologist or sociologist than the linguist.

It is clear that speakers do have reasons for initiating speech and that such reasons are comprehensible to hearers is obvious from the fact that communication would be impossible otherwise. Conversely, we can recognize communication that fails, as in (10):

10) ??We found all those magazines in the back seat of the car. However, Don knew that Mary would hate him if she didn't go back. So, Linda quickly locked the door and began to count her mosquito bites. After a while we thought better of it and reported the crash.

From a sentence grammar point of view, each sentence, in isolation, is grammatical and the conjunctions are acceptable, if context prior to the immediately antecedent sentence is ignored.
The Design of a Theory of Continuity in Discourse

It is clear that readers intuitively are able to recognize connectedness between successive sentences. Any theory of discourse must be able to account for at least this ability. Consequently, since meaning relations exist between successive sentences, such a theory must be able to specify which relations exist between particular sentence pairs. Likewise, and more importantly, it must also be able to identify sentence pairs which are anomalous. The degree to which a theory of discourse conjunction will be adequate, then, will depend on its possessing sufficient criteria to account for any type of successive-sentence anomaly and its ability to discover connections between sentence pairs.

(Notice that the term conjunction refers to sentence pairs in general here; as noted in the previous section, many successive sentences could be conjoined, and are therefore subsumed here within a theory of conjunction.)

Part I of this study will be directly concerned with the need for a model of discourse to specify and exclude anomalous succeeding sentences. Its chief aim is an examination of the inadequacy for discourse grammar of many of the criteria which seem sufficient for sentence grammar. As I shall show, anomaly judgements are highly complex, in that they may depend on a range of considerations. For the sake of coherence, the material on which anomaly judgements are
based is divided into five areas: syntax, compositional semantics, common topic semantics, immediate context, and extended context. While this division is artificial, since there are clearly relations between areas, each does distinguish a nearly independent area of language behavior. As a matter of format, then, each of the four chapters to follow in Part I is directed toward at least one of these, progressing from syntax to extended context.

While Part I is completely engaged with the subjects of successive sentence anomaly and connection, successive sentences also are a topic in Part II. There I show that following sentences become anomalous when the illocutionary force they carry is inconsistent with larger discourse force requirements. Thus, Part I and Part II are distinct in at least this respect: Part I looks at conjunct content while Part II looks at conjunct force. In the final chapter of Part II, I show that force considerations determine, in many cases, which meaning relations successive sentences allowably may have. In effect, I argue that force is an additional criterion to be added to the five above, although it is part of a theory of speech action rather than of content or form.

Two prime considerations in discovering anomalies of the different types are the means (or necessary operations in processing) by which readers understand sentence pairs, and what constitutes information that would count towardsa
judgement of continuity at each stage. Since successive sentences clearly will have to be at least syntactically well-formed, recognition of syntactic deviance is the logical point of departure. However, while a syntactic model blocks gross anomaly, ensuring for example that pronominalization across sentence boundaries preserves gender and number, it will indiscriminately generate pairs which are semantically contradictory, pragmatically unacceptable, or misordered where ordering criteria of a semantic type exist.

From syntactic recognition I move in Chapter 3 to semantic interpretation, specifically of the compositional kind. Such a semantics, however, will not block obviously odd sentence couples like Grandma bakes rabbits slowly and why is this dye synthetic? An interpretation must work toward specifying what relation paired clauses and sentences have, if it is to be of use in accounting ultimately for continuity decisions. Therefore, I take up R. Lakoff's "common topic" proposal for conjunction, which does attempt to specify such relations.

Since it is possible to combine sentences in discourse acceptably without "common topics" and likewise to find sentences with common topics which are not acceptable, additional criteria are necessary. Only the third version of the common topic constraint directly relates to successive sentence problems, but R. Lakoff's account contributes much
toward an understanding of the operations necessary for processing conjunctions or successive sentences. In particular, her account introduces the issues of knowledge of the world, presuppositions, and certain logical operations for interpreting conjuncts. I subsume all of these under the notions of "immediate context" and "pragmatics," which are dealt with as candidates for sufficiency subsequent to "common topic."

Consequently, the second and third sections of Chapter 3 make a case for the role of context, presuppositions, and limited deduction in finding symmetric relations between successive sentences. Although such operations can be shown to be instrumental in discovering symmetric relations, what is really at stake in such cases is recovery of underlying structure, specifically a symmetric predicate and an adverbial clause of respect, in that + S. The fourth section, then, makes a pragmatic distinction between cases of recovery of existing structure and the larger body of pragmatic cases, or problems of reconstruction. The latter are also the more complicated cases of interpretation from immediate context and knowledge of the world.

Chapter 4 specifically examines "inference" and "consequence" conjunction, as types which best conform to interpretation from immediate context. While consequence relations have to do with discovering a speaker's expectations
about the world, it is also necessary at this point to examine certain contrasting accounts of this relation from a sentence grammar perspective.

While syntactic, semantic, and immediate context criteria are all necessary for successive sentence acceptability, a final criterion must be added to ensure sufficiency. Chapter 5 shows that pragmatic considerations reach beyond immediate context to extended context. Occasionally, information needed for determining sentence continuity lies beyond the immediately antecedent sentence or the speaker's ability to deduce from the immediate sentences as paired. I cite reason adverbials separated in discourse as examples of the criterion of connectedness, or extended context. Information which may only be obtained from prior context, such as whether a speaker is reporting his own reasons and beliefs or another's in explanation of some event, is essential to the interpretation of such constructs in discourse.

Generally speaking then, Chapters 22 through 55 extend the criteria needed to make continuity and anomaly decisions about successive sentences in discourse from syntax to extended context. As well, they emphasize the operations by which language-users interpret sentences in successive pairs, the operations upon which decisions of acceptability are ultimately contingent.


10. This appears as example (54) in Williams, op. cit., p. 37.


16. Notice that D.T. Langendoen, Essentials of English Grammar (New York, 1970), p. 141, treats (i) and (ii) below as correspondents:

   i) My cousin married a girl who became pregnant.
   ii) A girl became pregnant. My cousin married her.

   In my dialect, if the problem is dialectical, (i) and (ii) express contrary temporal order. His example provides additional grounds for believing that restrictive clauses are not freely separable in discourse.


22. William Labov points out that in fact the major steps, or at least many of them, in discourse analysis have been taken not by linguists, but by sociologists and psychologists. See his "Rules for Ritual Insults," Studies in Social Interaction, ed. D. Sudnow (New York, 1972), pp. 120-121.
Chapter 2

THE INADEQUACY OF SYNTACTIC CRITERIA FOR
CONJUNCTION THEORY

The Place of Syntactic Rules in Models of Discourse

Chapter 1 raised several distinct issues in regard to the role of syntax in a theory of discourse. One question in particular is fundamental: may syntactic rules be extended to cover discourse phenomena? In short, although a theory of successive sentence acceptability must necessarily include a sentence syntax, do there exist any syntactic rules pertaining exclusively to discourse? In this section I discuss briefly several of the prominent positions with regard to these question, before formulating my own negative response.

Necessarily, this discussion will depend greatly on the notion of "syntax," a notion which has become increasingly difficult to define or specify. Many phenomena, having to do with both structure and lexicon, and which were once taken to be strictly syntactic, are now thought to be semantic,
or meaning-based. Consequently, to avoid restricting "syntax" purely to morphology, I will resort to an earlier or historical sense of this term, in which coordination, pronominalization, anaphora, features like [+ Human], and transformations in general are considered to be meaning-independent or syntactic. It is not inappropriate to return to this sense, since it was the basis for several important arguments against discourse analysis. Thus, by "syntactic" I refer to rules which can be written without semantic information or which need not depend on dictionary look-up.

Returning to the question of discourse rules and the possibility of extending syntactic rules to account for discourse phenomena, the issues may be reduced to at least two schools of thought. One would argue that since pronominalization, anaphora, and term-recurrence across sentence boundaries are discourse phenomena, the syntactic rules that characterize them should be included among the rules for discourse. As W. Dressler has pointed out,

The best known area of discourse grammar is anaphora or substitution or cross-reference or, more restricted, coreference, subjects that are often treated by means of extending discourse grammar rules. . . .

The work of Lauri Karttunen and Zellig Harris may be cited here as examples which extend syntactic analysis and reference problems into discourse, (although Karttunen's later work is semantic).
Karttunen's various conclusions concerning reference and specificity for noun phrases involve the extension of certain syntactic analyses beyond the boundaries of sentences. Since, by and large, these are based on co-occurrence, they are fundamentally related to Harris' earlier and also well known programme of analysis. The Harris models of "discourse analysis" focused directly on the phenomena of occurrence in discourse, in an attempt to find a successful method of analysis for breaking a discourse text down into sentences which recurred and sentences which did not. In effect then, the best known attempts to extend syntactic considerations to discourse have centered on the relatively predictable topics of co-occurrence and recurrence, and on the data of pronominalization, anaphora, and lexeme recurrence in particular.

Since Harris' models were syntactic ones, interested only in "decomposing" texts into "strings," which were then to be compared to other textual strings, their ultimate value can only be estimated relative to the extent to which language users depend on purely formal syntactic conventions and term-recurrence to determine discourse well-formedness. Harris contrasted his "string analysis" with the constituent structure and transformational analyses only, leaving the contrast with a semantic or "meaning" analysis up to the reader. In effect, this left open the question of whether
or not recurrence was in fact a syntactic problem, a question that remains without an answer.

A second school of thought might be expected to argue that pronominalization, anaphora, and term-recurrence could not be stated adequately with syntactic rules. For example, although once thought to be a purely syntactic phenomenon, semantic constraints have recently been introduced into the analysis of pronominalization, the subject of most studies of co-occurrence. For example, Kuno has argued convincingly that "Backward pronominalization is possible for English only when the right-most of the two coreferential noun phrases represents old, predictable information." By "old" information, Kuno relies on the notion of "predictability," which is a refinement on the theme-rheme distinction borrowed from the Prague school of discourse analysis. Based on the still older notion of information entropy, the theme is cashable as either repeated subject or predictable subject, thus presenting no "new" information in the required sense.

From another direction, also semantically oriented, Lakoff's transderivational approach attempts to find semantic solutions to standing problems in syntax, with particular emphasis on anaphora. Although elements of older treatments can be found in the transderivational account, in that the position relies on purely syntactic arguments at times, at
base it is a semantic account of certain syntactically peculiar behavior. Lakoff has argued that transderivational constraints are needed to block ambiguities arising from pronominalization, as in sentences like Spats and Eddy came in and he (?) offered us all a little ride to the river, in which the output from the first transformational cycle cannot provide sufficient information to block pronominalization, presently considered a post-cyclic operation. More importantly, anaphora and larger identity relations like those of deleted verb phrases and even clauses (as in John is an armchair warrior, if even that, where that refers to a deleted clause) also fall under transderivational constraints. For these larger relations in particular, Lakoff postulates that constraints of the sort needed would have to be able to state identity conditions between a derivation and what can be deduced from the semantic representation and sentence presuppositions. Whatever the eventual outcome of his proposal, an utterance's meaning, as well as whatever presuppositions it incorporates, must be considered a condition governing what material can be deleted or which meaning-changing last-cyclic transforms, like pronominalization or adverb preposing, may be allowed to operate. For example, consider (1b):
(1b) demonstrates the necessity for constraining such operations, as well as the relative difficulty of applying such constraints before either interpretation or semantic representation.

Thus, from the discussion above, it appears that the dual issues of extending syntactic rules into discourse and whether syntax or semantics is prior (which is actually a question about how the extended rules would be stated) are anything but clear cut or well-defined. Further, an additional complication exists with regard to the grammatical status of discourse rules. In a discourse analysis of a short text by Bertrand Russell, Carlota Smith gives the designation of *stylistics*, a term normally reserved for optional, rhetorical, operations, to what is basically a syntactic analysis extended to discourse. This is a terminological way of excluding rules applying to discourse from the grammar. Her analysis depends heavily on transformation grammar for derivational histories, with much emphasis on the structuring of certain information. Furthermore, she draws certain non-stylistic conclusions about the distinction between subjects and topics from the results. Why such clearly syntactic rules become "stylistic" when applied or extended to discourse, and are disqualified from having greater generality or motivation with respect
to sentence semantics, is not obvious. On the one hand, her position can be defended on the grounds that placement of information and information emphasis are strictly speaking not matters of either syntax or semantics (and thus are not necessarily topics for grammatical description). On the other hand, even the fact that in specified environments speakers consistently refer to past material early in an utterance and introduce new material late in an utterance seems well within the domain of grammatical description. One of the major points made in her paper is that certain transforms are required much more often than others in order to postpone new or unpredictable material.

A serious proposal to exclude discourse problems from the grammar was made by Bever and Ross, with regard to sentences like (2) below:

2) Everyone should read the Bible. Deuteronomy is one of the great books of the world.

In order to show continuity or coherence between such successive sentences, they argued that it would be necessary to include such facts as "Deuteronomy is a book of the Bible" in the grammar. Additions like these, setting aside the question of whether what language users know should be included in a grammar or not, would indeed complicate some types of grammatical account. Labov has counter-argued that "the form of discourse rules is independent of such detail."
His discourse rules stipulate that in cases of superficially unrelated successive sentences, the speaker is actually "asserting" that there exists some "connecting proposition" known to both speaker and audience. In the case of (2), even if the hearer does not know that Deuteronomy is one of the books of the Bible, he should infer this fact from his knowledge of the conventions of discourse.

While Labov's analysis is only fragmentary, and in its present state under-defined, Labov clearly feels that discourse rules belong in the grammar. Since his rules are of a logical rather than syntactic character, syntax would be expected to have either no role or a very small role in discourse or successive sentence analysis. This is essentially the position I take in this study: syntax is necessary for anomaly decisions at the independent sentence or clause level, and uninteresting at the successive sentence level.

At this point, at least one potential counter-argument arises. Above I have characterized the theme-rheme distinction as semantic, and have used this characterization to conclude that phenomena which appear to be syntactic might in fact be semantic. It could be argued, on the other hand, that since themes are recurrent or repeated material, they might as well be considered syntactic on the grounds that all co-occurrence has traditionally been considered syntactic. However, it can be shown that syntactically-bound
lexical recurrence is far too weak to make a major place for itself in a grammar of discourse; in many cases, a reader/hearer is able to register a common topic between two sentences which do not include any recurring terms:

3) John has been missing for days. The trails and canyons have each been covered. The searchers must now prepare to look for caves or animal lairs.

In (3), from presuppositions and knowledge of the world it is possible to say that these three sentences are well-ordered, and that the third sentence is acceptable although it shares no repeated terms with the first two sentences.

As well, the **theme-rheme** distinction is an entirely descriptive one, and while the notion of **theme** could explain to some degree the reader/hearer's ability to judge acceptability for successive sentences, the notion of **rheme** or "unpredictable" sentence theme is far too powerful and underdetermined to be of explanatory use. Consider:

4) In a second sense, the criticism would be that science is only directed toward the objective, and methodically neglects subjective meanings -- the psychology of behavior has been criticized for this. One looks for adrenalin or grimaces, but not for anger, etc. But there is a psychology of conduct (to which we will return): scientific linguistics does not limit itself to dictionary meanings, and the study of meaning is in no way the prerogative of reflective philosophy.  

(J. Piaget, *Insights and Illusions of Philosophy*, 1965, p. 121)
In this example, each of the three sentences, is strictly speaking, a matter of "new" information. However, the successive sentences make sense in a way that perhaps only conjunction relations (e.g., pragmatics and inference) can explain; "new" themes would not distinguish between ad hoc sentence succession and acceptable cases.

The Limitations of Coordination Grammar

The inclusion of a coordination grammar in a theory of conjunction can do little to strengthen the capacity of such a theory to describe the conditions under which particular sentences may be conjoined. Although there exists a wealth of material on coordination, particularly in studies on gapping, reduction, and anaphora, there is no reason to expect syntactic studies to make a significant contribution to a theory of conjunction, in that the basic questions that a conjunction theory must answer, like that of explaining why certain sentences may not be conjoined at all, are outside the scope of coordination. Gapping and reduction operate on already formed constructions, for which the questions of what and when two sentences may be conjoined have in effect been answered. The following section will attempt to clarify the place of coordination and its operations among the larger concerns included with a theory of conjunction.
In terms of conjunction, it is possible to speak not only of grammatically correct but semantically anomalous conjuncts, but also of grammatically correct, semantically acceptable, but pragmatically anomalous conjuncts. In fact, the argument against coordination runs along both of these general lines: a syntactic base may indiscriminately generate either semantically or pragmatically anomalous conjuncts. "Semantic," as the term is applied below, is used in two senses. First, disregarding for the moment that meaning relations include an inordinately large variety of phenomena, it is used in the general sense of a theory of meaning relations. In current usage, "semantic" may refer to reference, to sense, to the situation in which a speaker makes an utterance (or context), to the force of an utterance given intentions on the part of a speaker, to presuppositions of the different types, and even to entailment relations between sentences. In addition, I have used "semantic" in the first chapter to segregate that part of linguistic concern remaining after syntax and phonology. For its second sense, however, it is necessary to specify rather closely the difference in reference of two terms in particular: semantic and pragmatic. Those meaning relations and situational conditions (like a speaker's illocutionary intentions, knowledge of the audience, expectations about the world, previous context, status of the speaker, etc.) which are external to the compositional meaning of an
utterance are to be considered pragmatic. Internal relations, having to do with the logical structure of the sentence and with the dictionary entries of the lexical items (the speaker's knowledge of the meaning of the terms), are to be considered "semantic."

Considering the grammatically well-formed but semantically anomalous cases first, it is possible to see that syntactic well-formedness is not a sufficient condition for semantic acceptability:

1) a *John eats apples and doesn't eat fruit.  
   b John eats apples and doesn't eat meat.

2) a ?*John eats fruit and eats apples.  
   b John eats apples and eats bananas.

3) a *John eats apples and eats bananas in the yard.  
   b John eats apples in the attic and bananas in the yard.

4) a ??John eats apples and saws logs in the yard.  
   b John eats apples in the attic and saws logs in the yard.

5) a *It was significant that he left just then and it was likely.  
   b It was interesting that he left just then and it was significant.

6) a ?*Be careful and did you remember to go straight home?  
   b Be careful and remember to go straight home.

7) a ??John said he had spots and he has small pox.  
   b John said he had spots. He has small pox.

The examples of (1a) through (7a) above are cases of independently well-formed sentences becoming semantically anomalous
when conjoined. (1a), for example, is a case of logical contradiction, and is clearly deviant, although neither of its clauses are independently ungrammatical. Similarly, although more complex and violating extra-logical conditions, the other cases each demonstrate in their own way one central fact: while well-formedness seems necessary for semantic acceptability, it is not sufficient.

(2a), which contrasts with the case in (2b), involves the reader/hearer's knowledge of the inclusion of "apples" within the set of fruit. Where apples and fruit are both objects of the same verb, the speaker has in fact asserted the same proposition twice; (2a) is anomalous in the same way that "That road leads to Moscow and that road leads to Moscow" is anomalous. While such a case breaks no logical constraint, it does break with the conventions of language which demand that two sentences be conjoined in situations where repetition is not called for. 19

(3a) and (4a) are both cases of a similar difficulty. Conventions exist such that adverbial phrases and clauses serve to answer questions about information given earlier, or reflect the speaker's anticipation of information his audience will need to know. In these cases, the locative answers a question about only one of the conjoined clauses. In effect, an answer becomes conjoined to an utterance of a separate status in such cases. (3b) and (4b) show the necessity of
conjoining utterances of identical status to avoid structural deviance. Notice that (5a) and (6a) are also cases of conjoining utterances of separate status. In (5a), the initial clause is introduced by a factive predicate, indicating that the speaker takes the proposition identified by the clause to be a true one. However, in the second clause the same proposition is given a non-factive predicate, a fact which serves to contradict the speaker's committing himself to the truth of the proposition initially. The two clauses, because of the shifted factivity, come to have separate status, such that to conjoin them leads to self-contradiction.

(6a) is a case of an order conjoined with a question; again, there are utterances with separate semantic status here. While both the command and the question are individually well-formed, their conjunction is anomalous due to violation of language conventions. Similarly, in (7a) the scope of the indirect speech predicate *said* reaches across the conjunction to include something that the *speaker* could not acceptably say: *I have spots and I have small pox.*

Thus, for the cases above, a broad range of semantic criteria are revealed, resulting from phenomena as disparate as logical contradiction, structural asymmetry, counterfactuality, inconsistent force, and interpolation within the scope of a predicate of indirect speech. The examples above indicate the existence of a large class of deviant conjuncts,
in which certain semantic or internal structural conditions, which should be preserved across the conjunction have in fact been lost. In its inability to block the generation of conjunctions like those in (la) - (7a), coordination syntax is no more able to block the generation of conjuncts which are anomalous for pragmatic reasons.

The pragmatic case against coordination not only covers conjunctions which are otherwise grammatical and semantically acceptable on internal grounds, but includes cases which are unacceptable in context. At first glance, the field of pragmatics may seem merely more inclusive than that of sentence semantics, but in fact distinct interpretive operations are at stake. As the examples to follow indicate, the forming of hypotheses from conjunctions without recourse to context dooms even simple conjunction pairs to multiple ambiguity. A compositional semantics could specify the possible paraphrases, but would either mark the conjunct as well-formed or would disqualify itself from deciding whether the conjunct was acceptable in context. (8) offers a single reduced conjunct, with four paraphrases which progress in deviance toward complete unacceptability.

8) a John went to the store because he was hungry.
   ?John went to the store and was hungry.
 b John went to the store and then became hungry.
   ??John went to the store and was hungry.
 c John went to the store and couldn't keep from stealing.
   ?*John went to the store and was hungry.
(8) is interesting from another perspective as well. The operations which characterize coordination, like Reduction, contribute serious interpretive problems to a sentence semantics.

Coordination Reduction is a syntactic operation designed to apply within the derivational history of a "compound" sentence. Reduction is possible only when deep structure clauses, represented syntactically by #S₁ ---conj--- S₂#, share one or more identical elements, which may then be recoverably deleted. Seen in this way, Reduction is a transformational account of how sentences like those in (9) are related to and impart the same information as their counterparts in (10):

9)a  John kicked the cat and John seems to regret it.
   b  John flies gliders and Bill flies gliders.

10)a  John kicked the cat and seems to regret it.
     b  John and Bill fly gliders.

As a transformational account, it depends on conjoined phrases being derived from conjoined sentences. Other accounts, like that of Dougherty's, postulate that all conjoined structures, phrase or sentence, are generated directly in the base, and involve no such transform as Reduction. Known as the Phrase Structure Rule hypothesis, this formulation depends heavily on a semantic interpretive component capable of distinguishing between the pairs of examples like those above.
Notice that in (8) the string John went to the store and was hungry presents serious interpretive problems, especially if it is to be generated directly by the base rules, as in the Phrase Structure Rule Hypothesis. First, the interpretive component would have to be able to decide whether strings like this are to be interpreted in the sequential sense of (8b), in the because sense of (8a), in an inferential sense, or in fact as combinations of clauses the grammar ought to have blocked. In the first of these alternate interpretations, it might be taken as a substandard form for saying John went to the store and became hungry. Or, the audience might be expected to infer, depending on the immediate context, statements ranging from John went to the store and bought a great deal of food because he was hungry to John went to the store hungry, and having no money became even more hungry. Likewise, as in (8d), it is potentially an utterance (like John went to the store and the table has tipped over) a grammar should block, except in peculiar or unique contexts. The placement of such apparently unexceptional conjuncts, as that in (8), within discourse or in context produces interpretive problems beyond the scope of an independent sentence semantics.

Rather, a theory of conjunction must be powerful enough to handle both the cases of (11) and (12):
11) a (John has been blind for many years.) *John never sees UFOs and he always sits in the yard.  
b You have to be mistaken about the object you keep seeing. John never sees UFOs and he always sits in the yard.  
c (You should see that crowd of brats Marge has to tend.) *Her husband is a cowboy and Marge rides herd as well.  
d A woman has to pitch in when the ranch is short-handed. Her husband is a cowboy and Marge rides herd as well.

12) a Where did John go and since we are going to play chess, what opening does he like best? John went to the store and never plays P-Q4.  
b What did you just tell me about tonight? Be careful and could you have $5 before I go.

These are cases in which independently unproblematic utterances raise expectations which are inconsistent with the contextual information, and cases in which extremely peculiar conjuncts are in fact acceptable due just to context. Otherwise, notice that in the case of (11), the unacceptability of each conjunct is a consequence of information which allows the reader to construct hypotheses: if John is always outside and there were UFOs, he would have seen them, and if Marge rides herd, then Marge is a cow puncher. While the utterances are grammatical and violate no internal semantic condition, their corresponding hypotheses contradict contextual information.

In (13) below, the (a), (c), and (e) cases violate the conditions necessary for explaining, giving examples, and remaining contextually consistent:
13) a The building collapsed. *The dynamite had exploded and the accounts had been lost.
b The building collapsed. The dynamite had exploded and the structural supports had failed.
c The bull outsmarted the matador again and again. *He would never charge and liked to stand in the water.
d We had never seen a more gentle bull. He would never charge and liked to stand in the water.
e John knew just what to get his wife. *He rushed to the store to buy shoes but bought sandals instead.
f John could never make up his mind about what to get his wife. He rushed to the store to buy shoes but bought sandals instead.

For example, the accounts had been lost is not an adequate reason for the building to collapse, and the speaker had constructed a context with the first clause that made it necessary that his utterance just then be an explanation for the building's collapse. Similarly, the bull's liking to stand in the water belongs in another context, or that of (13d). As well, if John had known just what to get his wife, he would not have changed his mind at the store; in all of these cases, pragmatic or contextual requirements are broken.

Finally, the examples in (14) demonstrate the possible referential ambiguity and range of possible acceptability for conjuncts without context:

14) Edna casually mentioned that it was his wife's birthday. John rushed out to the store and bought a pair of shoes.
a His shoes were an embarrassment everytime he went out.
b His wife loved new shoes above all other gifts.
c  His guru brother-in-law would have to wear them in the restaurant.

d  John never had any idea of what to get her.

e  John always knew just what to get her.

In context, only one of the possibilities in each case will be acceptable. Given such issues as those raised here, and such a range of possible deviation, discussion of the deep syntactic status of conjunction, or coordination, seems to be much less interesting than investigation of the internal and external conditions for conjunction, especially since the former appears to be directly contingent on the latter.

The discussion above has presented a two-pronged attack on the utility of coordination studies of conjunction: a purely syntactic grammar will generate, indiscriminately, sentences which are internally and externally unacceptable. As well, the pragmatic line of attack includes another important type of syntactic insufficiency: a syntactic analysis cannot account for ordering problems in constructions which have conjunct remote structures. This seems to be a more general defect in that such problems also arise in relative clause structures. For example, Sandra Thompson argues that certain classes of relative clauses should be represented in deep structure as conjuncts. She first compares relative clauses in general to examples like the following:

15) I think Frieda likes to cook.

16) That Frieda likes to cook is no secret.
In cases like (15) and (16), the verb of the main clause takes an embedded proposition as an object or identifying description. For relative clauses, she argues, an embedded clause is never syntactically obligatory in just this way. Rather, given examples like (17) and (18), which propositions become main clauses and which become embedded clauses is entirely a matter of what the speaker may assume the audience to know:

17) a The girl I met speaks Basque.
    b I met the girl who speaks Basque.

18) a A girl I met speaks Basque.
    b I met a girl who speaks Basque.

In contrast with (18), (17) demonstrates the role of surface embedding, or ordering, as the case may be, in allowing the speaker to assume certain information is already known to his audience. Thus, the ordering of remote conjoined clauses is constrained. In (17a), the speaker assumes that the audience already knows that he has met a girl, but that they do not know that she speaks Basque. The old information is therefore subordinated, and in some contexts it could be dispensed with entirely. Material which will be old or predictable to the audience is deleted, suppled, pronominalized, or subordinated, depending on the material. In the examples of (18), because the subject noun is indefinite, there is no such opposition and the examples are paraphrases. For (18), an operation more like topicalization seems to be the case,
since there is no outstanding semantic or pragmatic constraint
to be met and the information is new to the audience either
way it is stated.

This section has made at least a partial demonstration
of the need to distinguish deviances of a syntactic
order from deviances of a semantic or pragmatic order. R.
Lakoff makes a similar point in her note in "If's, And's,
and But's about Conjunction:"

Let us try to reserve the term ungrammatical
for anomalies that arise out of violations
of syntactic rules alone. . . . More often,
we will be considering sentences that are
syntactically well-formed, but semantically
deviant for one reason or another.23

This last type she terms "errors of acceptability." Although
the following chapter takes up the notion of "acceptability,"
the discussion above invites a basic distinction between
grammaticality (syntactic anomalies) and acceptability in
its own right (sentences which are well-formed semantically
or inappropriate for a given sense in a given context).
FOOTNOTES

1. In general, the work of Ross, Lakoff, Postal, McCawley, Bach, Fillmore, and Partee (to name only a few of the linguists who have contributed to this revision toward semantics), may be consulted (see Bibliography) for the different stages of development away from the Aspects model.

2. Notice that this is essentially the position held by syntax (or material to be included in the syntactic component) in the Aspects model. See Chapter Two, of N. Chomsky, Aspects of the Theory of Syntax (M.I.T., 1965).


4. In particular, see L. Karttunen: "Coreference and Discourse" (1968) mimeo; "What do Referential Indices Refer to?" (Indiana University Linguistics Club reprint, 1968); and "The Identity of Noun Phrases," RAND mimeo (1967). Reference to Harris' work may be found below, but best known is his "Discourse Analysis," Language 28 (1952), pp. 1-30.


7. While these terms are well-known, for a discussion of the aims of the Prague School, see Josef Vachek, The Linguistic School of Prague (Indiana University Press, 1966).

9. Ibid., p. 5.


14. "Meaning relations," in the larger sense for semantics, would include both pragmatics and speech action.

15. For the place of these issues in the various theories of meaning, see W.P. Alston, Philosophy of Language (1964).

16. See. R.C. Stalnaker, "Pragmatics," Semantics of Natural Language (eds.), Harman and Davidson (1972), pp. 380-397 for an introduction to this topic. For example, on p. 383 he states: "There are two major types of problems to be solved within pragmatics:
first, to define interesting types of speech acts and speech products; second, to characterize the features of the speech context which help determine which proposition is expressed by a given sentence."

17. The set of examples in (1) and (2) is by no means a complete one. Other examples, of real interest but outside of the concerns of the chapter, are offered by Georgia Green, *op. cit.*, pp. 25 & 27:

   i. *Ho Chi Minh isn't one, and LBJ is no saint either.
   ii. *You're a hero, and I don't think you love me either.

18. With regard to this example, at least one syntactic grammar exists which might block this case. The UESP grammar could be construed to handle cases in which contrary moods are conjoined. See "Conjunction," *UESP* (1968), p. 360.

19. Notice that similar cases, involving relative clauses, are odd rather than anomalous, even though they are the logical consequences of their own presuppositions:

   i. The dog bit the man he bit.
   ii. The doctor said what he said.


23. R. Lakoff's footnote 1 to "If's, And's, and But's about Conjunction," *Studies in Linguistic Semantics, op. cit.*, p. 115.
Chapter 3

SEMANTIC CRITERIA AND SENTENCES IN CONTEXT

The Case Against Compositional Semantics

Syntax was the subject of discussion in Chapter 2, with particular attention paid to coordination grammar, and it was shown that although syntactic criteria are necessary for conjunct acceptability (or, more properly stated, that syntax is a precondition for acceptability since sentences must be well-formed before pairing), a syntactic account alone is insufficiently powerful to block obvious cases of conjunct or sentence-pair anomaly. Thus, following the discovery procedure begun in Chapter 2, which is to move from weaker to more adequate criteria, it is now reasonable to ask whether a compositional semantics will adequately block all anomalous cases of sentence pairing. Pragmatic issues will be introduced later in the chapter.

With regard to what is meant by "compositional semantics," two possible sources of confusion immediately come to mind. Compositional semantics should not be identified
with what is currently known as "Interpretive semantics," although there may be fundamental similarities. Neither should it be identified with logical semantics. Specifically, I will take the Katz and Postal\(^1\) model of 1964 as a representative example of compositional semantics and examine its effectiveness for handling cases of conjunction.

The Katz and Postal model was originally aimed to be used in connection with a syntactic component like that of the *Aspects* model and was designed to interpret phrase markers, and to locate type-crossing, ambiguities, paraphrases, and a limited set of presuppositions.\(^2\) It was composed of a dictionary and a set of projection rules:

Thus, the semantic component, if formulated correctly, provides an explanation of the speaker's ability to determine the meaning of any sentence, including ones wholly novel to him, as a compositional function of the antecedently known meanings of the lexical items in it.\(^3\)

It could locate and block a wide variety of deviant sentences, as long as these anomalies were problems of type-crossing, presupposition contradiction, and semantic inconsistencies:

\(\text{la) } *\text{John moved Q-R5 and he fried the king in check.} \)
\(\text{b) } *\text{What did you do yesterday and I know what you did.} \)
\(\text{c) } *\text{Harvey is a judge and sentences mice to life.} \)

For example,\(^{(1\ell)}\) here is a case of anomaly rising from the projection of **sentence** (which will be marked for a [+ Human] object) with **mice** (which will have a [- Human] feature assigned to its dictionary entry).
From the examples of (1), then, a compositional semantics would seem to be sufficiently strong to block many of the anomalies that arise in conjoining sentences. Specifically, it should be expected to block cases (1) through (6) in Chapter 2, the second section (cases like *John eats apples and doesn't eat fruit). Nevertheless, there are many counter examples, or cases of anomaly, which are well beyond the adequacy of compositional semantics to block. Notice that conjuncts may be clearly deviant even when their sentences are independently semantically acceptable and their conjunction breaks no presupposition of either sentence:

2) a *John is sick and John is sick.
 b *John is sick and John is ill.
 c ?*George is heavyweight champion and he can box.

3) a ??Termites chew wood and termites don't chew cedar.
 b *Termites chew cedar and termites can't chew cedar.

The examples of (2) include no type-crossings, are unambiguous, and contradict no presuppositions; yet they are utterances a grammar of conjunction should block, in all but extreme contexts. In (3), while the compositional semantics would block (3b) on the grounds of contradiction, it might also block (3a) on the same grounds, although in fact (3a) is only awkward (wood = class term for cedar).

Similar problems exist with other classes of examples:
4) a. *Elizabeth, adores donuts and the queen, avoids bagels.
   b. *Snowden, did a folio and Tony Jones, was his model.

5) a. *Harry knew Bill after three minutes and three students failed.
   b. Jerome followed Mortimer for three minutes and Pancho chased Marge for three miles.

6) a. ??Frogs have warts and I can't see Psych-movement now.
   b. My monkey has dandruff and brand X goes well with bananas.
   c. I moved N-K5 and I forgot to hit my clock.

7) a. *John rolled out of Boston and John rolled dice.
   b. Ralph rolls dice and Harry rolls drunks.

8) a. ??Harvey sentences vagrants to life and is a judge.
   b. Harvey is a judge and sentences vagrants to life.

In (4) above, while co-reference is preserved, to speak in such a manner is clearly peculiar and somehow out of compliance with the conventions of language use. Yet, a compositional semantics would have to show these cases in (4) as acceptable. Notice as well, with respect to (5) through (8), that not only would the (a) examples be allowed, but such a semantics could not specify why the (b) and (c) examples are allowable (although similar to the (a) cases).

That such a direct case can be made against the compositional model suggests strongly that conjunction and successive sentence acceptability will be determined by relatively sophisticated criteria. Thus, a shift in emphasis is due. The account, if it expects to handle cases like (2) through (8),
(which involve ordering, relevance, and conventions of usage), must move to a consideration of how language users decide acceptability and away from an otherwise formal account of conjoined sentences.

As shown in Chapter 2, formal identity or the co-occurrence of lexical items cannot ensure acceptability. Here meaning hyponymy suffers a similar fate (at least in terms of relations like cedar designating wood, logical contradiction, and the cases of (2)). Conjuncts with identical lexical items and consistent meaning (see (2c)) occasionally are unacceptable while conjuncts with no identical lexical items and apparently inconsistent meaning (see (6c)) can be unquestionably acceptable.

Therefore, usage constraints and less formally statable conventions like relevance and cooperation, and conditions on conjunction like those of R. Lakoff, form the next step in this analysis. From lexical identity (both syntactic and semantic) the discussion turns to topical identity and the semantics of presupposition and deduction.

"Common Topic" Semantics: Presupposition and Deduction

Before coming directly to R. Lakoff's "common topic" proposal and its underlying semantics, it will be useful to return to several of the examples of the last section. Notice
that each of the following presents a conjunction or successive sentence theory with a different problem: 5

1) Conventions of usage
   *John is sick and John is sick.

2) Knowledge of the world
   *Elizabeth adores donuts and the queen avoids bagels.

3) Contrastive stress
   Jerome followed Mortimer for three minutes and Pancho chased Marge for three miles.

4) Ordering
   ??Harvey sentences vagrants to life and is a judge.

While the previous section raised other problems as well, this list illustrates the range of semantic phenomena that must be described by an adequate theory of conjunction. With regard to (1), for example, Grice has pointed out that to repeat a message is by the conventions of conversation to lead one's audience to believe that more is meant the second time. 6 When the audience discovers that the repetition is pointless, it will conclude that the utterance is irrelevant and anomalous. Similarly, if (4) were reordered it would be acceptable, since there seems little point in asserting and conjoining what must be presupposed from the first clause (the fact that Harvey is a judge is presupposed from the predicate sentences in the first clause).

Thus, this range of phenomena may serve as a scale for evaluating the semantic accounts to follow. As R. Lakoff
gives three distinct versions of a semantic constraint on conjunction, each may be evaluated for adequacy in its own right. However, before taking up her proposals it is essential to discuss the semantic theory that underlies them in general. Radically different from compositional semantics, this account integrates presuppositions, deduction, and conversational principles into a single procedure which attempts to describe how speakers and hearers go about deciding acceptability.

Since presuppositions are such an integral part of this procedure, and since the origins of presuppositions figure in the account as well, some preliminary distinctions may prove helpful. Briefly, presuppositions are of different types and arise from different sources. Consider the following:

5) The cat sat on the mat.
6)a John and the other animals finally made it back. 
b The wolf and the other animals finally made it back.
7) Have you moved Q-R5 again? 
8)a The foreman revealed the jury's decision. 
b The foreman reported the prisoner's conviction.
9) John called Mary a cab and then she called him a jerk.

Examples (5) through (9) demonstrate some of the different types of presupposition. (5) is a case of existential presupposition, in that the existence of a cat and of a mat is implied. For (6a), we understand that there are two groups
of animals instead of one; in (6b), to know that a wolf is an animal allows one to know that only one group of animals came back. In (7) we understand that the addressee has moved Q-R5 before the time of the utterance, whether he has just made that move or not. Otherwise, the cases in (8) involve factive presuppositions, or instances in which we take something to be a fact: the jury came to a decision, and the prisoner was convicted. And finally (9), concerns the hearer's knowledge of what it is to "call" someone something or to insult them.

In all of the cases above, the speaker assumes some state of affairs to exist, and, although these assumptions are nowhere asserted, language users are able to recover such assumptions by recognition of such terms as other and again, recognition of factive nominalizations, and by lexical look-ups for items like call. All such cases are matters of internal recovery, or recovery through internal means, of underlying assumptions. However, for the purposes of interpreting sentences in discourse, presuppositions which are internal to contextual sentences, but which are external to the sentences in question, must also be employed. As I shall show subsequently, external presuppositions figure in the third of R. Lakoff's versions of the common topic.

Briefly, the common topic constraint is expressed in terms of "relevance," an "identity relation," and possible reduction to a symmetric predicate, to similar in particular
(the last of these, or reduction to a symmetric predicate, will be taken up in the fourth section). "Relevance," as she uses it, is more of a principle than a constraint: "Two sentences may be conjoined if one is relevant to the other, or if they share a common topic." Therefore, primary emphasis will be placed on her second version, since the relevance principle is not discussed further and is included within the second anyway.

R. Lakoff defines the common topic as "that part of each conjunct of the sentence that is identical." However, although she phrases her analysis in terms of "identity relations" these are clearly unlike those of the lexical co-occurrence variety. Rather, she argues, language users may combine presuppositions from the conjunct with what is asserted in the conjunct and reach an identity relation between clauses by means of a process of deduction.

For example, John wants to make Peking Duck, and I know that the A&P is having a sale on hoisin sauce requires the hearer to know:

a) (Presupposition) Hoisin sauce is the usual accompaniment to Peking Duck.
b) Since it is on sale, now is a good time to buy it.
c) (therefore) Now is a good time to make Peking Duck.
d) to make Peking Duck = to make Peking Duck.
and consequently the speaker/hearer is able to decide that this conjunct is an acceptable one on internal grounds.

Otherwise, R. Lakoff's early observations on conjunction are valuable, specifically those concerning the need to extend the topic to include semantic information, and those concerning the range of possible deviance. She is perhaps the first to point out that "To understand them at all, the hearer must supply, from his knowledge of the world, or from prior discourse he has participated in, additional facts that link something in one conjunct to something in the second." As well, she also observes that "he must make presuppositions about the overt elements in the sentence, and the presuppositions he makes, though they have no overt form in the superficial structure of the sentence, very definitely affect the acceptability of sentences."  

Thus, in terms of principles like these, and in terms of formal operations like deduction from presuppositions and assertions, R. Lakoff's account appears to be a suitable candidate for specifying conjunct acceptability. However, at least for her "identity relation" version of the constraint, this is not the case. In that its principal version relies on an identity relation being found between the two conjoined clauses, it is possible to show an account like this is both too strong and too weak. In certain cases, conjuncts may be discovered to be acceptable without the need of establishing
an identity relation, and in other cases, an identity relation might be established without the sentence being acceptable.

Limitations of the "Identity" Relation

While R. Lakoff's tentative findings clearly fit many facts about conjunction, to resolve such observations into a single relation, that of identity, tends to discredit their initial worth. With regard to usage (see (10) and (11) below), knowledge of the world (see (3) and (4)), and ordering (see (6)), the scale of evaluation set up in the first section, the identity relation stops short of adequacy.

In George Lakoff's early work on the role of deduction in a grammar, deduction and presupposition were used as a formal means of making explicit what a hearer understood from a conjunction, as well as why he took the conjunction to be acceptable. The essential understanding of utterances like "the mayor is a republican and the used-car dealer is honest too" is that the reader/hearer takes this to be one way a speaker may implicitly communicate his belief that either the mayor is honest or that republicans are honest. In such cases, we do not understand the utterance to be nothing more than two conjoined sentences, intended to be understood independently, but to be two premise lines in an
implicit proof, offering sufficient information to draw an implicit third or concluding line. In the Peking Duck example, we understand only that a speaker is suggesting something equivalent to "Now is a good time for John to buy hoisin sauce from the A & P." The fact that there exist topics in common between the two clauses is incidental to what we understand by the conjunct, and the operations are of a logical sort necessary to this understanding.

Whether the common topic is derived through repeated lexical items, lexical look-up producing common semantic features or set-member relations, or through the deductive process outlined above, the constraint is neither necessary or sufficient to conjunct-acceptability:

1) Max builds bombs and Pete flies missions over Thailand.

2) *Army ants invaded the village and the huts were attacked in July.

Although (2) allows the deduction of a topic identity (ants attack village = ants attack village) the conjunction remains peculiar. The relevance of "July" to the conjunct is uncertain. For (1), it is possible to establish a covert common topic (function of the war effort = function of the war effort) where this may not be what is actually asserted by the speaker, who may be implicitly ascribing similar culpability to both Max and Pete. Once this implicit connection has been made, no deduction of a common topic to test acceptability is
necessary; common topics may be a last resort when other interpretation fails. Thus, for utterances like (1), acceptability must be uniquely determined on the basis of the acceptability of their indirect statements in context. Consider (3) and (4):

3) Did you hear about what happened to Edna's cousin? Poor John never saw the train coming. I only hope he knew how to play a harp.

4) John was fired yesterday because he missed his commuter train again. Poor John never saw the train coming. I only hope he knew how to play a harp.

In (4) the final sentence fails acceptability because of the context set out by its initial sentence. Taken together, the final two sentences in both (3) and (4) implicitly state that John had a fatal accident. The unacceptability of this implicit statement in the context of (4) causes the final sentence there to be unacceptable. Thus, identity relations have little to do with acceptability for conjuncts like (1) and cannot guarantee acceptability for conjuncts like (2). The semantic conditions for a sentence's acceptability may, in fact, be in a sentence prior to its immediate antecedent.

In addition, the identity relation fails to show that modality and ordering play a vital part in conjunct interpretation:
5)a John is a used car salesman and Pete is a crook too.
?*Pete is a crook and John is a used car salesman too.

6)a John is a used car salesman and Pete is a crook too.
b ?John is a used car salesman and Pete may be a crook too.
c *John may be a used car salesman and Pete is a crook too.

7)a That furry object is an ape and has a long tail.
b ?That furry object has a long tail and is an ape.

(7) belongs to a class of conjuncts in which the first clause identifies a set or class of objects to which the second clause ascribes a typical property. The relationship is one-way, the audience must be offered the class or set term first. In (6), which is a more complicated case of (5), one can see that while a reader/hearer could still deduce "used car salesmen are crooks" or that "John is a crook" from (6b), such a conclusion is impossible from (6c). (6) also shows the role of modality in conjunction, in that most conjoined clauses are factive, facilitating the deductive process for the audience. In this sense, what is important for processing conjuncts is not modality but factivity, if we see the conjoined clauses as premises. In a case like (5a), the speaker takes it to be a fact that used car salesmen are crooks and that other persons share this knowledge. Notice that the factivity of
This presupposition underlies what is a surface counter-factual claim in (8):

8) Why is John pressuring me to buy Pete's old clunker? Well, John may be a used car salesman and Pete may be a crook as well.

However, perhaps (5) is the best example of a constraint on ordering in conjunction, since it shows that ordering can influence the possible interpretations of the sentence. As a hypothesis, the identity relation proposal leads to the assumption that ordering plays no important part for acceptability as long as a common topic can be located between the two clauses. The importance of ordering for interpreting conjoined sentences may also be approached from a different angle, involving Reduction:

9)a John is a used-car salesman and he is a crook.
   b *John is a crook and he is a used-car salesman.
   c John is a crooked used-car salesman.
   d *John is a used-car salesman crook.

(9c) and (9d) represent fronting of nouns into adjectival positions, demonstrating here that a property noun usually follows a class or set term in a conjunction of this sort. The point here is that there are syntactic, semantic, and pragmatic reasons for constraining the order of clauses in conjunction. A common topic constraint makes no allowance for the existence of these conventions.

In regard to cases like (5a), or those like the Peking Duck example, linguistic conventions are sufficient
to establish the necessary presuppositions for arriving at a common topic. For the following cases, none of which are unacceptable, different considerations are involved:

10) a He asked Agnew what he thought and Spiro said "ok."
   b ?? He asked Spiro what he thought and Agnew said "ok."

11) a John i is cashing his cheque and she's looking for the mechanic j.
    b There is a problem in selectional restrictions here and you should read Aspects.
    c That man on the beach is my brother j and Pedro i said he would meet us here.

(10) demonstrates that constraints exist such that if the speaker expresses familiarity with an individual, he must continue in that mood, but not vice versa. In (11), personal information allows descriptive coreference, whereas such is not the case for general coreference. In short, the internal conditions on well-formed conjunctions are extensive and well beyond the descriptive power of an identity relation.

Symmetric Conjunction

Although never developing her third version of the common topic constraint to its terminal implications, R. Lakoff has suggested that there is a close connection between conjunction and indirect statements of similarity: "perhaps, what one means by symmetric conjunction, and common topic in
connection with it, is 'possibility of reduction by presupposition and deduction to an underlying symmetric predicate.' If this is the case, and I shall try to show that for at least one class of conjuncts it is, then it is possible to speak of sentences like Max builds bombs and Pete flies missions over Thailand as reducing to any one of three possible topic pairs:

1) a) Max is similar to Pete in that they both work in the war effort.
   b) Building bombs is similar to flying missions in that both are functions of any war effort.
   c) Bombs are similar to missions in that both are destructive.

Notice that for the examples in (1), each pair may be expressed as deep structure subjects, fitting R. Lakoff's suggestion that common topics concern "what the sentence is particularly about." However, the range of topics, or themes, points directly to the role that context must play in interpreting conjunction. Thus, as it is the purpose of this section to demonstrate, conjunctions are constrained not only by internal syntactic and semantic conditions, but also by contextual ones (as well as external pragmatic conditions like the hearer's knowledge of the world).

Thus, the earlier distinction between internal presupposition and external, or contextual, presupposition comes fully into play. Sentences taken in isolation necessarily depend only on internal presupposition and deduction for
interpretation; however, sentences in context rarely may be interpreted without contextual information. Thus, while the internal procedure may result in several topics being found for a conjunct, the external or contextual procedure usually limits a conjunct to a single interpretation. This distinction requires some illustration.

Notice that a sentence like Max builds bombs and Pete flies missions over Thailand, when inserted into different contexts, may elicit different interpretive focus:

2) S: Max is no better than Pete. Max builds bombs and Pete flies missions over Thailand. They are both warmongers.
   R: But Max isn't really similar to Pete in that way, because Max can't get a job doing anything else.

3) S: What Max does is no different from what Pete does. Max builds bombs and Pete flies missions over Thailand.
   R: But these activities aren't really similar because building bombs is good for the economy whereas flying missions is not.

4) S: These men may be engaged in different activities but the result is the same. Max builds bombs and Pete flies missions over Thailand.
   R: But, bombs aren't really similar to missions even though both are destructive.

(2), (3), and (4) show that the assumption that surface structures must reflect and be intimately related to deep structure is an insecure one. Regardless of its surface subject or subjects, context must play an essential role in our understanding of what themes a particular conjunct may have.
Turning to internal presupposition, G. Lakoff has stated that "for many sentences it makes no sense to ask whether or not they are grammatical in any absolute sense, but only to ask whether they are grammatical relative to certain presuppositions." Although G. Lakoff takes the presuppositions necessary for establishing acceptability only from the sentences in question, and such sentences are acceptable relative to such presuppositions, if his examples were placed in context their acceptability might also depend on contextual presuppositions. Nevertheless, both of the Lakoffs' proposals concerning presuppositions are primarily concerned with whether the sentence is grammatical or acceptable, given only internal presuppositions. In actual practice, although their proposals seem at least formally distinct, both attempt to establish acceptability (or grammaticality, depending on one's notion of what a grammar should be able to do) by means of deducing an internal identity relation.

For example, given a sentence like (5), G. Lakoff argues that it is "grammatical only relative to the presupposition that calling someone a virgin is an insult."  

5) John called Mary a virgin and then she insulted him.

Although perhaps this claim should be modified to cover only calling (since He called him a hero is undoubtedly strange), it is nevertheless possible to reduce this sentence to Lakoff's
formula \([f(a,b) \& f(b,a)]\), in which the identical functors reflect the fact that the speaker or hearer has presupposed that to call someone something is to insult them. Thus, the above formula is a case of the simple form Lakoff posits to represent what speakers arrive at eventually in their understanding of such sentences. However, it is possible, even essential at times,(as in reading literature or subjects outside our technical competence), to speak of a sentence accurately reporting the beliefs of the speaker, no matter what the audience knows, or believes. Presuppositions seem to be relative to speaker-grammaticality only; consider the case of (6):

6) The mayor is a Republican and the used car dealer is honest too.

Here we know that whoever utters this believes either that the mayor is honest or that all Republicans are honest, or both, regardless of our own beliefs about the honesty of Republicans. In short, this account is informative concerning how conjuncts are understood, but not concerning how conjuncts are acceptable. By the same criteria, one would accept an example like (7) since we know that to be rich is an understated, but true description of someone having "80 million dollars," and yet (7) is decidedly queer:

7) ??John is rich and he has 80 million dollars.
It is the case with presuppositions, as well as with expectations, that they can be made explicit. Such is not the case with implied statements. Contrast (8) and (9) in this regard:

8)a John called Mary a virgin and then she insulted him.  
     b John called Mary a virgin and then she insulted him back, because to "call" someone anything is to insult them.

9)a The mayor is a Republican and the used car dealer is honest too.  
     b *The mayor is a Republican and the used car dealer is honest too because all Republicans are honest.  

This pair of examples demonstrates in the main the difference in status between presuppositions and inferences. Notice that where "implication" demands a conditional with its first member asserted, the process of presupposition is more tenuous:

10) If the mayor is a Republican, then he is honest, and the mayor is a Republican.

11) The mayor (who is honest) is a Republican and the used car dealer (who is a Democrat) is honest too.

12) ??The monkey digs clams and we have literary evaluations too.

13)a ?My mother makes a big impression and Sally wrestles alligators too.  
     b My mother makes a big impression and she wrestles alligators too.

In this series of examples (11), (12), and (13) are meant to contrast with (10), which is a case of explicit implication.
(11) demonstrates that contextual information may be available such that a deduction for a sentence like (6) to the effect that "the mayor is honest" is nowhere needed. Instead, the deduction for (11) might be The mayor is similar to the used car dealer in that although they belong to different parties, both are honest. (12) defies Lakoff-acceptability, but is a statement to the effect that digging clams is similar to literary evaluation, and may be context-acceptable in satirical criticism. (13) demonstrates that even the application of terms like impression are ultimately contingent on their immediate context. (13a) indirectly states that my mother makes an impression by wrestling alligators, which is not the impression that is to be inferred in (13b).

It might be argued at this point that the differences are merely terminological between deduction from internal presupposition and content to a common topic and deduction from both external and internal presupposition and content to an implicit statement. Nevertheless, as I argued in the last section, sentence pairs may have common topics and be unacceptable; yet, with regard to R. Lakoff's third version of the common topic constraint, sentences with similarities or that allow the inference of a similarity predicate are acceptable. Their acceptability seems to stem directly from the recovery of this symmetric predicate and the subsequent
interpretation it allows. The limitation of "topics" to "what the sentence is particularly about" seems to be crucial.

For example, the presuppositions internal to Max builds bombs and Pete flies missions over Thailand can include a surprisingly large range of material:

14)a building bombs and flying missions are war activities
   b bombs and missions both have to do with flying
   c Pete may be dropping Max's bombs on Thailand
   d bomb making and flying both require skill

As (14b) indicates, to reach an identity relation, or even a similarity relation, it is difficult to make a firm distinction between an association and a presupposition, since both depend only on a single utterance for their formation. What is important for an example like this is not that we are able to deduce back to a similarity or to an identity relation between Max's action and Pete's action, but that the utterance in context permits interpretations like: "Building bombs is to participate seriously in the war effort," or "What Max does is just as consequential as what Pete does."

Consider the following:

15)a Max and Pete are great bowlers, with steady nerves. Max builds bombs and Pete flies missions over Thailand.
   b Pete turns her on, but Martha will probably marry Max. Max builds bombs and Pete flies missions over Thailand.
c Compared to Pete, what does Max know about Southeast anywhere? Max builds bombs and Pete flies missions over Thailand.
d Sidney got the introductions completely mixed up. Max builds bombs and Pete flies missions over Thailand.

Each of the examples of (15) are acceptable, but in the (b) and (d) cases, no recourse to identity relations between the clauses is necessary for determining acceptability. For (a) and (c), where (c) offers a comparison for difference rather than for similarity, an audience does have to examine the two clauses relative to one another. (15a) is acceptable in context not just because one can deduce that the two actions are similar, or because we can deduce from internal presuppositions that both are part of the war effort, but because of implicit statements like "Max and Pete have steady nerves because they have occupations which demand steady nerves," deduced from contextual information.

In the final section of this chapter, the discussion will turn to the problems involved in recovering an underlying symmetric predicate (similar is the example I used throughout). Thus, the procedure begun in Chapter 2 ultimately reaches the question of pragmatics or context.

**Similarity Predicates and Pragmatic Recovery**

While in Chapter 2 a preliminary definition of pragmatics designated the reader's "knowledge of the world"
as the basis of its operations, this definition subsequently has come to include a knowledge of immediate context also. "Context" emerges, then, as a crucial topic of discussion for discourse, particularly from the point of view of strengthening conjunction theory. Recall that knowledge of the world formed part of the information a reader could gather from a conjunct and use in reaching a common topic. In the third section, as in the fourth, the corresponding identity relation proposal, including global knowledge, was found inadequate for discourse on the grounds that it failed to screen out contextually anomalous conjuncts. Clearly the contextual criterion, which current conjunction theories lack, is an important one. But, notice that while context is spoken of as a "criterion," its candidacy is actually founded on certain interpretive operations that figure in processing conjuncts. As I pointed out in the fourth section, one of these is recovery.

Concerning contextual recovery, to avoid confusion, two topics must be kept distinct. The alternatives for what is to be recovered are easily confused with the operation itself. I argue that conjunct (or successive sentence) acceptability depends greatly, when implicit statements are involved as they are here, on a single interpretation. Recovery of a symmetric predicate is matched in importance with the objects of the predicate, since, as I pointed out in the
fourth section, different interpretations are possible. Recovery may be seen as the reversal of the process of deletion (where deletion takes place just because contextual recovery is possible).

Thus, on reading a particular sentence in a discourse, an audience may deduce an implicit statement from the sentence and its antecedent. At this point, the implicit statement, especially where several are possible, becomes the target for the acceptability decision. If at least one implicit statement fits the context, then the sentence will be connected and reasonable in its immediate context. If not, it will be considered odd or deviant. Therefore, the recovery of deleted material is crucial to meeting the criterion of contextual acceptability.

It is necessary to distinguish between the different possible objects for similarity predicates, for it is between these objects that readers must decide in recovery. Postal's work in this regard is important, in particular his distinction between "entity" sentences and "property" sentences, corresponding to the (a) and (b) examples below: 18

1) a Max is similar to George in the way he treats girls.
   b The way Max treats girls is similar to the way George treats girls.

2) a Max is similar to Pete in colouring.
   b Max's colouring is similar to Pete's colouring.
Notice that the *in the way* type is both syntactically and conceptually different, expressing similarity of *manner* rather than property or attribute. Postal also formulated a Property Factoring rule to stand for a "sequence of rules" which operate to restructure entity types into property types. Postal's claim here is not a formal transformational one, but it seeks to express the generalization that the two types are related.

If we assume that his rule operates freely on entity sentences, (3b) would be the "property" form of entity sentence (3a):

3)a Max and Pete are similar in that they both swim.
   b Max's swimming is similar to Pete's swimming.

However, due to the fact that *similar in that* is always followed by one or more factive clauses, e.g.,

4)a *Max and I are similar in that he hopes to enjoy bullfights and I enjoy bullfights.*
   b Max and I are similar in that he enjoys bullfights and I enjoy them too.

(3b) above may not be understood in the manner sense, but in the factive sense, as in (5):

5) Max's swimming (after his heart transplant) and Pete's swimming (after his lung collapsed) are similar (in that they are surprising, etc.).

Notice in (5) that the subsequent *in that* clause typically contains a factive predicate. There are, then, three distinct
types of constituents which occur with similar to specify respects of similarity: a property type, (2); a manner type, (1); and a factive type like (5). Postal's factoring rule works on any of the three.

The material above argues that the similarity construction is in fact composed of three conceptually distinct types. Syntactic evidence can be brought to support this same contention. As one might expect, factive types take only the sentence adverbial similarly in discourse, and manner types take only manner adverbial similarly:

6) a Max and Pete are similar in that they smoke.  
   b Max smokes. Similarly, Pete smokes.

7) a Max and Pete are similar in the way they smoke.  
   b Max smokes a certain way. Pete smokes similarly.

8) a John and Mary are similar in that John has red hair and Mary has red hair too.  
   b *John and Mary are similar in the way John plays chess and in the way Mary plays chess too.  
   c *John and Mary are similar in the color of his hair and in the color of her hair too.

Finally, coming directly to the issue of contextual ambiguity, usage of in that S, already shown to be potentially three ways ambiguous, is further complicated by its frequent paraphrasability for "because" clauses:

9) a Fred and Pete are similar in outlook because they are brothers.  
   b Fred and Pete are similar in outlook in that they are brothers.
(9) presents two sentences which are semantically synonymous but lexically distinct. In looking at utterances with similar then, the reader/hearer must not only examine the respect of similarity for property-manner differences but must also (where objects like in outlook precede the in that S clause) examine the utterance for a causal or reason adverbial connection. Thus, a deep structure analysis showing conjoined entities followed by a similarity predicate and respect clause is not nearly deep enough to express the causal versus property distinction. Where similarity predicates occur in isolation, or without an accompanying respect clause, a four-way ambiguity is possible.

10) Max and Pete play golf, but both of them are awful at it. ??They are similar. In general, their athletic ability is poor.

Max and Pete can be similar here in that they play golf (factive), in the way they play golf (manner), because their athletic ability is poor (reason), or from unspecified shared attributes like appearance or number of teeth (property).

Thus, a recovery operation is faced with different underlying structures for constructions with similar as predicate. In fact, of the three principal types or respects of similarity identified above, each could be represented in deep structure as having its own unique head noun: Event, Manner, and Property. Moreover, a sentence like John smokes
cigars and the cat smokes cigars too (or John smokes cigars. The cat smokes cigars too), even if reduced to John and the cat are similar in that they smoke cigars, would typically be given a structural description which left the respect of similarity unspecified: 20

Thus, each of the three types above would be subsumed under a single structural description. In this regard, it should be noted that there is a fundamental difference between phrasal adverbials and the examples of respect clauses used to this point. In many ways, depending on the analysis one chooses, could be appended as an adverbial to the VP dominating similar, doing away entirely with the dummy marker IT and its matrix sentence.

Postal's observation that what are similar are not entities but properties of those entities, together with my arguments that manners, events, and actions may also be similar, leads logically to the conclusion that the formula
x and y are similar is simply the surface form of a proposition involving properties, events, actions, etc. What appears to be a surface adverbial clause may in fact be the factored predicates of two sentences, the NP's of which having been raised into a main clause with similar.

To meet this difficulty, I have been suggesting an analysis of similar in that S in which similar holds not between entities but between sentences, the subject NP's of which may be raised into a single entity sentence on reaching the surface, i.e.:

```
#S#
    NP
  EVENTS  S₁  -- conj --  S₂
    John smokes cigars   cat smokes cigars
```

Such a deep structure representation preserves the generalization that not only must the underlying (or implicit) similarity predicate be recovered, but the respect of similarity (represented here by head nouns) must be recovered as well.

Thus, to return to the fourth section, cases like (11) below come to have interpretations like those in (12):

(11)a  Max and Pete are great bowlers, with steady nerves. Max builds bombs and Pete flies missions over Thailand.
b Pete turns her on, but Martha will probably marry Max. Max builds bombs. Pete flies missions over Thailand.

12)a Max's building bombs is similar to Pete's flying missions over Thailand in that both activities require steady nerves.

b Flying missions is different for Martha than building bombs in that it is (safer, better paying, etc.).

As (12a) and (12b) show, context is needed for deciding which symmetric predicate (similar or different) is to be recovered, and for discovering or recovering the respect of similarity or difference. Of course, by recovery in these cases, I do not mean that (11b) represents the surface structure of an underlying (12b) but only that (12b) is the implicit statement by which a speaker could say Pete flies missions over Thailand acceptably in a context like that of (11b).

In Chapter 4 to follow, the discussion will remain generally on the subject of implicit statements and the criterion of immediate context. There I show that symmetric predicates (excluding types like met and married) do not designate the only relations between sentences, and that recovery is not the only operation by which readers decide that sentences are connected and acceptable in context.
FOOTNOTES


2. Entailment and presuppositions are handled in the discussion of questions. In particular, see p. 117.


5. I list here four principle problems, but there are many others possible. For example, a compositional semantics would block cases of syllepsis, a rhetorical device, where these should be allowed:

   i) He left in his car sand a blind rage.
   ii) Here tears ran down her cheeks and his bank account.

   A dictionary for such a semantics does not lend itself to expressing conventions like these, or those which block (1).


7. There are well-known controversies over the notion of "presupposition," about whether presuppositions are assertions themselves and whether they necessarily supply preconditions for some statement to be true. Fillmore's definition is generally the one used in this study: "We may identify the presuppositions of a sentence as those conditions which must be satisfied before the sentence can be used in any of the functions just mentioned." C. Fillmore, "Types of Lexical Information," *Working Papers in Linguistics* #2 (Ohio State University, 1968), p. 83.


10. *Ibid.*, p. 120.


15. Note here that external assertions and presuppositions are used in interpretation. In M. Masatake's "Discourse Presupposition," *Papers in Linguistics* 5:2 (Summer, 1972), pp. 300-320, at issue are presuppositions (internal to the sentence itself) which are about the surrounding discourse. The two approaches should not be confused since they are exactly opposite.


20. For example, see G. Lakoff, *On the Nature of Syntactic Irregularity*, NSF-16 (1965), Appendix F.
Chapter 4

RECOVERY, RECONSTRUCTION, AND INFERENCE

The Place of Reconstruction in Conjunction Grammar

In the previous chapters it has been possible to move by a step by step procedure toward a theory of sufficient adequacy to block unacceptable sentence pairs. Beginning with syntactic well-formedness, which is a precondition for sentence pairing, the discussion has proceeded in terms of progressively stronger criteria and each successive criterion has been based on the inability of the previous criterion to block certain classes of sentence pair anomaly. Thus, syntax failed on semantic and pragmatic grounds, compositional semantics failed on presuppositional and deductive semantic grounds (the semantics of the deduced identity relation), and presuppositional semantics failed on contextual pragmatic grounds. Concerning contextual pragmatics, as I argued in the fifth section of Chapter 3, this criterion is adequate for one restricted class of conjuncts. Where sentence pairs are not deviant in any of the respects identified thus far

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(syntax, compositional semantics, usage conventions, ordering, etc.), where such pairs permit the recovery of an implicit statement containing a symmetric predicate, and where the implicit statement is acceptable in immediate context, the sentence pair will be acceptable.

It should be noticed that as an interpretive operation, recovery (based as it is on context and presupposition) is radically different from the interpretive operations that preceded it. These early operations, at least prior to the common topic account, could be classified under the heading of recognition, since neither presupposition nor deduction were required for them. Also distinct from recovery, and to be discussed in this chapter, are those operations that draw implicit statements from conjunct pairs where no similarity predicate is involved. As these operations do not involve recovery, I class them under the heading of reconstruction and they include inference, reaching consequence relations, and ad hoc deductions. Thus, I argue that abilities beyond the mere recognition and recovery of internal syntactic, semantic, and pragmatic facts are necessary for readers to decide acceptability for many conjuncts and sentence pairs.

Notice that late in Chapter 3 a distinction was made between deducing an identity relation from internal presuppositions and deducing what is an implicit statement from contextual presuppositions. This distinction relied on the
difference between presuppositions which are carried by an utterance, and presuppositions which are applied in the interpretation of an utterance in exactly the same way external or contextual information is applied:

1) a) As you can imagine, the difference between Henry's income and John's income is great. Henry sells caskets and John digs graves.
   b) Neither Henry or John have what you could call pleasant jobs. Henry sells caskets and John digs graves.
   c) If you want to know about prices, don't bother asking John. Henry sells caskets and John digs graves.

For both (1a) and (1b) an underlying symmetric predicate is indicated by context: different for (1a) and similar for (1b).

In (1c), where the second sentence explains or gives information in explanation of the antecedent claim, neither symmetric predicate is called for.

Although all three cases in (1) seem to depend uniquely on context for interpretation, there is, in fact, a crucial difference between the symmetric cases and (c). In (a) and (b) Henry sells caskets and John digs graves is open to restructuring as Henry's income is different from John's income in that Henry sells caskets and John digs graves and John's job is similar to Henry's job in that neither are pleasant. Our understanding of (c), whatever we may want to ascribe to the role of expectations about the world or conditionals, may not be expressed in a way similar to (a) and
(b). Rather, the speaker here intends to convey something structurally dissimilar to (c), like: Ask Henry about the prices. Indirect statements like this are contingent on the reader/hearer's knowledge of the world and ability to hypothesize. Here, the reader/hearer must know that those who sell products best know their prices, must expect that the speaker believes him to want to know about the prices of caskets, and must hypothesize that "If Henry sells the product, then he is the proper person to ask about the prices."

Moreover, no strict line of distinction between recovery and reconstruction can be drawn, for even in the (a) and (b) cases, the cases in which, ostensibly, only recovery of deleted structure is called for, context and outside knowledge are still needed for interpretation. For (la) we need to know that selling jobs commonly pay better than digging jobs and for (lb) we need to know of taboos about the "unpleasantness" of death. In a sense, the spectrum from recovery to reconstruction is one of decreasing public knowledge; in moving toward reconstruction, a reader seems to move away from knowledge strictly of the language toward knowledge of the world and ultimately, toward personal knowledge and immediate sources. In this regard, deictic terms like here and there depend on uniquely personal knowledge of the utterance situation. Likewise, use of proper nouns in sentences will often require personal knowledge, although in cases like
Queen Elizabeth such knowledge would count as one's knowledge of the world. On the other hand, our understanding of common nouns, and even conventions of usage count as part of our knowledge of the language and not information that we might have to look up.

Although recovery is a necessary corollary to many grammatical operations, including anaphora, pronominalization, and deletions of different kinds (thus it is necessary for interpretation of sentence pairs where these operations have occurred), in no case is it independently sufficient to establish acceptability:

2)a  His prize has just arrived and it is a good one.
   b  *His prize has just arrived and Granny just threw one into the disposal.

3)a  Her prize flower has just bloomed and it is a good one.
   b  *Her prize flower has just bloomed and we saw one in the barber shop.

4)a  Betty drives a truck and so does John.
   b  *Betty just had a child and so did John.

5)a  John drives a hearse and Bill digs graves.
   b  *Andy raises poodles. My french maid just quit.

6)a  Hank's wife is pregnant and he is another W.C. Fields.
   b  *Harry is an arsonist and we saw Buster Crabbe once.

Examples (2) through (6) are, respectively, cases of anaphoric pronominalization, anaphoric recovery (bloomed becomes bloom),
lexical identity, lexical look-up, and pragmatic look-up. Although in each case recovery is possible, in no case can it result in utterance acceptability. For example, the fact that W.C. Fields was a celebrity can be recovered through pragmatic look-up, but it is only the fact that he disliked children that is essential for (6a).

It should be noticed that the pragmatic constraints on acceptability are stronger for conjunction than for other structures, like questions and replies. For example, Labov's Q: Are you going to work tomorrow? R: I'm on jury duty shows that lexical and pragmatic look-up are often sufficient to establish reasonable answers. If duty is marked in the lexicon for "obligation," and to work is interpreted as where the questioned person is to go, then jury becomes a "reasonable" alternative in that the individual is obliged to go there instead of to work. However, if to work is also marked with "obligation," in the sense that one is usually obliged to go, then jury must be interpreted pragmatically as a form of societal obligation higher than that of work. Forms of internal recovery, syntactic, semantic, or pragmatic, are never sufficient to establish contextual acceptability for conjuncts, for uniquely contextual information is always needed for interpreting them.

Thus, this chapter does not proceed to additional criteria for conjunction anomaly, but begins to explore the
role of immediate context in conjunct or sentence-pair interpretation. The interest here is in a reader's ability to determine that sentences are connected for context; the interpretative operations that figure in acceptability decisions necessarily figure in unacceptability decisions as well.

The Place of Inference in Interpreting Successive Sentences

As I shall argue subsequently, what is ordinarily taken to be a matter of inference is in many contexts a matter of deduction. Therefore, the early treatment of inferential conjunction here should be taken not principally as an account of how language users interpret all conjuncts, but rather as material given to demonstrate the difference between such conjunction and symmetric or similarity conjunction. The term inference may be used to cover a wide range of language behavior, from presuppositions to poetic interpretation, and the distinction between it and implication is difficult to apply in many cases. Geis and Zwicky use inference where Grice might use implication. Since a consistent bias throughout this work has been to take the point of view of the audience, and inference expresses behavior by the audience, this term will be used, with reservations. Otherwise, the phenomenon is little understood and studies on this subject are only now in progress; nevertheless, the asserted content
or statement made by an utterance is rarely all the speaker intends an audience to understand by it. A theory of discourse must therefore account for the audience's ability to properly interpret utterances apart from what they assert.

Inferential conjunction occurs when two conjoined clauses are such that they invite the audience to infer a third, or additional, clause. As in the case of indirect speech-action (a king utters *It's cold in here*, but means *You are commanded to close the window*) speakers have the option of making their intentions explicit, or, by uttering sentences which with context lead the hearer to infer the intended material, of leaving their intentions implicit. Conjunction requiring inference is such a case of indirect communication, relying on the ability of the hearer to reconstruct from context.

The crucial difference between symmetric conjunction and inferential conjunction corresponds to the difference between contextual recovery and contextual reconstruction. In the case of conjunction reduction, as in the case of syntactic deletion in general, any deleted material is recoverable. In the case of inference conjunction, however, only reconstruction is possible, since the inferred material is not strictly a part of any structural description of either clause. Consequently, the issue for symmetric (similarity) conjunction is superficially unclear. On the one hand, one
might want to say that from our understanding of the conjuncts we "infer" that a similarity relation must hold. Thereby, since deduction and knowledge of the world is involved, the operation must be one of reconstruction. Nevertheless, transformational theory is sufficiently powerful to deal with deletion of a deep predicate followed by suppletion by \textit{and}, where conventions of interpretation are such that an audience would recover the predicate. In this way the surface structure of a similarity conjunction, where it is marked only by \textit{and}, can be said to exist in a deletion and paraphrase relationship to the explicit form or remote structure containing the symmetric predicate. In fact, symmetric conjunction holds a median position between reconstruction and recovery, as the audience must rely on context to recover which of several possible underlying structures is meant. Notice that either (b) or (c) below could appear on the surface as (a):

\begin{itemize}
  \item[(a)] John drives a hearse. Bill digs graves.
  \item[(b)] John is similar to Bill in that one drives a hearse and the other digs graves.
  \item[(c)] John's driving a hearse is similar to Bill's digging graves in that both are involved in interment.
\end{itemize}

Following the issue of context in interpretation, I now turn directly to inference conjunction, which is well within the domain of reconstruction.

As I argued in the first section above, recognition and even recovery, although figuring in interpretation
and necessary operations in themselves, are not sufficient to guarantee contextual acceptability or to reach implicit statements. Thus, although the cases of inference conjunction below often contain cases of pronominalization, this fact alone does not ensure acceptability:

2) John wants to meet the Queen and I know her.

3) I just have to see the new building and Ed is going to drive by it.

4) These hats are just out and yet Helen claims she has one.

5) We just checked the prints on the weapon. They're Fred's.

6) Frank hates kids. His wife is babysitting three tonight.

Placed in context, cases like these depend uniquely on their antecedent material for interpretation:

7)a You want to know why John's been bothering me all week. (John wants me to introduce him to the Queen.)

b How do I know that she will wait a little longer before granting an audience? (The Queen will cunningly get the advantage in the meeting.)

8)a I'm sure we can get Frank to join us tonight. (Frank will want to get away from the kids.)

b Don't you think we should drop in on Frank and his wife tonight? (Frank may be dangerous, a visit would improve the atmosphere, etc.)
As (7) and (8) show, the implicit statements of (2) through (6) depend on context; if a reader assumed an (a) interpretation in a (b) context, he would find the conjunction or sentence pair anomalous and unacceptable.

On the other hand (9) shows that while common elements may appear in inference conjuncts, similarity conjunction is not at stake:

9) *John and I are similar in that he wants to buy a new ruler and I have one to sell.

No deletions or paraphrase relations count in the reconstruction of the implicit statement in (2). The mere fact that both clauses contain the word ruler is insufficient to establish a common topic of similarity and a recovery operation will produce no implicit statement of similarity. In addition, the clauses like those in (2) are co-relevant precisely due to our ability to bring our knowledge and expectations about the world to the utterance, and to infer the implicit statement (John could buy a ruler from me) from the two assertions. Notice that each of the examples above is an utterance which could be used to answer or as an indirect answer to the following single clause questions.

10) Why do you think that John might buy your ruler?

11) Why are you interested in finding Ed?
12) Why do you think that Helen is lying about her hat?

13) Why do you think that Fred is the murderer?

14) Why doesn't Frank want to go home tonight?

Notice too that because (10) through (14) are *why* questions, or questions that call for explanations, their potential answers, ((2) through (6)), are more direct than they might at first seem. For explanations typically involve either causes or reasons for belief (see Chapter 5), and (2) - (6) are nothing less than sufficient reasons for certain beliefs expressed by (10) - (14). In the particular cases of (11) and (14), notice that some special context needs to be assumed in order to interpret these. However, what is important here is that, first, this set of examples distinguishes a unique class of conjunction, and second, that G. Lakoff's claim that conjunctions will be grammatical relative to information and deduction does seem to apply here.

Assuming that (5) is representative of this type of conjunction, we would not expect to be challenged if we were to say that this utterance was an indirect way of stating a belief such that Fred was the murderer, given our knowledge of contexts in which such an utterance may be used. From the speaker's knowledge and general information in cases like this, Lakoff might contend, along with Thomason, that we supply an expectation about the world such that, no evidence
to the contrary, the person whose prints are on a murder weapon is the murderer: "a belief on the part of the speaker that, according to some general rule" some utterance should entail some other utterance. Grammatically speaking, the language user's knowledge of the world has historically been an object which many linguists thought could never be described. Early arguments against the inclusion of semantics in a grammar often rested on the assumption that such an inclusion would involve the speaker's knowledge of the world. Thomason has implicitly questioned this assumption by pointing out that whatever past experience two speakers may have they may certainly arrive at the same expectation about the world independently. Such expectations are nothing more for Thomason than general rules, or pragmatic postulates.  

Nevertheless, "no evidence to the contrary" is an important phrase here because the question of what would be evidence to the contrary is essential. (5), according to the strongest form of the expectation hypothesis, would always be understood in terms of the expectation if prints are on the weapon, they will in all probability be the murderer's and few speakers will process this sentence or interpret it without taking this expectation into account. However, if we knew from prior context that Fred was a clumsy policeman who had picked up the weapon, then this would constitute "evidence to the contrary." Yet, the question must be asked
for this example and every other such example that when we are contextually informed, does this expectation arise at all? Are expectations context-independent and arising in every case or are expectations context-dependent and arising only from the context? Is "knowledge to the contrary" simply a matter of normal contextual instruction about how to take certain utterances? The answer to these kinds of questions is beyond the scope of this work, but should be considered at the level of a theory of semantics. If we read (5) in the context in which Fred is a policeman we may not consider (5) to be a statement of belief or a charge that Fred is the murderer at all.

Consequence Relations Between Successive Sentences

While a sentence grammar must attempt to describe all explicit or morphologically marked sentence relations, like so, and, however, thus, therefore, as a result, etc., a discourse grammar must confront cases in which such relations are left unmarked and inexplicit.

1) a He finally promised to leave. They called the dog off.
   b He finally promised to leave, so they called the dog off.
   c He finally promised to leave. Thus, they called the dog off.
   d He finally promised to leave. As a consequence, they called the dog off.
He finally promised to leave. They then called the dog off.

(1a), although it could be taken to be no more than a statement of temporal order of events, is open as well to an interpretation that the dog was called off as a consequence or a result of his promising to leave. Clearly, considerable knowledge of the world will be necessary for a reader to cover all such cases, particularly if the reader is unaware of such facts as "people have guard dogs." Nevertheless, the consequence relation is a major one; perhaps as many continuity judgements are made on the basis of this relation as any other.

Two significant problems haunt the analysis of consequence relations, from sentence grammar and performance theory. At least in the case of so constructions, it will be essential to show that such constructions are separable in discourse, since so clauses have been considered subordinate. On the other hand, relations marked by thus, and therefore commonly have the force of CONCLUDE. Thus, these two topics will be included in the discussion.

Notice that for the purposes of this section, "consequence" as a relation must be restricted to independent clauses. It could also be said to apply adverbially in restrictive clauses which are not separable in discourse. Other than "consequences" typical adverbial usage, and the occasions in which it appears between independent clauses, it also
appears between sentences marked by sentence adverbials like thus, therefore, hence, so, as a result, etc. Finally, it appears in the late stages of texts, marked by discourse adverbials like, in conclusion, finally, in summary, etc. Because its applications are many and the relationship is difficult to define, I will briefly outline its principle uses, purposely stressing the construction in which so holds between independent clauses, as this construction reveals much about the larger relations.

Taking first the adverbial sense of the consequence relation, examples like (2) and (3) are typical.

2) It was so he could swim that Mike brought his trunks.

3) Mike brought his trunks so he could swim.

The examples contain adverbials that are roughly synonymous with purpose adverbial clauses, usually marked by for the purpose and in order to. However, there are important differences. Consider:

4) Mike's purpose in bringing his trunks was to swim.

5) Mike brought his trunks in order to swim.

Taking (4) and (5) as representative of the previous examples (2) and (3), with the exception that these have the purpose adverbial actually made explicit, one can see that could is
removed from the last example. Even if (5) was changed to Mike brought his trunks in order to be able to swim, (3) would have to be changed to Mike brought his trunks so he would be able to swim. Either case shows the so types to take a conditional would or could marker. The importance of this conditionalization of the so clause will be made apparent after a discussion of the so construction between independent clauses.

It can be seen that, within sentences, so constructions do not have the same constituent structure as reason adverbials, although they resemble reason adverbials closely. So, holding between independent clauses, marks consequences and results rather than reasons.

6) John was in town, so he stopped by.

Here we can't maintain, seriously, that John's reason for stopping by was that he was in town (even though speakers may offer this as an only reason), but rather one must say that this stopping by was a result of his being in town. To put the above parenthetical material more accurately, what the speaker says is, "I was in town so I stopped by." Even in the case of John stopped by because he was in town, we only understand the reason adverbial in a result sense, as if John's stopping by somehow resulted from his being in town.

More importantly, in the case of so constructions each independent clause has independent force, which provides
an interesting test of whether a construction has an independent clause. T.H. Peterson makes an initial analysis of conjunction of independent clauses, where each clause has separate force. He analyzes exactly such clauses in Moore, a Niger-Congo language, and points out that in Moore both independent clauses must include and be marked by the declarative performative particle me, whereas in sentences with dependent clauses, only the main or matrix clause takes a me.

For English, although he points out that there is no such marker available as in Moore, he notes that negation cannot extend in scope over more than one sentence which is in conjunction with another sentence. To do so, it would have to extend out of the complement of one clause, over its underlying performative verb, and into the next clause. Peterson argues that there are no such negatable performatives. As far as so constructions are concerned, the first clause is usually asserted (although clearly this is not necessarily the case, as sentences like I promise to leave, so call off your dog are certainly acceptable) and the second clause usually has the force of CONCLUDE.

If a grammar of conjunction is to be equal to the task of accounting for relations between sentences, then it will have to account for consequence relations. I show below that sentences with two independent clauses and so holding between them are not adequately representable in a sentence grammar (they are like inference conjunction in this respect)
and argue from this fact that a grammar of sentential conjunction, depending on sentence grammar, cannot handle such a relation.

To begin with, a "no" answer to (7) below, does not deny the factivity of either clause. It denies only the assertion that the last clause is the reason, or a sufficient reason, for the event expressed by the first clause, i.e., "No, that he was hungry is not the reason that he ate the cake."

7) He ate the cake because he was hungry.

8) He was hungry, so he ate the cake.

However, a "no" response to (8) does not affect only the so or consequence relationship. Since one cannot say "*He was not hungry, so he ate the cake," except in unusual circumstances, but only "He was not hungry so he didn't eat the cake," denying factivity for both clauses, it can be seen that negation leaves the so relationship intact. This means that negation somehow operates below the so operator, whereas in the reason adverbial it operates on the highest simplex sentence.

(9) and (10) are unacceptable because in both cases the first clause cannot entail the second. Put in other words, the second clause is not consistent with expectations provided by the first.

9) *He was not hungry so he ate the cake.
10) *He was hungry so he didn't eat the cake.

11) He was not hungry so he didn't eat the cake.

However, since (11) is acceptable, it follows that the first clause, which has the force of assertion, must in some way depend on the presence or availability of a conditional like:

12) If John was hungry, then he would have eaten the cake.

In this way, so constructions stand in a converse relation to but conjunction; whereas for but the expectation is denied, for so it is affirmed. (13) shows these facts:

13) If there was a draft, then John would shut the door.
   a There was a draft so John shut the door.
   b (ASSERT) There was a draft, but John didn't shut the door.

   /However, Nevertheless, etc. John didn't shut the door.

In this way, sentences like Marsha came home so Bill shaped up seem to be assertive reflexes of conditionals; i.e., for the entailment relation to succeed, an underlying conditional must be posited.

It might be objected that the first clause is not always uttered with the force of assertion and this would invalidate the claim of an underlying conditional. For example, consider:
14) I'm warning you that the ice is thin, so be careful.
?I'm warning you the ice is thin, so you might break through.

15)a I believed that John knew that we were after him because he tried to escape.
b *I believed that John knew that we were after him because I told the officer to pick him up immediately.

16)a *I believed that John knew that we were after him, so he tried to escape.
b I believed that John knew that we were after him, so I told the officer to pick him up immediately.

In cases like (14) and (16) respectively, where the first clause is not given the force of assertion and is non-factive, there are problems of scope. As shown in comparison with the reason adverbial example, in these cases the so clause must not express the consequent of a clause subordinate to I believe or I warn, but must be the consequent to the entire structure before it. This in no way invalidates the claim for an underlying conditional as it would be reasonable to tell the officer to pick John up immediately if we thought that he knew that we were after him.

Alice Davison's well-reasoned proposal that S1, so S2 constructs are derived from an underlying structure with IF as a two-place predicate, would seem to be an attempt to incorporate the requisite conditional and asserted first clause together into one underlying structure.
Moving to the larger and more inclusive occasions of the consequence relation, or that which holds between sentences, the following are representative cases:

18) Unless these constraints can be formulated and shown to follow from independent principles, the proposal to treat generics as higher verbs has no motivation other than the facts of (14-17) and a certain vague notion of logical similarity. Hence, the Equi-NP argument for quantifiers as higher verbs is hardly supported by the claim that Generic is a higher verb.

(Jackendoff, "On Some Questionable Arguments about Quantifiers and Negation.")

19) John followed me home. Thus, he must have suspected that I was the Thief.

(18) and (19) exemplify the force of conclusion for utterances which exist in consequence relations to the material that has appeared before then. Often, the sentence marked by hence, thus, so, therefore, etc. will constitute the last line of an underlying proof. Often arguments take the form
of some assertion which is followed by a series of arguments or reasons for believing the assertion true, and the claim is repeated at the end of the argument, preceded by a consequence marker.

20) This is a permanent book. Our paper is opaque; it will not discolor or become brittle with age. Pages are sewn in signatures, and the binding will not crack or split. Thus, this is a permanent book.

In this way, thus, therefore, and hence serve as force showing devices for CONCLUDE and occasionally REASSERT.

Conjunction and Invited Inference

The material in the preceding sections of this chapter has raised certain fundamental questions, both of method and of material. It is observably true that inferences can be drawn across discourse, based on sentences which are located far from one another in a text. The inference operation identified earlier, although materially adequate for a class of conjuncts (and successive sentences if these conjuncts are separated), is also adequate for relations having nothing to do with successive sentences. Should inference conjunction, then, be considered a part of conjunction theory, or a part of successive sentence analysis either? Should inference relations qualify as successive sentence relations if they are
not confined to successive sentences? If inference is thus called into question, what is the status of discourse implication or audience deduction for successive sentence analysis?

Geis and Zwicky have pointed out convincingly that inference is by no means an incidental phenomena in language use. While it may apply on an \textit{ad hoc} basis across discourse, it also applies in the cases of conditionals and temporal adjectives which suggest causation, etc.:

1) a) If you mow the lawn, I'll give you five dollars.
    b) If you don't mow the lawn, I won't give you five dollars.

2) a) After a large meal, they slept soundly.
    b) Their large meal caused them to sleep soundly.

3) a) Dogs that eat Opla are healthy.
    b) Dogs that are healthy eat Opla.

The (a) cases in (1) through (3) invite the inference of the (b) cases.

Notice that the (a) cases do not imply their correlates and to draw such inferences as in the (b) cases is, strictly speaking, to indulge in logically fallacious reasoning. For example, (2b) corresponds to the "after the fact therefore because of the fact" fallacy, and (1b) is a matter of fallaciously "affirming the consequent." In cases like (1a), if the subject doesn't mow the lawn, he may still be given five dollars for some other reason. Nevertheless, it
seems that sentences of the type $x \rightarrow y$ invite fallacious inferences of the type $-x \rightarrow -y$; such fallacies show the variety of usage possible in natural language, as well as reveal knowledge on the part of language users that invited inference constructions are used with force as well as content in mind. (1a) can be a warning, a threat, a reminder, a promise, etc., and its possible correlates depend on the force it has originally; e.g., if it were a promise, the audience would not feel invited to infer (1a) from it.

As Geis and Zwicky claim, "In many cases...there is a quasi-regular association between the logical form of a sentence and the form of the inference it invites." However, expressing the problem in this way leaves distinctions between what are expectations, presuppositions, and invited inferences undrawn and unclear. Is Lakoff presupposing (as he says) "If one is a used car salesman, then one is a crook," from John sells used cars and Pete is a crook too, or inferring it? Although a complete analysis of these problems is beyond the scope of Part I, the questions raised do require at least a preliminary discussion.

First, the very question of whether inference relations should be included in a successive sentence analysis must be discussed. And, a major distinction must be made between successive sentence inference and cross-sentential inference. Consider the two types of cases below:
In (4), an audience will understand from the last two sentences that Janet believes that something undesirable is going to happen and that the police may be able to stop it. These inferences may be invited from the last two sentences but they do not substantially contribute to successive sentence acceptability. Rather, John's carrying a shotgun is a reason for Janet to report John to the police and is an explanation of why she has called the police. Thus, inference, where other and stronger relations exist, has low priority for acceptability judgements.

Notice, however, that in (5a) neither the fact that John is looking for Henri or that he is carrying a shotgun is independently sufficient to warrant Janet's crying. However, in combination, they invite the inference that John intends to shoot Henri (no contextual advice to the contrary) and this is a reason for Janet's crying. Inference has high priority in this case. Nevertheless, from both (5a) and (5b) an audience can draw the conclusion that John intends
to shoot Henri, since looking for someone, being armed with a shotgun, and leaving one's whereabouts unknown is behavior typical of someone who intends violence. But, in (5b), John's carrying a shotgun is offered as a reason for Janet to be crying rather than as material inviting the conclusion that John intends violence, although it does in fact serve in this second sense.

Two conclusions should be drawn from these cases. First, there is a question of priority in judgements of acceptability. It may be the case that an answer to a why question in a discourse will naturally be more relevant or of higher priority than an answer to a when or what or where or how question asked of an antecedent sentence. It may also be the case that an inference will only be important when no relation of higher priority is available and only the inference is sufficient to justify some later fact. Where a subsequent sentence offers material for both a high and low priority relation, naturally the relation of highest priority would contribute most to the acceptability decision.

Second, it is often the case that while reading through a well-formed discourse a language user will discover what looks like a digression, or what is otherwise unrelatable to the antecedent material. Often these disparities (or apparent disparities) remain in a reader's memory store and are resolved as the reader discovers subsequent facts.
Their resolution, and the reader's fitting the apparently aberrant sentences back into the discourse, is based on cross-sentential inference. To automatically exclude cross-sentential inference from an analysis of successive sentence acceptability judgements is to ignore an important generalization about language processing in general: language users often process backwards across discourse, a subject to be handled in Chapter 5.

Turning from the topic of the place of inference in a successive sentence analysis to the question of inference itself, or how to distinguish inference from presupposition and expectation, etc., I will discuss this later question only from the point of view of discourse. In terms of the conjunction or successive sentence relations considered in this work, and of particular interest in constructing a grammar to handle conjunction, it is important to observe that whether we speak of similarity conjunction or of inference conjunction, use of such utterances in context requires deduction rather than inference. Geis and Zwicky's "invite to infer" is an important observation, but lacks the contextual perspective and thereby misses an important generalization. Such utterances as have been offered as examples here must be relevant to the context in which they occur or they will fail acceptability in spite of inference. For "John builds bombs and Pete flies missions over Thailand," a context which
first introduces the notion of culpability makes the deduction that both are involved in the war effort possible. Contextually informed or specified interpretations are typically matters of deduction rather than inference.

G. Lakoff has shown that our understanding of certain conjuncts can be described logically. Identity relations for conjoined sentences may be formally deduced from proofs including both explicit assertions and implicit information (presuppositions, etc.). This is not to claim that the reader/hearer actually or empirically deduces in just such a formal way, but only to show that given the amount of information asserted both in the conjunct and in its context, as well as the presuppositions, expectations, etc. that are part of the interpretation as well, an operation as formal as deduction is possible. In terms of context, the reader is given much more instruction that Geis and Zwicky have anticipated.

Thus, many apparent cases of inference are better characterized as cases of deduction, and for discourse acceptability judgements inference will be required just in those cases in which no deduction is possible. "Inference" conjunction then may or may not involve inference, may or may not be limited to successive sentences, and may or may not contribute significantly to acceptability judgements, depending on relations with higher priorities. Nevertheless, however, the borderline between inference and deduction is
placed and whatever priority is assigned to inference con-
junction, the role of reconstruction, which includes phenomena
so varied as to include both inference and deduction, is a
central one.
FOOTNOTES

1. Examples similar to (4) appear in G. Williams, "The Internal Structure of Antecedents," Papers from the Eighth Regional Meeting, Chicago Linguistic Society (1972), pp. 379-87. In particular, see p. 380:

   i. *As beautiful as Tom thinks Sandra is, I don't think so.

   ii. *Which book did Tom believe that Bill had collated and why did he think so?

Although I am interested in looking at recovery here, strictly speaking, no recovery is possible in these cases. However, these examples do show that recoverability, where needed, is necessary for acceptability.

2. In (6a), if we follow the dictum that successive sentences will be co-relevant, we may consult stored knowledge and conclude that since W.C. Fields never liked dogs or children (except well-done ones), Hank's wife is having trouble with Hank about the baby. For (6b), although we are told that Harry is an arsonist and know from stored knowledge that Buster Crabbe is a water actor, no conclusions suggest themselves, and no inferences follow from these facts.


6. These reservations are made explicit in the section entitled "Conjunction and Invited Inference."

7. As the discussion of reconstruction continues, it will become clear that my analysis is influenced by the work of H.P. Grice. This influence is by choice, as there are other or alternative positions to be considered. For example, Jonathan Cohen has offered one interesting counter-proposal to the "conversational implicatures" positions.

Given (i) and (ii), by what means do we understand (ii) to imply the converse order of events to (i):

i) A republic has been declared and the old king has died of a heart attack.

ii) The old king has died of a heart attack and a republic has been declared.

Cohen bases his analysis on a semantic treatment of and:

According to the Conversationalist Hypothesis, which Grice favors, the meaning or linguistic function of 'and,' even in [i] and [ii], is just the same as that of the truth-functional constant '&,' and the implication of temporal sequence that is conveyed by uttering [i] or [ii] derives from a presumption that people's discourse obeys the maxim "Be orderly;"

According to the Semantical Hypothesis, however, the meaning or linguistic function of 'and,' as a clause-concatenating particle, is rather richer than that of the truth-functional constant '&.'

Since a discourse grammar must assign relations to separate sentence pairs without the particle and figuring in the material to be considered, its richness is beside the point. Otherwise, ordering conventions do exist, at least in English, such that antecedent events are ordered first. Other conventions of relevance and co-operation exist, although these are as yet poorly specified, that enable a reader to make sense of sentence pairs, whether conjoined by and or not. Thus, for discourse grammar, the Gricean proposal seems better motivated. L.

Jonathan Cohen, "Some Remarks on Grice's Views about the


11. "That the scope of the negative can extend over more than one sentence in dependent but not in independent conjunction is explained by the fact that a performative verb cannot be negated." See Peterson, *ibid.*, p. 426.


Interpretive Problems Across Discourse

In Chapters 2 and 3, primary attention was given to anomalies of sentences in succession. Through a step by step discovery procedure, progressively stronger criteria were introduced to identify those anomalous pairs left unblocked by the previous stages. The eventual inadequacy of internal criteria led to the introduction of external or pragmatic criteria. For the purposes of a successive sentence theory, it was necessary to show that pragmatic criteria fall into two types: knowledge of the world and constraints imposed by immediate context. Each criteria entailed its own interpretive problems.

Not surprisingly, the discussion in Chapter 3 and 4 centered on the interpretive problems of immediate context, although there were in fact knowledge of the world problems for both recovery and reconstruction. The notion of "immediatecontext" was restricted, by and large, to antecedent
sentences, or if an implicit statement was to be drawn between successive utterances the notion extended to their antecedent sentence. However, as the fourth section of Chapter 4 argued, the notion of "immediate context" does not always describe the facts of discourse interpretation. In fact, discourse interpretation problems may extend beyond immediate context and across discourse. Although the case made there concerned *ad hoc* deductions, it is possible to make a more general case for including "extended context" among the criteria a successful theory of discourse must reflect.

In this chapter a case is made for *connectedness*, a term which describes the intuition the reader has when a sentence pair is not only well-formed and acceptable in context, but is discourse-consistent as well. *Connectedness* must be defined in terms more general than those for immediate context, or in terms of discourse information and relevance to the speaker's larger intentions. Although a full discussion of the dependency of successive sentence relations on broader discourse organization will follow in Chapter 7, the following chapter initiates many of the issues that are involved in this intuition.

In short, the notion of "extended context" includes contextual knowledge beyond that which may be found in an antecedent sentence. Such knowledge is essential for
accurately interpreting otherwise ambiguous sentences in context and, as I shall show, for deciding the illocutionary force of particular utterances. To demonstrate the role of extended context in interpretations which are made across discourse, I will look here at a member of the class of adverbial clauses. Reason adverbial constructions are separable in discourse and present a reader with interpretive dilemmas which are unresolvable without recourse to extended context. Whereas ad hoc deductions were possible based on subsequent information bringing right apparently aberrant sentences, the situation here is exactly the opposite. Readers face on the one hand sentences which are related to their antecedent but not to the extended context, and on the other hand sentences which are related to the extended context but not apparently to their antecedent.

For example, consider the following sequences:

1) a Marlene has been at her father for months to get a steady job. Dick is a bouncer at a club. Ted is a tough guy too.

   b Marlene has been at her brothers for months to get steady jobs. Dick is a bouncer at a club. Ted is a tough guy too.

2) a Everyone remembers the campaign through the desert. In fact, housewives welded tanks and packed bombs.

   b (The war was really won on the homefront.) Everyone remembers the campaign through the desert. In fact, housewives welded tanks and packed bombs.
The dynamite exploded with a gigantic concussion. Where a building stood before now there was nothing.

(The fraudulent accounts were buried under the rubble.) The dynamite exploded with a gigantic concussion. Where a building stood before now there was nothing.

Examples (2) and (3) above are cases of irrelevance, illustrating that sentences may be acceptable in immediate but not in extended context (3) and that sentences may be unacceptable in immediate but acceptable in extended context (2). Both contrast with (1), in particular (1a), as it demonstrates the role of immediate context for implicit statements. A similarity relation may be established between the last two sentences of (1a), which is at odds with its first sentence.

(Marlene has been at her father for months to get a steady job. Dick and Ted are similar in that they are tough guys.)

While (2) and (3) above are mere illustrations of the principle of extended context, and intended only to focus the following discussion with regard to problems of immediate context, the important case for extended context does not lie in irrelevance or contradiction. Ultimately, it lies in interpretation. Force, or the speaker's illocutionary intentions for an utterance, and ambiguity are the essential problems leading to the need to include extended context in a grammar of successive sentences. They will be taken up in the third section below.
Immediately, however, since the argument in the third section depends on an analysis of reason adverbial clauses which is revised for discourse and context problems, certain sentence grammar counter-analyses must be introduced and dealt with. These counter-claims may be listed as follows:

a) because clauses are subordinate and not separable in discourse therefore (but see Thompson's analysis);¹

b) because clauses are causal rather than reason adverbials; and

c) because clauses answer no particular question about their antecedent sentence (see the discussion of contrastive stress in the third section below).

Specifically, then, I argue that reason adverbial clauses are not subordinate clauses (following G. Lakoff's argument to the same effect)² and that because clauses do answer specific questions about their antecedents.

An Underlying Structure for Reason Adverbials

In this section, I briefly review several of the earlier structural claims for reason adverbials before offering an independent description, revised to take into account difficulties with previous treatments. In particular, I make a case here that reason adverbials are separable in discourse and that they do serve to answer asked or anticipated questions about antecedent material: (Godzilla plodded
up the beach toward Tokyo. The kids in the theater screamed their approval. This is why Johnny wants to go to Japan).

"Why" questions, whether marked explicitly by the presence of this term or not, occur frequently in discourse. First, however, it is necessary to show that because clauses are not causal clauses.

To begin with, it seems that recent treatments of because clauses (in particular, A. Davison) and of explanations in which one uses because clauses (J. Dakin) have relied on a rather too simple hypothesis, by which the underlying structure of because adverbials can be represented by a phrase marker involving two clauses, the antecedent one causally or consequentially related to the following one. For example, J. Dakin asserts that "the first event is no explanation of the second unless I intend you to understand that the two events are related causally," and A. Davison makes the corollary statement that since, as, and because introduce clauses which act as causal adverbs to some independent clause. Nevertheless, the difficulty of the questions that surround how the language user is able to make explanations in general, and the complexity of the syntax of because constructs in particular, indicate that the hypothesis above is simply too brief to accurately handle either the semantic information involved in reason adverbials or the complicated syntactic constraints that govern the derivation of such constructions.
One not unusual way of handling *because* is as an adverbial synonym for *cause*; but while this makes the important generalization that the two are semantically related and often difficult to distinguish in sense, it does so at the expense of ignoring the different senses that *because* does have and leaves aside questions that ask for a more explicit account of their relationship. In order to meet a synonymy claim of the sort indicated, *because* constructs, although adverbial, should be expected to meet at least two minimal abstract causal predicate tests. For instance, (1) expresses Lakoff's proposal that certain affective predicates have an underlying CAUSE + affective verb in an embedded S.\(^7\)

1)  
   a) The dynamite's exploding caused the building to collapse.  
   b) The dynamite's exploding collapsed the building.

As can be seen (2) seems at least superficially to be synonymous in the required way with (1a) since both seem related to (1b).

2) The building collapsed because the dynamite exploded.

However, this evidence for *because* constructs having an underlying CAUSE predicate is anything but conclusive. Subject Raising provides a stronger test of the relationship. (3) and (4) seem to indicate that Subject Raising, which fixes the abstract predicate for the surface, will operate here without loss of sense (although (5) and (6) reflect a class of counterexamples).
3) a Mary's beating the dog caused it to run away.
    b Mary caused the dog to run away by beating it.

4) a The dog ran away because Mary beat it.
    b Mary caused the dog to run away because she beat it.

5) a Mary's disliking the dog caused it to run away.
    b Mary caused the dog to run away by disliking it.

6) a The dog ran away because Mary disliked it.
    b Mary caused the dog to run away because she disliked it.

For (6) we expect that Mary has performed some act or actions that have resulted in, but not caused, the dog's running away.

Moving toward the sense of because which is non-causal, notice that the following pairs are usually taken as synonymous:

7) a John's hitting the window caused it to break.
    b Because John hit the window it broke.

8) a John hit the window and caused it to break.
    b The window broke because John hit it.

In particular (8a), typical of causal constructions, contains two conjoined factive clauses with the causal predicate holding between them. In cases like (10a) and (11a), however, we feel that although these events are connected, cause is too strong a predicate to use to express that connection, whereas in (9a) we do not.
9) a The handle's being hot caused John to drop the pan.
b John dropped the pan because the handle was hot.

10) a His being an intellectual causes John to play chess.
b John plays chess because he is an intellectual.

11) a Our being too early caused John to drive slowly.
b John drove slowly because we were too early.

That the first sentences of (10) and (11) are odd, while the other examples above are acceptable, is due to the fact that we use because in making explanations for which we need reasons, and although causes may be offered as reasons, not all reasons are causes. As evidence of the broader function of because, (9b) answers not only the question "What caused John to drop the pan?" but "What do you believe to be the reason that John dropped the pan?" as well. In connection with the last question, it is possible to show, as in (12), that although only factive clauses are possible in causal constructions (John's being sick caused him to be absent but not *That John might be sick caused his absence) because is not thus limited, a fact which indicates a significant difference between the two semantically.

12) John dropped the pan because the handle must have been hot.

13) *The handle must have been hot caused John to drop the pan.
Yet another treatment of because includes it in a category of adverbial clause which also includes clauses headed by since, as, if, and so, etc. (A. Davison). However, A. Davison points out that since and because do not have the same distribution, although their distributions are very similar. She notes that because clauses may not be used with performative utterances, as in (14): 8

14) *Because you are an expert, what do you think of my collection?

whereas (15) is acceptable:

15) Since you are an expert, what do you think of my collection?

(16) provides an example, however, that casts doubt on the inclusion of because in the first place with the above set of clause markers.

16)a John lost the book because since he was sleepy he was careless.
b *John lost the book because he was careless because he was sleepy.

Similarly, (17), taken from Ross on Langacker, 9 is acceptable with since, indicating, as Ross seems to suggest, that (17) involves a misoperation of extraposition resulting from because being included under an ADV or adverbial node (the extraposition transform is possible with since under ADV, see (18) and (20)).
17) *It never occurred to Harvey because he is insensitive to other people's desires that I might want to leave.

18) It never occurred to Harvey since he is insensitive to other people's desires that I might want to leave.

On the other hand, unlike the category containing since, which also contains concessives like although, even if, etc., because clauses, as (19c) reveals, are cleftable independently:

19)a *It was since he was sleepy that he was careless.
    b *It was although he was sleepy that he was careless.
    c It was because he was sleepy that he was careless.

From (19) and the above examples, it may be seen that because clauses do not have a constituent structure like that of since clauses or like that of causal constructions either. When because clauses are represented under ADV nodes, as in (20), the difference between because adverbial clauses and other adverbials and adverbs is not clear at all.

20)
As suggested above, Ross argues that a phrase marker like (20) does not accurately represent the constituent structure of such sentences. For *It never occurred to Harvey that I might want to leave because he is insensitive to other people's desires*, Ross proposes:  

![Diagram](attachment:image.png)

Lakoff offers the best explanation of why (21) more adequately represents the constituent structure here. For one, he presents evidence like that of the scope of negation in sentences like *I don't beat my wife in the yard*. In cases like these, negation may apply only to the adverbial clause, a fact which is explainable only if (22) is the underlying structure.
However, the most important argument for (22) is a semantic one. If we ask "Did John shoot Bill near the house?" we are not questioning whether or not John shot Bill, but where the action took place, a fact which is explained by representing these adverbial clauses as higher sentences. As Lakoff argues, a "no" answer denies only the location and not the event.

The arguments in the following section are intended to make the case for deriving (23) from (24), the underlying structure of which is (25).

23) It was near the house that John shot Bill.

24) The place where John shot Bill was near the house.
Consistent with the explicitness criterion for remote structure, it should be noticed that for the following set of adverbial clauses, as with (23) and (24), each has an explicit head noun form and a corresponding form with the head noun deleted and replaced by unique markers like because, when, where, etc.

26) a The reason that we returned was that we were broke.
   b We returned because we were broke.

27) a He left at the time that we arrived.
   b He left when we arrived.

28) a He cut the bread in the manner we told him to.
   b He cut the bread as we told him to.

29) a He stopped at the place we were camping.
   b He stopped where we were camping.

30) a He went upstairs for the purpose of getting a book.
   b He went upstairs to get a book.
The set of adverbial clause markers containing since, although, etc., does not have head noun counterparts to characterize the semantic function of its adverbial clauses. Moreover, the head nouns of (26-30) reflect a central fact about the underlying structures of the adverbial clauses with which they appear; i.e., each of the above types of adverbial clause is subject to Ross's Complex NP Constraint (as suggested by A. Davison),

31) a John stayed home because his wife was ill.
    b *Who did John stayed home because was sick.

32) a The reason John stayed was that Martha told him to.
    b *Who did John stay for the reason that she told him to.

a limitation not shared by the causal construction (33).

33) a The dynamite's exploding caused the building to collapse.
    b What did the dynamite's exploding cause to collapse?

Furthermore, these adverbial head nouns seem to serve as natural markers for the fact that these clauses are so constrained. In addition, just as IT can replace the head noun FACT, as in

*It surprised us that John knew Harry which is derived from
The fact that John knew Harry surprised us, IT may also replace these head nouns.

If the contention that sentences like (23) are derived from (24) is correct, then in the case of reason adverbials, because must be transformationally inserted following head
noun deletion, very much like the way wh- lexemes are inserted in relative clauses and questions. While certain adverbial clause types like PLACE and TIME and REASON may appear, although awkwardly, with their respective clause markers, as in:

34) a The place he stopped was where we were stuck.
    b The time he cut the ribbon was when we told him to.
    c The reason he left was that we told him to go.

only PURPOSE may be deleted without some inserted replacement:

35) a John's purpose in going upstairs was to get a book.
    b John went upstairs to get a book.

Nevertheless, it is not my intention here to argue the problems raised by because insertion as most of these problems would have to do with where such a transform would fit in the transformational cycle. Rather, it is only my intention to show that sentences like The reason John races is that he likes danger are the explicit forms of sentences like John races because he likes danger. I now turn to the claim that these adverbial constructions contain indirect questions.

Although the relative merits of Q-markers have been in general well-debated, and questions about their operation still remain, only two, and these well-supported, facts concerning Q are germane here. First, Q-markers are operators which designate the phrase markers which are to be questioned, either directly or indirectly. Second, these markers are
replaced by the surface in indirect questions with *wh*-lexemes like *why*, *who*, *where*, etc. The more central point to be emphasized here though is that just as indirect questions contain the questioned string, as in:

36)a Why did John shoot Bill?
b I know why John shot Bill.

adverbial clauses of the reason, etc., types also contain the questioned string.

37)a Where did John shoot Bill?
b The place where John shot Bill was near the house.

38)a When did John shoot Bill?
b The time of John's shooting Bill was when we arrived.

39)a Why did John leave?
b The reason why John left was that his wife was ill.

40)a Why did John go upstairs?
b The purpose for John's going upstairs was to find his watch.

As might be expected, the *wh*-question lexemes may be replaced by head nouns to make the questions more explicit, as in *For what reason did John leave?* and *For what purpose did John go upstairs?*

As Lakoff has pointed out, to ask questions of sentences with these adverbials is to ask a question to which only the adverbial clause is an answer. In these adverbials, the question marker specifies in the underlying structure the phrase marker that is questioned; before reaching the surface,
the Q is replaced in the phrase marker (although (38b) is a special case) by the relevant wh-lexeme, which has to be uniquely determined by the adjacent head noun, just as the that-who choice in relatives is determined by a feature [+ human]. The content of this phrase marker which is dominated by Q and to be indirectly questioned must be available to the speaker and his audience either by context or otherwise. If it were not available and questioned, there would be no need to offer an explanation for it. It would seem that these are the conditions that must exist for any explanation to be offered.

The Role of Extended Context in Interpretation

In this section, I examine interpretive problems for reason adverbials which demand contextual information for their resolution. Specifically, this discussion will concern problems of ambiguity, force assignment, question answering, and speaker interpolation. Extended context, then, includes a range of phenomena and interpretative beginning with facts located in the previous discourse and reaching as far as a speaker's illocutionary intentions. To add the problems of force and question answering to those which must be handled by a theory of successive sentences is to extend the notion of pragmatics significantly beyond that used in immediate context. Notice as well that decisions of
acceptability in context come to be subsumed under questions of interpretation. Interpretation includes not only decisions made about discourse content, but includes operations by the reader in which recovery and reconstruction are at stake. Without these operations, speakers would have to specify fully not only the grammatical constructions they use but extensive knowledge of the world and what connections exist between their utterances. Whether what is now done with efficiency could be done at all is unclear.

Beginning with sentences ambiguous in immediate context, the following reason adverbials apparently involve anaphora, and are ambiguous in context. It must be emphasized that the ambiguities handled here are not of the flying planes can be dangerous or the visiting relatives can be a nuisance types, as alternative deep structures can be given for either of these without recourse to any context. Of course, if either of these ambiguous sentences were used in context, one could support one's selection of the appropriate reading for them, but this is not the case I wish to make. Rather, while the examples below may be assigned only one phrase marker, they still remain ambiguous due to the possibility of there being different readings for them in different contexts.

Examples like (41) and (42) are more to the point:

41) Bobby started crying. He wanted in.

42) Bobby went back upstairs. He wanted to get a book.
(41) could mean either that he started crying because he wanted in and believed that crying would cause someone to let him in, or that he was crying because someone was keeping him out on purpose. Similarly (42) might mean either that Bobby intended to get a book by going upstairs (or knew that by going upstairs when he did that he would be rewarded with a book), or that he had not been allowed to have the book that he came downstairs to get. Since knowledge of the subject's intentions and beliefs is necessary to disambiguate these sentences for the reader, these sentences become ambiguous when such information is unavailable. Naturally, each sense is acceptable only in contexts which call for that sense, and it follows from this that only from such contexts will the deleted information be recoverable.

It might be objected here that the ambiguities of (41) and (42) are at least partially resolvable by inclusion of past perfect aspect, as in Bobby started crying because he had wanted to get in, but the question of what existing grammars would do with (41) and (42) still remains. Aspect is as easily deleted in contexts from which it can be recovered as other contextually deletable types of information. More importantly, sentences similar to these, like (43), cannot be disambiguated by inclusion of aspect to begin with, showing that aspect inclusion is of much less aid here than it might at first seem.
43) He broke the handle because it was (had been) the only way to get in.

(43) would remain ambiguous out of context between the reading that he broke the handle to let himself in, and the reading that he broke the handle to keep everyone out. Contexts for these two readings are easily constructed:

44) John knew that the Prosecutor would find the incriminating evidence if he was able to search the vault. John broke the handle because it was the only way to get in (and John intended that no one get in).

45) John knew that he had to reach the evidence first and destroy it. He broke the handle because it was the only way to get in (and destroy the evidence).

The last example here appears to be a representative case of anaphora; the deleted information is explicit and available in the immediate context and thus easily recovered. (44), however, contains the reading of (43) for which we may not say that the needed intention clause "John intended that no one get in," is simply anaphorized, as it does not, in fact, appear explicitly anywhere in the immediate context. Furthermore, (44) contains nothing else explicitly that could be added to (43) to disambiguate it. In this case, we must say that (44) has an intention clause that is reconstructed rather than recovered. Preliminary studies, especially those of Robin Lakoff, indicate that reconstruction is a matter of presupposition and deduction. The point to be taken here, however, is that although reconstruction is the more powerful
and sufficient argument for contextual recourse in the case of such ambiguities, recovery is still an argument for such recourse. This is true if for no other reason that the fact that language listeners constantly both recover and reconstruct from context to make sense of individual utterances that would make little sense otherwise.

Finally, notice that in (46) and (47) there are two possible referents for the embedded it under a non-contextual representation of (43).

46)

```
NP  #S#
   Reason   
   S1
   
   Q  John broke the handle

VP
   was
   S2
   S3 --- conj --- S4
   John intended to destroy the evidence
   It (breaking the handle) was the only way to get in.
```

47)

```
NP  #S#
   Reason
   S1
   
   Q  John broke the handle

VP
   was
   S2
   S3 --- conj --- S4
   John intended no one get in
   It (the handle) was the only way to get in.
```
It is to be stressed that as these two examples, as well as the previous ones, are not untypical in English, recovery and reconstruction are operations that must constantly be used in the production and understanding of sentences, and that underlying structures for reason adverbials at least may be inadequate without recourse to their contexts.

The second line I suggested above is that there are contextual constraints which govern the surface forms of reason adverbials, and that the underlying structures of reason adverbials must be revised in line with these constraints. The object of taking this second line is to show that the underlying structures of reason adverbials must be revised to include markers of illocutionary force, as force serves to act in a constraining way on what may appear on the surface for such adverbials. As shown in (48) and (49), reason adverbials are used with one of two illocutionary forces; others of course are possible, but commanding and questioning are not at stake here, and other usage tends to be only special cases of either EXPLAIN or REPORT.

48) I explained that I knew that the reason why the building collapsed was that the dynamite exploded.

49) I reported that he said that the reason why the building collapsed was that the dynamite exploded.

50) The reason why the building collapsed was that the dynamite exploded.
I intend to show why one must assign either EXPLAIN or REPORT to utterances like (50), depending on whether one is quoting or paraphrasing another speaker, or offering an explanation of some event based on one's own information and beliefs. Of course, if we meant (50) as a report, we could not use it in a context in which the appropriate form and force is that of an explanation; however, there are more powerful reasons for the inclusion of force.

It is evident that constraints like the following one must hold for reason adverbials, i.e., if we have permitted some surface or late operation like focusing or contrastive stress assignment or clefting to topicalize an element of the phrase marker to be questioned indirecd then the reason adverbial clause may serve to explain only that topicalized element. A primary consequence of this constraint is that if the because clause explains any other element than the element in question, then the resulting construction is unacceptable, as in (52):

51) a  THIEVES broke into the house because we have no vandals in this area.
    b  Thieves BROKE into the house because they couldn't pick the locks.
    c  Thiēvēs broke into the HOUSE because they didn't find anything valuable in the garage.

52) a  *Thieves broke into the HOUSE because we have no vandals in this area.
    b  *THIEVES broke into the house because they couldn't pick the locks.
Because the indirect question in (51a) asks not "Why did thieves break into the house?" but rather, "Why do you say that THIEVES broke into the house?" and because the derivation of the reason adverbial clause in (51a) must be blocked if it is an answer to any other question than this second one, one might be inclined to conclude that either the embedded S of the reason adverbial clause is subject to filtering and blocking near the surface or that focus and clefting are not late phenomena, and blocking must occur early in the derivation. Only one of these alternatives can be given principled support; in fact, generally, both of their opposites seem to be the case. However, reason adverbial constructions with the force of REPORT do place semantic constraints on what may be given focus within the construction; (54) is not acceptable.

53) THIEVES broke into the house, because we have no vandals in the area.

54) *I REPORT that the thieves said that it was THIEVES that broke into the house because we have no vandals in the area.

Although unpromising, because force is a remote structure constraint, one might conclude that focus is also a remote structure phenomena. On the other hand, operations like focus and clefting seem to have very much in common with stylistic constraints, which are generally taken to be surface phenomena. It is difficult to see how (55), taken from Chomsky, could be described in terms of remote structure.
55) John is more concerned with AFFirmation than with CONfirmation.

A more interesting account of the way focus occurs in these particular examples offers itself if we consider that such indirect questions as "Why was it THIEVES...?" (which appear in reason adverbial constructs) are all in reference to some sentence which may be present in the previous discourse or some information which is considered by the speaker to be available to his audience (or reconstructable by his audience). It seems often to be the case that where the questioned clause is not in fact explicitly present in the previous discourse, it is available in the second way above. In either case, it would seem that since the material to be questioned is available, that it is simply "copied" into the indirect question position in the reason adverbial construction.

While "copying" must be taken only as a possible account for the source of certain questioned material and not necessarily as an operation, its use does preserve the important generalization that the two occurrences of this information are fundamentally similar. Yet, in many cases, as shown below, the original information undergoes fundamental changes before its appearance in the indirect question.

In (56), the focused element in the questioned phrase marker must be preserved through its transportation into the indirect question clause of the adverbial.
While investigating the damage to the house next door, the police wanted to know why I thought it had been done by THIEVES. (I EXPLAINED) the reason why I thought it was THIEVES that broke in was that we have no vandals... 

In explanations like (56) the speaker takes the copied material as an identifying description of his knowledge or belief and then explains or gives his reasons for believing or knowing the questioned material to be true or false. Whereas sentences like (56), with the force of EXPLAIN, rely on the speaker's own beliefs, we expect this not to be the case with sentences having the force of REPORT, in which we are apparently only acting to relay the belief of some other speaker. However, in regards to deciding which force an utterance of this type has, selections based on these criterion are not easily made and resort to context is often necessary.

It is usually the case that utterances are given only one force ascription; if the speaker is offering his own belief then we ascribe the force of explanation to the utterance, if he offers the belief of another then we say the utterance has the force of a report. In the case of reason adverbials, however, there is reason to believe that there are many utterances intermediate between the two forces. Many times, when offering what seems to be a report, the speaker will not merely paraphrase the utterance made by another person, but will interpolate his own beliefs and knowledge onto that utterance as well. As this problem
rightfully includes material recently discussed by Hasagawa (in a discussion of claims made by Ross and Perlmutter, and McCawley) I shall include those examples also.

Ross, Perlmutter and McCawley take the position that Mary and than he is in (57) and (58) must appear outside the object of think in underlying structure because they do not form part of an identifying description of what Bill or John thought, but rather of what the speaker himself knows.

57) a. John thinks that Bill loves the girl he met yesterday.

b. John thinks that Bill loves Mary.

58) John thinks that he is taller than he is.

In (57b) the speaker is able to substitute Mary for the girl he met yesterday when he and his audience know her name, whereas John may actually have said only "Bill loves the girl he met yesterday." Thus, we are inclined to say that the speaker has first paraphrased John's utterance and then interpolated into the paraphrase from his own store of facts. In this case, we would still be able to virtually recover what John said. Yet, in cases like (59),

59) John doesn't know that Bill loves Mary.

the speaker is not simply interpolating into what John said, which might have been something like "I don't think that Bill loves the girl he met yesterday," but is actually presenting an identifying description of his own belief. John's statement is unrecoverable; it could not have been:
60) *I don't know that Bill loves the girl that he met yesterday.

because factive predicates like know don't allow negative transportation. By this, one can see that (59) does not have a force identical to that of REPORT (compare (49)), although (59) is based on a statement made by John. (61) and (62) demonstrate that an identical situation exists for reason adverbial constructions:

61) Mary knew that I had talked to John and wanted to know why John thought that Bill was ill. I answered that the reason why John doesn't know that Bill is well is that John hasn't been to visit him in some time.

62) *John said, "I don't know that Bill is sick because I haven't been to visit him in some time."

By way of satisfying the third line introduced above, it can be seen that in certain cases, like focusing, the previous structure is transported whole into the adverbial construction, while in other cases, it may be completely interpolated by the speaker before appearing there. Without recourse to context, there would seem to be no way in a sentence grammar to provide the formal basis for this ability on the part of the speaker to interpolate, or the reader or audience's ability to identify utterances which while grammatical in their own right, are unacceptable in certain contexts.
While this chapter has been concerned essentially with subordination relations and their necessary inclusion in a conjunction grammar for discourse, and with a demonstration of the role of context in interpreting reason adverbials, it has continued the argument, indirectly, against the adequacy of a sentence grammar for discourse. As well, by extending the notion of context beyond the immediately antecedent sentence, it demonstrates the complexity of criteria whereby speakers produce and readers evaluate sentences for acceptability. In general, the arguments I have presented here should be taken as support for a statement made recently by R. Lakoff:

Much evidence has accumulated to support the contention that one must often be aware of the context in which an utterance is used, of the beliefs of speaker and hearer, before one can know whether or not a sentence has been used correctly, or appropriately.
FOOTNOTES


2. My case for this claim, which relies on analyses made by Ross and Lakoff respectively, is located in the second section.


CONCLUSION: PART I

Part I has worked toward a description of an ability shared by the greatest part of adult language users: the ability to identify sentences which do not fit in context or are somehow anomalous in relation to their antecedent sentences. This ability, I have argued, is a complex one, relying on extensive knowledge of the language and its conventions of usage, as well as knowledge of the world and ability to undertake deductive operations. Thus, it is reasonable to expect any adequate theory of successive sentences (one which would predict anomalous cases given context) to be sensitive to information from many areas of grammatical description. A first problem for successive sentence theory, then, must be to determine on just which levels anomaly decisions operate, and which criteria necessarily must be included in such a theory. Consequently, this study has not been interested in indiscriminately specifying types of sentence pair anomaly; rather, I have emphasized only characteristic anomalies, or those which contribute most to evaluating the adequacy of the different possible accounts of successive sentences.
As the inadequacies of weaker criteria were discovered, progressively stronger criteria came under consideration. Each criterion was considered on two grounds: necessity and sufficiency. Any criterion which blocked certain anomalies but allowed either the generation or occurrence of other anomalous sentences in succession was deficient on the basis of insufficiency. Thus, if a criterion was found to be necessary but not sufficient it was to be included in the theory but joined by other criteria which would strengthen the theory toward adequacy. If any criterion included an operation which blocked acceptable sentences, that operation could not be considered either necessary or sufficient and was excluded from the theory altogether.

A brief review, excluding extended context (which will be taken up later), will bring into focus the relative merits of the different criteria for unacceptability:

1) Syntax
   a *The cabinet refused himself and John is a doctors.
   b *John eats apples and eats bananas in the yard.

2) Compositional semantics
   a *Harvey is a judge and sentences mice to life.
   b *John is sick and John is ill.

3) The identity relation
   a ??*Stress assignment is cyclic and radio isn't a Russian invention.
   b ??I reviewed my application and it needs to be reviewed.
4) Immediate context
   a Marlene has been at Dick for months to get a steady job. Dick is a bouncer at a club. *Ted is a tough guy too.
   b (The fraudulent accounts were buried under the rubble.) The dynamite exploded with a terrific concussion. *No trace was left of what had been a building.

In examples (1) through (4), the (a) cases are representative of anomalies blocked by the criterion while the (b) cases are conjuncts the criterion won't block. Only with the addition to the theory of the criterion of extended context does the theory approach descriptive adequacy. In each of the other cases, although many anomalous conjuncts are blocked, those conjuncts left unblocked suggest an addition to the theory of a higher or more powerful criterion.

Notice, however, that with regard to compositional semantics, there are several operations which are neither necessary or sufficient. For example, consider (5) and (6):

5) Termites eat wood and termites don't eat cedar.
6) The lady wants the mechanic and John is out to lunch.

Whereas a compositional semantics is essential to a conjunction grammar (since type-crossings like (2a) clearly render successive sentences unacceptable), (5) and (6) indicate that the projection rules and the dictionary itself in a compositional semantics may act to block acceptable sentences. Such a semantics would take (5) to be contradictory on the basis
of a wood = cedar reading and would question (6) since no
dictionary of the type furnished could include what is per-
sonal information. Although problems like these disqualify
such operations from inclusion in the theory, little was made
of them at the time since subsequent criteria are sufficiently
strong to establish connections between such sentences and
their antecedents. As pointed out on several occasions,
sentences may be anomalous in more than one respect at the
same time. The significance of this fact should not be lost.
Since the theory's most pressing task is to specify the
relations between sentences such that they are acceptable to
a reader, questions of unacceptability arise only when this
interpretative procedure fails. It is essential, therefore,
that the theory be constrained from blocking any acceptable
or potentially acceptable sentence at stages as early as that
of compositional semantics. Anomalies should be well-defined
at such levels and additions to the theory well-motivated.

The identity relation was disqualified from the
theory for just the reasons specified above. Cases like
(3a), which are assigned anomaly markers because they lack
common topics, are potentially acceptable, given context.
Although contexts which allow such successive sentences will
be rare, the theory must only assign anomaly to cases which
are clearly unacceptable. Otherwise, the identity relation
account offered interpretations of successive sentences which
were inconsistent with the readings those utterances would take in ordinary usage.

As I pointed out in Chapter 3, the third section, the impetus for discovering identity relations stems from an earlier sentence grammar approach in which identical terms, co-reference, and anaphora were considered to be the only important discourse relations. Although little of the discussion in Part I has been directed explicitly toward the inadequacy of a sentence grammar approach for discourse, it is self-evident that the arguments against syntactic and compositional semantic adequacy and the arguments for pragmatic and contextual criteria tend to refute the argument for a sentence grammar approach. More damaging than its descriptive inadequacy is its complete failure to explain how speakers order utterances or how readers decide that utterances are acceptably ordered.

Furthermore, Part I has included analyses of four principle meaning relations between sentences in discourse:

17) John broke the handle. It was the only way to get in.


39) My shoes are leaking. Frank the Fence has some for sale.

40) Everyone forgot the meeting. Naturally, Jane was angry.
Whether conjoined by and or nor, speaker/hearers are able to interpret such sentence pairs in terms of connections like reason explanations, similarities, inferences invited, and consequences for them respectively. Judgements of acceptability depend uniquely on such interpretations and on the acceptability of the meaning relation in context.

There are, of course, other meaning relations between successive sentences. Consider:

11) John has never been known to get angry. Even when his dog ate the paycheck he stayed cool.

12) Charles claimed he saw John at the scene. That's a lie.

13) The cat was caged for three weeks. Treating any animal that way is criminal.

For (11) through (13), instead of recourse to attempts at recovery or reconstruction, we feel that these pairs are acceptable not principally because of what is said, but because of what is done. These are not cases of adverbial question answering, similarity inference, indirect statement inference, or consequence relations. Rather, for (11) the speaker offers an instance or an example of his claim. For (12), the speaker contradicts another speaker's claim. And, for (13), the speaker makes a criticism. Part II to follow takes up this type of phenomena and shows that both types of conjunction relations are contingent on larger discourse ordering and organization. Only when these two types of criterion are
taken together does an account of discourse connectedness between individual utterances or successive sentences approach adequacy.

By looking at those conjunction relations treatable by an extended conjunction grammar, it was possible to suggest certain revisions (which are beyond the scope of this study) of primitive grammatical notions like coordination and subordination. These notions, unlike authentic primitives, are analyzable. Subordination, except where it is structurally necessary, as in It is certain that Moby Dick never swam up the Amazon, seems to depend less on the logical status of embedded clauses than on whether the information in the clause is already known to the audience. Clausal coordination, on the other hand, seems to be an optional operation: whereas subordination is essential in order to avoid confusion in the minds of the audience (subordinating material prohibits the audience from taking a statement to mean more than it would if it were asserted again), coordination seems to be a matter of output (with the exception of conjunctions with but in its comparative sense: boiling water is hot but boiling iron is hotter). With the exception of structures like since adverbial clauses, concessives, and conditionals (or those containing sentential predicates like cause), subordinate and coordinate clause constructions may occur in discourse in separate sentence form. This
separability in discourse, where language users are able to understand relations between sentences when they are not syntactically connected, means that a theory of discourse conjunction must be at base a semantic and pragmatic theory.

Part I has also tried to show that revision of certain syntactic positions is essential, in light of the need to include semantic and pragmatic examples in the corpus a grammar of a language should be expected to describe. Essentially semantic operations like presupposition, deduction, and recovery, along with pragmatic operations like reconstruction based on global and contextual information, are necessary for processing or understanding sentences in context. Although a compositional semantics can establish ambiguity and type crossings for sentences in isolation, it is far too economical to be of use in establishing acceptability in context. In certain cases (like *Men who write ads believe the public is illiterate*) knowledge of the world or expectations about the world are necessary to arrive at what a language user understands by an utterance (to interpret "Ad-men take advantage of the public" instead of "Ad-men try to educate as well as sell" or something similar).

Likewise, certain sentences must remain ambiguous until context is applied in their interpretation. Thus, intuitions like well-formedness, acceptability in immediate context, and connectedness in discourse context are all
contingent on the reader's ability to interpret sentences. In Part II, along parallel lines, judgements of performative success and the larger judgements on which these are built are dependent on the uptake of force. In both cases, processing operations form the basis for judgement. Thus, Part II will continue to emphasize the means by which readers understand sentences in context.
INTRODUCTION

The Argument

Part II directly concerns the structure of "expository" speech action in discursive written prose. "Expository" was the term used by Austin to differentiate the type of speech action which makes plain "how our utterances fit into the course of an argument or conversation,"¹ and which is "used in acts of exposition involving the expounding of views, the conducting of arguments, and the clarifying of usages and of references."² While speakers employ the other types of speech action identified by Austin, behabitives, commissives, verdictives, and exercitives, expositives are the type most characteristically found in written discourse.³

Many linguists have recognized that what a language user produces in print is subject to more strict or formal linguistic conventions than what he produces orally;⁴ an audience is usually able to recognize written language as such, even when it is read with the intonation given spoken or conversational speech. In large part, this recognition is due to the fact that information must be made more explicit in writing than in speaking,⁵ as well as to the fact that
in general writers are more formally restricted to expository acts (arguing, admitting, illustrating, proving, refuting, etc.) than speakers are.

Taken as a whole, Part II presents a variety of evidence for the existence of an underlying discourse organization, which I argue must be described along the lines of performance theory. Since no utterance in a discourse is illocutionarily empty, individual texts will be successful or not depending on whether their utterances are organized at the performative level. The degree to which they are successful must depend on how unambiguously their utterances reflect this organization. In short, speech actions in discourse do not occur in random order or with random propositional content; they are subject to both expository and discourse constraints, apart from the typical constraints that apply to all speech actions.

An effective method of elucidating discourse organization at the performative level is to demonstrate the many errors that speakers must be able to avoid in the performance of discourse expository acts. By establishing the various ways in which some linguistic object may be permuted and be deviant as a result, the extent of contingent structure present can be determined, as well as the conditions that have to be met and the constraints that must apply before the structure is acceptable. Consequently, the last three
chapters of Part II are each concerned with a particular class of expository error. And, while they do not explicitly deal with a speaker's internalization of the ability to organize discourse in such a way as to avoid these errors, they do implicitly defend the thesis that a speaker must acquire the ability to recognize and avoid such errors. The speaker must have internalized rules consistent with such constraints in order to produce ordered discourses in the first place.

Although the aim of Part II is to explore the extent to which expository considerations contribute to acceptability intuitions about discourse, at irregular intervals points are made in support of three related hypotheses. These are:

a) illocutionary behavior is undertaken at the level of discourse, i.e., some expository actions take entire discourses as their utterance;

b) within a given discourse action, the performance of certain other actions is obligatory; and,

c) conjunction relations are constrained in discourse along the lines of performance.

While single utterances are characteristically treated as having force, I show that there are motivated reasons for treating language units as large as discourse texts as having force independent of their utterances. Speakers may intend entire discourses to be taken as arguments for, explanations of, descriptions of, discussions of, analyses of, or even abstracts of some position, to name a few of these. In this
way, the notion of "utterance" itself is extended beyond sentential boundaries; notice the similarity between this position and that taken by Harris: "All occurrences of language are discourses, each being segmentable into stretches of sound whose structure can be characterized as some connected segment of a sentence." Where such expository nominals as argument and explanation do not refer to arguments and explanations made within discourse, they are often used to refer to the status of the discourse itself. Examples are "This argument has now moved toward its strongest evidence" and "This explanation was developed from research done at Harvard."

Concerning the second hypothesis, I proceed on the basis of necessary conditions for a discourse level action to be successful. In discourses in which someone is arguing for something, the giving of reasons is an empty action without the prior introduction of some claim to be argued. Correspondingly, the action of claiming something without subsequent reasons being given is not by itself an argument. Thus, the actions of claiming and giving reasons become mandatory for the larger expository action of arguing. Optional actions for discourse arguments would include the making of distinctions, the giving of examples, admitting, objecting, suggesting, etc. (however, note that in some arguments the making of distinctions might be considered essential).
Of equal importance, in the chapter on force incorporation errors, I present material having to do with conjunction and subordination and hypothesis (c) in general. While successive sentence studies in the past commonly have been conjunction studies, this material demonstrates that explicit conjunction and subordination markers between sentences (or implicit relations) must be consistent with and applied in such a way as not to alter the force of the utterances between which they operate. Thus, although I acknowledge that successive sentences may be taken as constrained at a conjunction level, I argue that such content constraints are consistent with the organization of utterance force.

Performance Theory and Grammatical Research

Although philosophical efforts in recent years have produced significant and interesting insights into performance, such results often lose much interest when translated into linguistic terms. Such phrases as sincerity condition and illocutionary misfire, while appearing in both linguistic and philosophical studies, may vary in designation considerably, according to the designs of the research in which they appear. What may be important for linguistic theory may be even trivial for philosophical questions. In short, the two approaches are distinct; the act of promising, or
obliging oneself perhaps, is important for philosophy but unexceptional for linguistics.

Consequently, the issues discussed in Part II, although having to do directly with performance theory, are peculiarly linguistic. And, while moving across philosophical territory, the discussion will necessarily ignore certain theses of definite philosophical interest. For example, taking a well-known case, if one excludes those acts like promising in which the act needs the explicit appearance of a performative verb, Austin's explicit force thesis\(^8\) accounts only for a single ability of a speaker. This thesis registers how the speaker is able to identify a past action when he is asked to do so. However, from a linguistic point of view, speakers typically are more interested in performing a certain action than with introducing their own behavior. What is important here is the characteristic behavior of speakers and their audiences; speakers typically do not introduce their actions, and audiences rarely need to ask them to do so for a past action. What an audience uses to recognize which action is at stake, in spite of the lack of explicit introductions, is the crucial linguistic object of description.

Nevertheless, there are at least two essential observations to be salvaged for linguistic theory from the rubric of philosophical research. The first is that to utter certain words or sentences under certain circumstances is to
perform actions, rather than simply to say something which is true or false. When uttered in such circumstances, a statement is taken to have force rather than a truth value only. Like other language phenomena, force or illocutionary action is convention based, and rules for the successful use of utterances to achieve certain force are available to the speaker from the speech community. Although the speaker is free to choose between ways in which he will perform the action intended, all normal utterances of a language have some illocutionary force, a fact which renders successful speech as much a matter of the speaker's internalization of performance rules as of grammatical rules.

The second observation is that different utterances may be used by a speaker to perform the same act, and that different acts may be performed by using the same utterance. This composite observation reflects the fact that conventions of communication exist such that an audience's attention to the circumstances around which something is uttered is necessary for uptake of the speaker's intended force. Such circumstances have the utmost importance for performance theory as they determine, along with propositional content, whether an act is felicitous or not. Consequently, this area more than any other is the focus of dispute and conflicting claims. This study will attempt to avoid the controversy surrounding the conditions necessary (or which conditions are necessary)
to the success of the other types of speech action, and devote itself entirely to the exigencies of the expository action. In doing so, however, it confronts squarely one of the most grey areas of performance theory, the axiom that performative utterances are not true or false.

Apart from saving the two observations above, Part II will also attempt to specify as preparatory conditions only those circumstances which are necessary to the successful performance of an act. Some of the circumstances that surround the normal performance of a speech action can be mistaken for essential conditions for its success. For example, whether a speaker sincerely intends to meet the obligation of his promise is irrelevant to the conventions he has to rely on to make one (i.e., he may be lying but he still makes a promise). In addition, someone can request successfully without assuming that his audience would be willing to do the act in question. In short, even if an action is empty (like lying or asking that a door be shut when it is already closed), an audience can still secure uptake of utterance force. Thus, this study will try to maintain the further distinction between conditions necessary for success and conditions necessary for uptake. This last is a crucial distinction, as I shall show, since many expository actions are performed obliquely; their utterances in discourse are simple statements or reports, causing potential force ambiguity.
FOOTNOTES


2. Ibid., p. 160.

3. However, notice that other types may appear in discourse and that expository acts often bear many similarities to particular acts in the other classes of speech action. A theory of discourse action is not necessarily just a theory of expository action.

4. Although examples of this generalization are numerous, see Sumner Ives, "Linguistics in the Classroom," *College English* 17 (Dec., 1955), p. 167, for a typical expression (in a typical context) of this principle.

5. Notice that a statement of this type, which makes a generalization about written language use, is not expressed or intended to be understood as a rule. Rather, it is a convention of language use (and certainly an important one) and must be taken into consideration, along with other similar conventions, in any description of discourse language behavior. For an important discussion of conventions and their importance for linguistic description see David Lewis, *Convention: A Philosophical Study* (1969).


7. Many of these studies are beyond the scope of this work and have to do specifically with the place of a theory of speech action in a larger theory of meaning. Philosophical treatments in general, however, utilize terms and distinctions which must continually be redefined for linguistic treatments.
In the Conclusion to Part I, a brief argument was made against the adequacy of content to account for all meaning relations between sentences. This argument is represented by (a) below but is not as elementary or prima facie as (a) might lead one to believe. In fact, while (5) through (7) in the Conclusion were examples of expository actions like offering, contradicting, and criticizing respectively, such actions would also include concluding and explaining, raising the question of whether performance or content is prime in such cases. Do markers like so, thus, therefore, and because exist to show the force of concluding and explaining, or are the acts of concluding and explaining merely incidental to the content relations between successive sentences? Thus, although (a) appears to be the simplest of the cases below, it is in fact complex and forms the subject matter of Chapter 9 to follow.
A more complete inadequacy argument against content could take several complementary lines:

a) no direct provision is made by Part I for discourse relations in which speech actions are undertaken;

b) content analysis inaccurately predicts that if meaning relations can be discovered between successive sentences, then the discourse will be acceptable;

c) it inaccurately predicts that if meaning relations cannot be discovered, then the discourse will be unacceptable;

d) it inaccurately predicts that if content is the chief criterion for continuity, then expository acts in discourse may occur in any order without affecting acceptability; and

e) it predicts that discourse which share common topics or themes will tolerate large degrees of reordering, provided no content relations (of the type specified in Part I) are destroyed.

In effect, then, (a) through (e) may be generalized as (f):

f) content, whether meaning relations, shared topics, or shared themes, is not a sufficient condition for continuity; and thus not sufficient for judgements of discourse acceptability.

Beginning with (c), the converse of (b), consider the following:

1) Practical feasibility is another matter, not directly in question here. The antecedent classification is so rough and tentative that the decisions to be made are many, intricate, and consequential. And inadvertent violation of one of the syntactic or semantic requirements
can easily result in a non-notational language
or a system that is no language at all. Bold
and intelligent systematization is called for,
along with a good deal of care.

(Nelson Goodman, *Languages
of Art*, 1968)

Of the four sentences here, which in fact form a paragraph,
none are recognizably related through content to any other.
This discourse should not be acceptable therefore, but it is.
Each sentence refers to material antecedent to the paragraph
in which it appears, and nominals like question, classification,
and requirements refer not to contextual content but to
contextual speech action.

Likewise, consider (2) as a trivial but telling case
against hypothesis (b) above:

2)a Unemployment is getting to be a real problem.
For instance, 450,000 received no paycheck
last month. Admittedly, the prospects are
looking better, but increasing population
will more than make up the gain. I've come
to the conclusion that strong measures are
in order.

b **Unemployment is getting to be a real problem.
For example, overpopulation is a real problem.
Admittedly, overdoing anything, like over-
exercising, can be dangerous. I've come to
the conclusion that exercise has disadvantages.

Notice that while (2b) includes four sentences, each of which
takes up a theme of its antecedent, the overall discourse is
unacceptable. In fact, it appears to fail not because of
lack of common topics, but because without appropriate pro-
positional content, actions like giving explanations and
examples cannot be successful. (2b) does not include successful cases of an example, an admission, or a conclusion, even though these utterances are explicitly marked for such force. Also, although each of the sentences in (2a) is on the topic of unemployment, contrast it with (2c) for the role in continuity judgements that force has:

2)c Unemployment is getting to be a real problem. 450,000 received no paycheck last month. The prospects are looking better, but increasing population will more than make up the gain. Strong measures are in order.

Looking only at the first two sentences of (2c) from the content point of view, different relations are possible (reason adverbial and inference conjunction), posing the question of ambiguity.

Concerning (d) and its complement (e), while many texts are like (3) below in allowing reordering, most texts are like (4) and (5):

3) But in science fiction films, unlike horror films, there is not much horror. Suspense, shocks, surprises are mostly abjured in favor of a steady, inexorable plot. Science fiction films invite a dispassionate, aesthetic view of destruction and violence -- a technological view. Things, objects, machinery play a major role in these films. (Susan Sontag, "The Imagination of Disaster," Against Interpretation, 1969)

4)a George hates to bathe his dog. The mongrel once bit him during a bath. It's easy to tell when this task is due. George begins to look for new products on the market which might make the job easier.
b *The mongrel once bit George during a bath. He begins to look for new products on the market which might make the job easier. George hates to bathe it. It's easy to tell when the dog's bath is due.

c **George begins to look for new products on the market which might make the job easier. It's easy to tell when this task is due. The mongrel once bit him during a bath. George hates to bathe his dog.

5)a John has never liked racing his boat. This is because he doesn't enjoy losing. For example, he wouldn't race even after we offered him a start. Admittedly, he has lost often. But, I must conclude that he is being too sensitive about this.

b *For example, he wouldn't race even after we offered him a start. Admittedly, he has lost often. This is because he doesn't enjoy losing in general. I must conclude that he is being too sensitive about this. John has never liked racing his boat.

Omitting but in (3), this text could be ordered in a reverse fashion with no loss in sense or continuity. However (4), which does not contain four continuous independent claims (an unusual situation), resists reordering. (4b) poses problems of tense and ambiguity, and (4c) fails coherence; the utterances become irrelevant in succession.

Similarly, (5), which presents a reordering of the expository actions of claiming, admitting, concluding, explaining, and giving an example, demonstrates that the order in which actions appear is more significant than the presence of a common topic or a content relation between each utterance in the text. Placed out of contiguous order, examples fail to have claims, admissions are made not to objections but to
actions which do not call for admissions, and conclusions, for example, appear redundant or undrawn from antecedent explanations and claims.

Approaching (d) from a different point of view, that of reference constraints, another line of argument presents itself. The emphasized terms below in (6) refer to the illocutionary force of prior actions; deviance results when the conventions that govern the ordering of these actions are broken:

6)a But it will not do simply to reaffirm the direct-evidence principle by way of reply to my criticism of this principle. That you are doing this may be made clear as follows: you claim that p is meaningless for me, citing the principle as your reason. I reject this principle, offering the analogy argument.

b **But it will not do simply to reject the direct-evidence principle by way of offering my reaffirmation of this principle. That you are doing this may be made clear as follows: you reply that p is meaningless for me, criticizing the principle as your claim. I cite this principle, reasoning for the analogy argument.

Here, not only the ordering of actions is involved, but just as importantly, the objects of these actions. For example, to undertake a rejection by way of offering another's ré-affirmation is decidedly peculiar and counter to the notion of rejecting.

Thus, a preliminary case for (f) can be made by posing counter-examples to (a) through (e). Of course, these
counter-examples give no indication of the range or complexity of actual ordering in discourse. Rather, in terms of necessary and sufficient conditions being met for judgements of acceptability, only the fact that ordering conditions exist is important at this point, because they raise the question of the audience's expectations of expository order. As I shall show below, along performative lines judgements of acceptability depend on the successful performance of the act undertaken in discourse. Any performance is successful relative to the conditions for its success being met at the time of the utterance, and in the case of expository actions these conditions include the prior performance of other expository actions.

Uptake Problems for Expository Force

Two unrelated assumptions explain to a significant extent why discourse performance in particular and expository performance in general have remained uninvestigated. Traditionally, discourse organization has been taken to be a matter of style or rhetoric, meaning that intuitions of discourse acceptability were not to be understood, like their sentence counterparts, in terms of "obligatory" constituents. As well, success conditions for the expository class of speech action have not been differentiated from the success
conditions for the other classes. It has been assumed that the conditions surrounding an action of any class, on which its success is contingent, have chiefly to do with just one's intentions in speaking, having the requisite status (the ability, for example, to see a promise through), and having sufficient knowledge of audience and situation. As preparatory conditions, these fit well into the schemas used in describing verdictives ("we find the defendant guilty"), exercitives ("fire when ready"), commissives ("I promise to be there"), and behabitives ("congratulations"). For these classes of speech action, the utterance used typically exhausts or makes explicit just the force intended. In such cases, knowledge of the context or preparatory conditions is usually unnecessary for the uptake of force, and is deemed essential only for the success of the actions.

For expositives, on the other hand, uptake is contingent on discourse context itself; both antecedent and subsequent context are essential. Utterances in discourse are rarely introduced by performative predicates, or the "I hereby _____" explicit formula. Uptake of actions as widely diverse as admissions, summaries, arguments, explanations, objections, giving examples, quotations, criticisms, etc., when any of these may appear obliquely as simple statements or reports, must depend uniquely on the discourse context and the propositional content of the act together.
Speaking only of expository cases, it is reasonable to ask why speakers do in fact sometimes introduce these utterances, if conventions exist which allow uptake independent of force introduction. In response, it is necessary to say that although the intention here is to look at the role of context in disambiguating force, no claim that context will always be sufficient for uptake is being made. To ascribe all uptake to convention or context seems as extreme as ascribing performative status only to those utterances which are introduced by a performative verb. Analysis of conversation could eventually develop a class of appropriate speaker's responses along the following lines:

a) where the speaker appreciates that his audience will not easily understand the intended force of his utterance, he must utilize a force showing or force introducing device;

b) when an audience has assigned a status (force) for his utterance different from that he intended, a speaker must subsequently bring his force right by making his intention explicit.

In (b) above, the term status was used to designate and differentiate the audience's uptake of force from the speaker's intended force. This notion is crucial for any study of intuitions of discourse acceptability. Typically, an audience faces the task, often difficult, of ascribing force to oblique, or unintroduced utterances. It is sometimes the case that a speech action is undertaken correctly in all respects by the speaker, but misascribed by the audience,
forcing the speaker to make his illocutionary intention explicit. Likewise, a speaker is able to act as audience to his own utterance, in subsequent discourse referring back to that utterance and often assigning it a different force than it was intended to have originally. As I shall show in the section to follow, it is possible for the audience to acceptably and properly refer to the expository force they ascribe to an utterance in more ways than the speaker may introduce the force of his utterance.

Illocutionary nominals may be shown to refer neither to performative actions themselves, nor to utterances which are somehow objections or denials, etc., before they are made. They refer, instead, to the performative status of a statement or assertion in context. Firstly, therefore, I shall discuss the possible derivational sources of such nominals, considering objections to my analysis, and conclude they exist independently of force-showing predicates. Afterwards, I shall demonstrate the complexity of audience reference to a text, in relation to the ways in which a text and its utterances may be immediately introduced for force.

Expository Nominals and Illocutionary Status

Although performative verbs and nominals of force are similar in that they refer to utterance force, they are neither synonymous nor substitutable. Their contrast is an
important one, and corresponds to the act:action distinction. Performative verbs identify acts intended by and undertaken by a speaker. Expository nominals refer to a reader's judgement that a particular act belongs to a larger class of such acts, having satisfied the conditions to qualify as a particular action. There are two other treatments of performative verbs which differ with my distinction, and I will treat these as potential counter-cases and deal with them below. Both have to do with the peculiar position expository performance has to truth.

With a single exception, the speaker as a rule is more interested in performing the requisite action than in characterizing his own behavior by the use of performance introducing verbs. The single exception is an important one for discourse. In order to predicate upon or characterize one's prior speech action or previous discourse passage, one has to refer in some way to the past action. The fact that there are two modes of reference available to both speaker and audience means that the audience can check the speaker's intentions against his actions and the audience can ascribe force independently of his intentions.

The first mode is a straight-forward case of reference to action, which I will call simple action reference. Provided that the requisite speech action has been performed, the speaker may refer to that action by using identifying
verbs like admit, or even nominalizations like admitting, as in you have admitted that you were at the scene of the crime, and your admitting what you did surprised us all. The second mode, which is more complex, involves nominals; contrast admission with admit and admitting. This type of reference is quite as common in ordinary speech as is simple action reference, but, there is no clear way to answer the question of what exactly these nominals refer to and how. As well, they involve one of the more serious problems in current speech act theory.

Principally, I will be looking here at nominals like criticism and argument, as in yours is not a substantive criticism and but if you admit this, your argument fails. It is necessary to show that they are not simply special cases of mere action reference, but refer to the status of utterances made in context.

The problem for expositives concerns the fact that, in general, utterances with their illocutionary force made explicit by being introduced by a performative verb as in "I testify that" or "I promise that" or "I pronounce you man and wife" were, as correctly observed by Austin, the doing of something rather than the saying of something, and would be successful actions rather than true or false. In the cases I have just given, clearly promises and excercitve pronouncements are not true or false. However, in the case
of the expository type, the type most integral to discourse, like stating, arguing, objecting, admitting, illustrating, describing, etc., there seems to be an exception.\(^7\)

Although Austin had to acknowledge that state, considering its corresponding action, seemed to be a performative verb, he concluded that it could not be purely so because the utterances used for stating are in fact true or false in the constating way. Austin did admit that although these cases seemed to fall within his criterion for performance, they seemed to be constative in every other way. The paradox here is that while state and the other expository utterances are clearly performative, they are also constatively true or false, an important criterion that Austin used to separate performance from non-performance.\(^8\)

This criterion may be expressed quite successfully in most cases by two complementary tests. When the "retort" test succeeds, which is to ask "what were you doing in uttering what you did" where doing expresses the notion of action, then the truth test will fail. In the case of "I promise to be home early" that is true is not a reasonable response to the statement as a whole and can only mean that it is true that someone does promise, and not that it is true that someone will be home early.

In addition, performative verbs like object, admit, deny, etc., and their nominalizations, will appear, as might
be expected, with temporal adjectives since actions take time. In this regard they compare favorably with the nominals, as we can see by comparing John's describing the place bored us for three hours and John's description of the place takes too long to repeat. From this fact it might be argued, as the transformationalists do in fact argue, that these nominals are in some mysterious way to be derived from the matching verb forms. If true, such nominal usage would be only a case of simple action reference. But, unlike the verbs, only the nominals take both time and veracity predicates, sharing the same overall characteristics as both expository actions and constatives, i.e., both performative and true and false. While we can say John's description of the train took five minutes and was still inaccurate, where inaccurate characterizes the content rather than the action, to say *John's describing the train was inaccurate is deviant. With such evidence, it is very difficult to believe that expository nominals are derivable from the corresponding verb forms.

As a proposal, this has other troubles as well. In the first place, nominals like example and difficulty and adverbial head nouns like time, place, and reason have no matching verbs to derive from, but clearly the giving or using of examples and such adverbials would qualify as expositive action. Secondly, nominals like description would have to be said to derive from the verb describe, followed
by some identifying description, the standard form for utterance introducing performative verbs. Compare I admit that John is an arsonist with the deviant *I describe that the houses have three floors to see that if description is to derive from describe it will be derived from a verb that cannot be used to introduce what one utters in order to describe. Again, descriptions may be true or false, even if describing is not.

In fact, it might be the case that verbs like claim, argue, admit, etc., derive from the nominals plus some affective verb like give or make. We can speak of giving an example when we cannot speak of exampleing and with a few exceptions nominals may occur in predicate phrases with either give or make. Ross (1967) has already argued that claim in make a claim must be given a separate status from claim in discuss a claim. If it were the case that the verb derived from the nominal incorporated with make or give, then the sentence that Ross took to be counter to his Complex-NP constraint I am making the claim that the company squandered the money would not in fact be counter. It would simply be the remote structure for I claimed, a structure which doesn't fall under the Complex-NP constraint to begin with.

But, if we wish to afford these nominals an independent existence in a grammar, as Chomsky would do, if we want to speak of making claims or giving descriptions, to
speak as if we are apparently acting by using claims, arguments, or descriptions, then we must be left in an untenable position. Our utterances would be claims, arguments or descriptions before we actually claimed, argued, or described with them. This runs counter to the axiom in performance theory that the same utterance can be used for different acts. And, it is just as apparent that assertions are claims, denials, descriptions, only when used in the appropriate context. Thus, we have another paradox. These nominals do not derive from performative verbs, but, as they are referential, cannot have an existence without some prior performance which is always characterizable by a performative verb. This paradox, taken together with the first, forms an infinite regression.

Any solution to this second paradox will have to meet at least two requirements. It must explain what these nominals refer to if not to acts like claiming, arguing, etc., and why they may take veracity predicates if they are in some important sense dependent on a prior action. Otherwise, it should say something useful about the orientative function these nominals serve. As Austin said, "They [expositives] make plain how our utterances fit into the course of an argument or conversation."

Leaving the question of veracity predicates aside for a moment, I should say that there is no motivated reason for separating what speakers refer to with these nominals
from their orientative function. Both concern not so much reference to the speaker's intended illocutionary force for an utterance (which for Austin and Strawson the speaker must always be able to avow),\textsuperscript{12} as they concern reference to the illocutionary status of utterances made in context. The immediate force of most expository utterances is simply that of assertion, but the status of these utterances depends on what discourse or conversational context something has been asserted in. In this respect, expositive performance differs markedly from excercitive performance like marrying or sentencing. For instance, in uttering "you will be taken from here to a place of execution. . . .", or "I now pronounce you man and wife" there is no way these utterances could be taken as other than successful or unsuccessful cases of just sentencing or marrying (where marrying is not considered a special case of sentencing). But, even in the case of utterances like "Pete stayed sober because the liquor shops were shut on Sunday" the speaker could be arguing, criticizing, illustrating, describing, agreeing, informing, concluding, enumerating, or whatever; the hearer's interpretation will depend on what the hearer is able to infer from the context of the utterance.

In regards to taking veracity predicates, if we see that asserting some utterance as true or false is the essential condition for most expositives, then it is only reasonable that these expositives would pass the truth test.
Beliefs on the part of the speaker that are essential to the act he performs are called "sincerity" conditions, but if the act of asserting some belief to be true counts as the performative undertaking on the part of the speaker, then this act of asserting truth or falsity is the "essential" condition of the performance, or what the performance is to count as. Seen in this way, that admission, argument, objection, denial, description, and the like, take veracity predicates is not paradoxical but necessary. What needs revision is Austin's original criterion for performative utterances.

Austin might argue that rather than assertions, what these acts count as, and what the speaker undertakes, are arguments, objections, etc. But, a speaker may argue and intend to; nevertheless, whether he avows his intention or not, his arguing successfully will still depend on whether he undertakes certain truth assertions in the appropriate context. Although it seems as though anyone could say what an undertaking to "argue" would be, it turns out that such an undertaking is either a matter of uptake of intention or perlocutionary force, and not illocutionary force at all. Likewise, if in the context of "you must promise me that you will be there tomorrow," someone replies "Yes, I argue that I will be there tomorrow," this introduced utterance will count as neither promising nor arguing successfully. It is simply illocutionary breakdown.
In an interesting paper entitled "Conventions and the Understanding of Speech Acts," Quentin Skinner examines Strawson's amendments to Austin's theory of illocutionary force. Basically, Strawson argues that no act can be illocutionary which is not a "wholly overt" and "essentially avowable" act of communication, including the speaker's ability to delineate his intention or intentions in making his utterance, which intentions the audience must understand for uptake of the speaker's utterance. In arriving at this conclusion Strawson distinguishes two cases of illocutionary acts; the "conventional" or rule-governed utterances of the "I hereby _____" type, and what he calls the "non-conventional" utterances, which are the more usual or ordinary.

Skinner shows convincingly that there are many acts which fall between Strawson's (self-admitted) two extremes, and that, in fact, none of these acts can be said to be free of social and linguistic conventions, although definitely different from the ritualized "I now pronounce you man and wife." In the main, Skinner's examples fall into two types: the acts which are oblique (performed by performing some other act) and the acts which are non-avowable (like flattering; if avowed, then not a case of flattering). Thus, by showing that these two cases exist, Skinner argues that in such cases the speaker's intention is not, in fact, avowable, and uptake can come about only through other means, like societal
conventions. Very briefly, the following exchange characterizes the arguments very well. For Strawson:

Surely there may be cases in which to utter the words 'the ice over there is very thin' to a skater is to issue a warning without it's being the case that there is any statable convention at all such that the speaker's act can be said to be done as conforming to that convention.15

Skinner's reply is very apt:

The point is rather that even when the locution and the circumstances are both appropriate for the act performed to be assessable as one of warning, a further question still remains, as to whether there exists any recognized convention such that to speak in the way S speaks in warning A will be acceptable as a form of warning, and so capable of being taken by A as as warning. And this seems to be a question essentially about the nature and the extent of the social conventions which S may expect A to regard as appropriate for the regulation of their social (and so verbal) relationships.16

By this, Skinner argues for the inclusion of social and linguistic conventions into the analysis and characterization of all such action.

In the case of simple action reference, the verbs and nominalizations characterize the status of the speaker's primary act of asserting, and in the case of the nominals, the status of the asserted utterance is characterized. It might also be the case that the speaker has in the performance of an intended action necessarily made utterances which have the status of other actions, all of which may be referred
to by the hearer. The expository act of admission will do as a short example of the complexity of this ability on the part of language users. A speaker might say, for example, "The other car pulled right out in front of George, so he shouldn't be held responsible for the accident," to which another speaker replies, "But he did hit the other car, and that makes him responsible under the law." At this point, the first speaker has at least three admissions available to him, which are:

(a) "I admit that he hit the other car, but under the circumstances he shouldn't be held responsible;"

(b) "I admit that he is responsible under the law, but under the circumstances the law is unfair;"

(c) "I admit that George hit the other car and that he is legally responsible, but the law is unfair if it doesn't take the circumstances into account. Therefore, George shouldn't be held responsible."

Whichever of the three the speaker chooses, all of the following are acceptable replies by the other speaker and are typical of the many replies possible to him:

1) "You don't understand my objection;"

2) "How can you agree with me and still claim that George is not responsible?"

3) "Your conclusion that George shouldn't be held responsible is a strange one indeed;"

4) "How can you make such an admission and still deny that George is responsible?"
Of course, my point here is that while only the utterances introduced by admit have been given any explicit force, these utterances still have an illocutionary status which may be referred to by expository verbs, nominals, and nominalizations.

This status argument is given extra support by the fact that expository nominals characteristically take a third set of predicates as well as those of time and veracity. These I rather prejudicially call status predicates, since they are used to qualify the status of utterances in discourse. Examples are:

5)a This objection is a good one.
   b Your criticism is ill-founded and irrelevant.
   c The third argument is contradictory and inconsequential.
   d My claim is incomplete.
   e Your description is misleading.

Notice that it is as much to credit or discredit the utterances made by some other speaker that these nominals are used, as to simply refer to utterances given a particular status by being made in a particular context. Nevertheless, in each case above, the referent for the nominal may or may not be an unintroduced assertion, or even what the speaker intended as force for his utterance, and still the audience may acceptably ascribe such status nominals to them, given proper context. Notice in (4) above that while the speaker claimed only that George "shouldn't be held responsible," and nowhere
denied that George was not in fact responsible, the second speaker acceptably characterizes the (a) case as a denial.

The Place of Status in Studies of Indirect Force

As the material above demonstrates, in context what are otherwise claims or assertions assume the force of particular expository actions. Taken in isolation, the illocutionary force potential for such utterances is necessarily large. That it should be large is consistent with the axiom that individual utterances may be used with the force of different actions, which is to say that force must more often than not be understood obliquely, or indirectly.

The phenomenon of indirect, or unannounced, force has been the subject of several grammatical studies in recent years, which I refer to below. Each has tried to incorporate, from a sentence grammatical as well as the speaker's point of view, the following generalizations:

a) assertions and questions with the intended force of commands, requests, etc., are syntactically identical to literal assertions or actual questions;

b) conditions on performance seem to have bearing on the possible indirect forms of the performance;

c) the types of conditions surrounding a performance seem to be more or less essential to the performance depending uniquely on what action is undertaken.
Generalization (a) points toward the existence of pragmatic conventions such that a speaker's audience succeeds in acquiring the proper force uptake from what are only assertions and questions. Lakoff and Gordon, and Heringer to some extent as well, have undertaken to account for generalization (a) in terms of (b), or in terms of conditions which must be met for an act to have a success.

Concerning the role of sincerity conditions in the success of utterances with indirect force, Lakoff and Gordon have made an ingenious demonstration: "thus, if a sincerely requests of b that b do R, then a wants b to do R, a assumes that b can do R, assumes that b would be willing to do R, and a assumes that b will not do R in the absence of the request." 18

6)a I want you to take out the garbage.
   b Can you take out the garbage?
   c Would you be willing to take out the garbage?
   d Will you take out the garbage?

The examples of (6) correspond uniquely to the "sincerity" conditions quoted above:

Among his other objections to this analysis, Heringer points out that it seems to assume that "the intrinsic conditions on a given illocutionary act are unrelated to the intrinsic conditions on any other illocutionary act." 19 In fact, most speech actions are underlied to some extent by conditions such as those above. For example, a's belief "that
b is able to do R" clearly must underlie speech actions other than requesting, like offering, warning, advising, asking, etc. Thus, the fact that a speaker expresses a sincerity condition cannot ensure the audience's pickup of the particular force intended. Otherwise, most studies on indirect force restrict themselves to describing only a very limited set of actions, leaving the class of expository actions unaccounted for on the whole. For the indirect performance of expository actions the problems in using intrinsic conditions are great.

For example, the last sentence of the text below has the force of a conclusion, a frequently reoccurring type of expository action in discourse:

7) John's car was a clunker to begin with. And besides, he was never a very careful driver. He even forgot his glasses that morning. To suggest criminal negligence on the part of the mechanic who fixed his brakes is irresponsible.

Clearly a speaker wants the audience to see his point and may say, preserving force, "I want you to see that to suggest criminal negligence. . . ." The other correlates, however, are unsuccessful. The examples below demonstrate the deficiencies of applying the kinds of beliefs in (6) to a conclusion:

8)a *Surely you can see that to suggest criminal. . . .
b *Will you conclude that to suggest criminal. . . ?
c *I want to persuade you that to suggest criminal. . . .
d *I want to remind you that to suggest criminal. . . .
In (8c) the speaker makes explicit his perlocutionary intention. The perlocutionary intention, which was sufficient for indirectly requesting, is clearly insufficient for indirectly concluding. (Recall that the REQUEST correlate for CONCLUDE's I want to persuade you was I want you to do R.) For (8b), to introduce what is a conclusion with "Will you conclude" or "Will you believe" is equally unacceptable, although it corresponds to the formula that "a assumes that b will not believe or conclude p in the absence of a's concluding." Likewise, the force-ambiguous (8a) corresponds to "a's assumption that b can do or see what is required," but is more of a softened request than a conclusion.

(8d) reflects a distinct problem of speaker's knowledge of felicity conditions, although it too is related to the assumption above that the audience will not otherwise act, know, or realize what the speaker intends unless the speaker makes his intentions known. In cases like (7), the speaker could typically have announced the direction of his reasoning, or could have stated the conclusion he would reach at the end of the proof he was making. In these cases, the speaker could try to effect the requisite force by reminding his audience of his announced conclusion. But, in doing so, he overdetermines for force and simply reminds, rather than concludes. Expository actions resist indirect performance by either intrinsic conditions or by performance of other
actions. As I show in the following chapters, for indirectly admitting, conceding, contradicting, giving reasons and explanations, etc., the intrinsic conditions for such actions are closely connected to contextual information and prior force.

In addition, the interest here must be in how reader/hearers are able to make judgements of force acceptability in the discourse context of prior performance; that all of the internal felicity conditions are met is only the beginning of the basis for this judgement. Thus, the term status has a double reference. First, it applies to particular expository cases in which a reader/hearer properly ascribes force to an utterance without benefit of sincerity conditions, relying only on context and other force-showing devices. And, second, it applies to the force an utterance has in relation to some other unit of speech. For example, the second clause of an admission may be an assertion in relation to the subsequent discourse, particularly if it becomes a topic of argument. It is also a contradiction in relation to the previous objection the speaker is answering. Further, it may be a denial that some statement is true rather than just an assertion that another speaker is incorrect or that some conclusion does not follow from the other speaker's argument. That language users may refer to prior utterances in such a range of ways testifies to the distinct levels of
ordering and organization of performance in discourse, the subject of the following chapter. The relations between any utterance and its performative context are far more extensive than recent studies like those above indicate.

Conclusion

As announced, this study is undertaken from the reader's point of view. Thus, regardless of the speaker's force intentions, only what the reader takes to be the force of an utterance can count toward the reader's judgement of utterance acceptability or performative success. While the speaker may in fact have identified or introduced the intended force for some utterance, it is nevertheless possible for the reader to ascribe to the utterance in question various force. The term illocutionary status was introduced in this chapter to mark just this wider ability of a reader. The next two chapters will depend heavily on the consequences of this notion of ascribed force.

As the fourth section has just argued, expository actions have status relative to the actions performed around them. Many expository actions, as Chapter 6 will continue to argue, take certain other expository actions as preparatory conditions (e.g., claims must precede contradictions). This fact leads logically past questions of expository ordering
to issues of optional and obligatory actions, and the larger requirements of discourse performance. As well, even as readers ascribe status to utterances, so speakers also refer back to their own actions in discourse, identifying for the audience their intended force. Readers are thus required to evaluate discourse success not only on the basis of the force they perceive, but on how well a discourse utterance lives up to the performance intended by the speaker. This issue is taken up in Chapter 8, as both requirements contribute to and are necessary for judgements of discourse success.
1. Consider, for example, A.A. Hill's remark in "A Program for the Definition of Literature," University of Texas Studies in English, 37 (1958), p. 50:

The definition here is based on the commonly accepted belief that there is an area of study which describes items within sentences, and which stops with the border of the sentence. Such an area can be called by the value linguistics; the larger area of language study which is not bound by the limits of the sentence is here called the area of stylistics.


Insistence on keeping poetics apart from linguistics is warranted only when the field of linguistics appears to be illicitly restricted, for example, when the sentence is viewed by some linguists as the highest analysable construction. . . .

2. This absence of differentiation is due to lack of attention rather than to design. However, in recent theory, there has been an emphasis on generalization. In Speech Acts (Cambridge, 1969), p. 64, Searle states:

If this analysis is of any general interest beyond the case of promising, then it would seem that these distinctions should carry over into other types of illocutionary act, and I think a little reflection will show that they do.

Presently, and perhaps properly, the theory shows more interest in similarities between acts than differences between them.
3. Notice that it is with the introduction of expository acts like asserting that Richards is able to refute Searle's Principle of Expressibility: "the semantic component does not specify all the conditions necessary for their [the greatest part of sentences used] appropriate utterance." Barry Richards, "Searle on Meaning and Speech Acts," Foundations of Language 7 (1971), p. 538. A similar argument could be made from the point of view of oblique action, or in any cases in which an utterance's meaning does not identify its force.

4. Quentin Skinner, "Conventions and the Understanding of Speech Acts," Philosophical Quarterly 20, #79 (April, 1970), p. 130, notes this tendency and argues against it:

[if] it is possible (even essential) to grasp this intention [to flatter] without there being any explicit avowal of it on S's part, it would seem again that the success of such acts of communication must at least to a similar extent depend on the existence of conventions governing what counts in that particular situation as a case of flattery, patronage, and so on.

5. In passing, notice that this treatment is interested in reader's uptake while Austin's treatment was more interested, or at least as interested, in production. He consistently refers to problems for the speaker, as in "fitting our particular utterance, say, into its context of discourse," rather than to problems for the audience. J.L Austin, How to Do Things with Words (Oxford, 1965), p. 88.

6. Specifically, I argue that nominals of force and performative verbs are not derivationally related (counter to the transformational hypothesis). And, I argue that to draw a sharp line between so-called constatives and expositive acts with regard to truth is artificial (counter to the action condition for performance).

7. By saying that expositives are "exceptions" to the action condition (performance can be neither true nor false), I do not mean to say that they are true and false. Rather, we treat them as if they were. For
the purposes of describing discourse, it is important to note that while very few utterances are introduced by performative verbs, very few utterances are simply statements. What seem at first to be mere statements turn out to be objections, distinctions, classifications, analogies, answers, etc., meaning that actions are undertaken by a speaker committing himself to the truth of something. But, as Austin points out, op.cit., pp. 141-46, the notion of truth is a complex one and the difference between the performative and constative utterance is a matter of abstraction and arbitration. Thus, for discourse, statements, which are indirect forms for other expository actions, may be true and false, but the actions are not.


> If we are to call the issuing of any performative an illocutionary act, such acts will span utterances which are true or false as constatives are, as well as utterances which are not. It is true that there will be a performatory edge to them all -- for they are singled out as (parts of) actions.

> To give such a heterogeneous collection of speech acts a unitary name, 'illocutionary act,' is to imply the falsehoods that the overlap of functions is complete, not partial; and substantial, not accidental.

Austin's criteria then may be seriously over-simplified.


11. See N. Chomsky, Remarks on Nominalization, Readings in English Transformational Grammar (eds.) Jacobs and Rosenbaum (1970), pp. 184-221. The problems here stem not from giving nominals a separate place in the lexicon, but from denying fundamental relationships between what the nominals designate and what actions the performative verbs identify. However, the term refusal is marked in the lexicon, speakers use it to refer to instances in which someone has refused.


17. Many writers have pointed out the problem of force ambiguity, but have defined it in interestingly different ways. For example, Furberg, op. cit., p. 208, states:

I shall say that utterances which show this indeterminateness concerning their discourse or to what degree they conform to the standard requirements of that discourse, are force-ambiguous.

Compare Furberg's remark with Heringer's approach, Some Grammatical Correlates of Felicity Conditions and Presuppositions, Working Papers in Linguistics, #11 (February, 1972), p. 7:

The question immediately arises whether the illocutionary force of an utterance is a well-defined notion, that is whether for a given utterance there is any way of determining other than by vague intuition what illocutionary act(s) may be performed by the speaker using it and
distinguishing such illocutionary acts from the possible perlocutionary acts associated with the utterance.

Heringer's is by far the more empirical of the two approaches, and is concerned that such notions actually match linguistic behavior.


Chapter 7

DISCOURSE ACTION AND EXPOSITORY STRUCTURING

Discourse Texts: Structure and Performance

A theory of discourse action, in light of the material in the previous chapter, would seek to account for the speaker's intuitions of continuity in terms of the ordering of expository force. Since expository actions may not occur in random order, there must exist structural constraints that block certain expository actions from occurring before certain other expository actions. For example, conclusions logically follow arguments and explanations, solutions follow the posing of problems, contradictions follow claims, and admissions follow objections made or anticipated. However, although discourse structure thus interpreted would refer to the ordering of successive utterances, relative to the fact that certain actions must be preceded by certain other actions, such a theory would still be able to account for only one intuition about discourse acceptability.

While such a theory, if successful, could account for continuity from utterance to utterance, or from action to
action, it could not account for the intuition of a language user that some discourse taken as a whole was well-formed structurally and successful relative to the occasion that called for its utterance. To account for this larger intuition, since it involves structure and success, a theory would have to determine if any expository actions were necessary or obligatory to a discourse, rather than simply to individual acts to follow. It would also have to determine whether discourses themselves could be seen as expository acts or performative behavior. The first of these determinations is the subject of the sections to follow. The second, or whether entire discourses constitute units of illocutionary behavior (successful as actions in themselves), will be discussed first.

The phrase "discourse action," although above it refers to entire texts, should be seen as designating a general category which includes all acts beyond one utterance in length and which are intended and can be characterized as actions in themselves. Thus, this category might include all actions from two-sentence comparisons to five act tragedies, provided the actions are intended and characterizable as such. The intention criterion does not rule out that an audience in fact will be able to refer to the passage in question in their own terms, ascribing force according to their uptake; rather, what is important is the length of the passage. The speaker must intend a particular passage as counting as a certain action, and must be able to specify the boundaries of the action.
Since the case for discourse as expository action is almost a prima facie one, the above attempt at definition may seem unmotivated. However, one possible source of confusion is avoided. The prima facie case lies in the fact that terms exist in the language which refer to and identify discourse actions; expository nominals exist which refer to larger utterances than single sentences. Nevertheless, many terms may refer either to single sentences or to larger units of utterance. For example, a description could be one or hundreds of sentences in length, provided the longer passage continues to count as a description.

However, instead of relying exclusively on the nominal case or on criteria as general as "Can entire texts be speech undertaken with the intention of doing something?" or "Are expository actions like arguing necessarily confined to single sentences?" the discussion here will incorporate more telling criteria and tests. Specifically, if discourses are to count as actions in themselves, it should be possible to show that, like other actions, they must meet preparatory and propositional content conditions to be successful. Consider the following:

1) Everyone should have the legal right to make bathtub alcohol. Admittedly not everyone might want to, but those who do should be able to. For instance, I know of someone who would take advantage of the new law. If he does, though, I certainly wouldn't want to taste the product. A lot of people might kill themselves. I hope this argument has convinced you.
Everyone should have the legal right to make bathtub alcohol. Homemade wines and beer are not presently illegal, and most distilled products are only slightly more alcoholic. It might be argued that such a development would injure the liquor industry, but liquor would still be needed for those choosing not to have a home distillery. If the Government doesn't worry about sales of homemade beer and wine, it shouldn't be concerned about possible and limited sales of booze. I hope this argument has persuaded you.

Although the utterance pairs share common topics and ordered force relations, our expectations about the well-formedness of (1a) as an argument are unsatisfied.

With regard to (1b), notice that the conditions that must be met preparatory to discourse expository actions are parallel to those which must be met prior to sentential expository actions. For such discourse actions as arguing, discussing, explaining, describing, analyzing, etc., it must not be obvious to both speaker and audience that the audience will know or already believes what the speaker is asserting. In the case of arguing, the action will count as an attempt to persuade. For discussing and explaining, these actions often count as attempts to impart ability or understanding. Otherwise, for arguing, the speaker must believe that the audience may not be persuaded unless he undertakes to argue.

However, while these are the type of conditions that must be satisfied prior to acts in general, discourse acts of less than text length, but longer than a single sentence, have expository prior conditions.
2) The first interpretation would consist in considering them if not innate at least resulting exclusively from biological factors of an epigenetic nature. . . . It was in this direction that Konrad Lorenz turned. Lorenz, one of the founders of contemporary ethology, believes in a priori knowledge and interprets it on the mode of instincts.

The central problem in this respect is that of the nature of intellectual operations, especially of logico-mathematical structures. A certain number of hypotheses are possible which, among other things, correspond to the four preceding distinct factors, eventually with additional subdivisions.

(Jean Piaget, Psychology and Epistemology, 1971)

The paragraphs in (2) have been reversed to show that introducing interpretations and problems is empty without appropriate objects being established. The audience's search to establish a referent for problem, specified as it is, will fail. Objections and solutions, of whatever length, typically follow claims and problems, of whatever length.

Along parallel lines, passages taken from context, and unidentified by expository force identifying terms, will be separated from whatever preparatory conditions they have, often resulting in force ambiguity:

3) A major defect in the opinion handed down was the talk about the newspapers being criminally liable. Since the courts are responsible for deciding only the cases before them, judges should speak to the point. Their opinions should have to do with the litigation. Justice Labes wanted to rule on an issue not in question, and find the newspapers guilty of another charge.
In different circumstances, (3) could be referred to acceptably as either an explanation or an argument, but not both. If the speaker can assume that his audience knows nothing about the issue or holds an opinion contrary to the author's, he makes the pertinent claim or description of his belief and proceeds to argue for it by the giving of reasons. However, if the context is such that the audience has first asked the speaker why he believes that such a state of affairs is the case, then the speaker is not under obligation to argue, but to explain. He will not be trying to persuade or convince, but simply to report his own reasons for belief. Likewise, in another context, (3) could count as a criticism, or an oblique piece of advice to another justice, or even a revision of a previously taken position.

Notice as well, that often a discourse action may be undertaken obliquely or indirectly:

4) a Obviously there is no easy answer to the question of late medieval and scholastic influences on the thought of Galileo. The line of argument pursued in this paper suggests a modest conclusion.

b In contrast with such sweeping allegations, let us consider what may be a more promising alternative by taking an empirical description rather than a conceptual one.

c In claiming that in the first half of the film the lighting runs counter to the very basic quality of the pictures, I begin an extended analysis of the cinematography.

In these cases, of arguing while answering, of contrasting while describing, and of claiming while beginning to analyze,
the larger discourse action (the action which is consistent with the preparatory conditions) is performed obliquely by other actions.

Thus, it is possible to speak of discourse actions in terms of preparatory conditions, as actions which may be undertaken obliquely, as actions with ambiguous force when the preparatory conditions are not known, and as actions having constraints on their propositional content (see (1) above). More decisively, it is possible to refer to discourse texts and passages in terms of force. However, the important fact here is that the ordering of individual expository actions is not independently sufficient to prevent a discourse from failing as an action, and hence becoming unacceptable because unsuccessful. Acceptability depends on the satisfying of intrinsic and extrinsic conditions for the discourse as an utterance with illocutionary force. While the present discussion has been principally concerned with extrinsic conditions, the sections to follow will concern intrinsic conditions, chiefly with regard to structuring and propositional content. However, these intrinsic conditions should not be seen outside of the perspective of the discourse as an action in itself.
Turning directly to internal criteria for success, an important generalization remains to be drawn from example (1) on page 199. Discourse texts are characterizable as utterances having the illocutionary status of an argument when the speaker undertakes to persuade the audience by giving reasons for some claim or position. Without offering such reasons the speaker cannot be said to be trying to persuade someone of the truth of something, but merely making a claim, as in the case in (1a). Conversely, without making a claim or taking a position, the mere giving of reasons is empty. For a discourse action to be taken as an argument, it must be structured to contain at least one utterance which is to be taken as a claim and at least one utterance which is to be taken as a reason to believe the claim to be true.

Whereas the previous discussion concerned structure along the lines of ordering conditions, the present discussion concerns the constituent structure of discourse actions.

Compare the constituent actions undertaken in (5), which is an argument, with those undertaken in (6), which is a discussion.

5) The use of computers in processing personal needs is dehumanizing. Anyone who has credit cards or has ever registered for anything knows that their assigned numbers are more important than their names. In such circumstances one
is no more than a set of features like age, sex, and whatever else is in the marked boxes. At best, a person is just a set of answers or a particular pattern of circuits.

Discussions and arguments both are initiated by the introduction of some claim to be argued or discussed, but the discussion must include both reasons for and reasons against taking the claim to be true.

6) The question of whether or not the use of computers in processing personal needs is dehumanizing has often been debated. It seems clear that a person does become no more than a number when using a credit card or filling out applications. On the other hand, the inconvenience and waste of time occasioned by the lack of such devices is just as dehumanizing. In addition, one would have to answer the same trivial questions whether filling out cards or transacting with fellow humans. However, there is no room for special needs to be expressed on a computer card.

In a discussion, the speaker undertakes not to persuade his audience. In this way, not every discourse action must include the same obligatory sentential actions necessary for its performance.

The discourse action of analyzing is another case in point. Although superficially similar to arguing, it is characterized by descriptions and distinctions. By referring to "distinction" here is meant a special class of denials. The act requires an expectation that some element should be taken as a whole, which the speaker must deny in making the distinction. Ordinary denials demand antecedent assertions.
7) John was seen running from the scene of the accident. (ASSERT). No, John was seen walking toward the wreck. (DENIAL).

8) There is Skinner the philosopher (Walden Two). There is Skinner the scientist (Verbal Behavior). There is Skinner the social engineer (Science and Human Behavior). Humanistically oriented political theorists have, quite understandably, reacted to Skinner the philosopher. (DISTINCTIONS).

The assumptions underlying a distinction is that some difference exists between two elements which are commonly taken to be one element or parts of the same element. An analysis takes some object and establishes these differences by virtue of distinctions and descriptions. (9) below is an analysis in terms of expectations and range of belief.

9) We must now attempt to analyze what is 'expressed' by the words 'A is always followed by B.' What is expressed cannot be merely that, when I experience A, I expect B, for this is another general law, which would have to be similarly analyzed, and we would thus be led into an endless regress. What is expressed must be a belief involving both A and B, not a merely causal relation between a belief involving only A and another belief involving only B.

(9) contrasts with (10), which is an analysis in terms of description.

10) Let us imagine the situation of an individual A who is trying to get a message to a friend B who is almost out of earshot and let us suppose that communication is further hampered by various kinds of interference -- noise from elsewhere. What will A do? If he is sensible he will not be satisfied with shouting his
message just once, he will shout it several times, and give a different wording to the message each time, supplementing his words with visual signals. At the receiving end B may very likely get the meaning of each of the individual messages slightly wrong, but when he puts them together the redundancies and the mutual consistencies will make it quite clear what is 'really' being said.

Both (9) and (10) "break down" contrastively some object which is problematic taken as a whole. They may be included in arguments and explanations or appear independently.

Similarly, explanations are composed of descriptions. Notice that explanations why are similar to arguments in that when the speaker explains why it is he believes some state of affairs to hold he is commonly expected to give his reasons. However, for factive explanations of both why and how, the utterances have the status of descriptions.

11) Exactly how does the hormone activate the genes? A group has found evidence that in the cells of the chick's oviduct the hormone progesterone, which activates genes that give rise to the production of the protein (avidin), is bound to a receptor molecule of protein in the cytoplasm of a target cell. The hormone receptor complex then moves into the nucleus of the cell, where it becomes associated with chromatin: the material that incorporates the genes. Thereafter, there are quantitative and qualitative changes in the synthesis of nuclear ribonucleic acid leading ultimately to the synthesis of avidin.

Where explanations involve statements made by others, reports acceptably replace descriptions; but still, an explanation
containing criticisms, objections, concessions, and counter-claims only, would not be an explanation.

While a claim and utterances which constitute reasons for the claim to be taken as true are obligatory in arguments, there are many optional actions available in all discourse performance. Compared to the obligatory actions above, these actions have an orientative rather than a constituent function. While not necessary parts of arguments, admissions and distinctions at the utterance level improve the argument as a whole by anticipating objections and giving such claims as appear there more explicit expressions. For example, this optionality can be seen in what is known rhetorically as the "introduction." All of the following could appear acceptably in the introduction of a text in which it is pointed out that although the U.S. Supreme Court handed down a very popular decision in the Pentagon Papers case, the Court failed to explain its decision, missing the opportunity to set a precedent for many other such cases.

12)a The Supreme Court failed the public in the Pentagon Papers case. (CHARGE).
   b The Supreme Court's handling of the Pentagon Papers case was one of the most interesting in recent years. (CLAIM INTEREST).
   c The Pentagon Papers case brings to light a serious weakness in the judicial process of the Supreme Court. (POSE PROBLEM).
   d The question of what the Supreme Court should have done in the Pentagon Papers case is still being debated. (QUESTION).
The Supreme Court's handling of the Pentagon Papers case has been hailed in the popular press as a defense of the constitution. In truth, they have failed us. (REFUTE STEREOTYPE).

We want to develop an analysis of the Supreme Court's behavior in the Pentagon Papers case. (ANNOUNCE INTENTION).

There are good reasons to believe that the Supreme Court may have failed us seriously in the Pentagon Papers decision. (INTRODUCE TOPIC OF DISCUSSION).

Underlined above are typical predicates and nominals which serve in force-showing capacities. In the case of (b), the predicates could have been important, vital, or any one of a class of predicates which serve to notify the reader that some text is worth his attention. The point to be made here is that not every action in a discourse is of the same rank; the simple view of discourse performative structure introduced earlier misses the fact that such structures involve optional and obligatory actions.

Obligatory Actions and Ordering

To this point, the analysis offered has presented a general sketch of discourse structure. The account has offered evidence that the following generalizations must be included in any complete account of discourse structure.

a) Individual utterances in discourse have expository force.

b) Individual expository actions do not occur in random order.
c) Content and common topic constraints are not sufficient to account for discourse continuity.

d) Discourse texts constitute units of performative behavior.

e) Discourse actions include the performance of optional and obligatory actions at the individual utterance level.

(e) makes reference to certain actions at the sentential level which are necessarily present for the discourse action to meet the speaker's intentions and reasons for initiating speech. Given text (13) below, (14) may be taken according to previous considerations as representative of its underlying performative structure.

13)a I appreciate the Professor's letter, and just wish to clear up one small matter.

b He takes exception to the word "induced" to describe a person's behavior in a Skinnerian environment.

c I know that Skinner says that he prefers "emitted."

d But, in Beyond Freedom and Dignity, he writes: "The simple fact is that a culture which for any reason induces its members to work for its survival...is more likely to survive."

e Skinner is faithful here to his own overriding ambition: the creation of desired behavior through deliberate scientific intervention.

f Skinner should not object if others use "induced" when discussing his ideas.

14) OBJECTION: Author should not have used "induced."
COUNTER: The author's use of this term is justified.
REASON: Skinner himself uses this word.
CONCLUSION: The objection is spurious.
An analysis of the text using omission and reordering tests reduces the necessary content in terms of actions to (15).

15) The professor takes exception to the word "induced" to describe a person's behavior in a Skinnerian environment. But, in Beyond Freedom and Dignity, Skinner writes: "The simple fact is that a culture which for any reason induces its members to work for its survival... is more likely to survive." Skinner should not object if others use "induced" when discussing his ideas.

As the underlying structure formula in (14) reveals, utterances (a), (c), and (e) are optional in so far as they could be deleted without leaving the resulting text unacceptable. (a), for example, could be reordered to appear after (b). It could not appear acceptably after (f), but this fact could be handled in the theory by postulating for optional expository actions a scale of appropriateness. On one end of the scale they could be omitted entirely without a resulting loss of acceptability, and on the other end they might be reordered on a decreasing scale of appropriateness, provided that they do not violate other constraints such that by reordering they become unacceptable rather than simply inappropriate. Due to the deictic term here in (e), this statement has much less reordering potential, but its position could still be described on a scale of appropriateness. (e) could appear after (f).

Concerning the obligatory actions, as the formula in (14) shows, the text reports an objection. (b) serves in
this capacity to report that someone has taken "exception" and to report the object of their objection. The author does not concede this objection and, instead, introduces an utterance which serves as a reason to believe the author justified in using such a term. From this the reader infers that the author is in fact responding negatively to the objection, and is offering evidence in support of an (implicit) counterclaim to the effect that his use of this term is justified. Consequently, from the evidence in (d) the author reaches conclusion (f). (b), (d), and (f) represent structurally obligatory actions here. Notice that if (b) is omitted in (13), conclusion (f) becomes incidental and seems to follow from (e) rather than from the rest of (13). According to this analysis, omission of necessary structure does not always result in unacceptability, but may result in changed force, thereby producing a different text. Omitting (b) from (13) results in (c) becoming the claim to be handled. Omitting (d) from (13) results in an unacceptable text.

The above account of (13) depends on notions of obligatory and optional structure, determined by deletion and reordering tests. While such tests have proven to be of considerable use to this point, they result in far too simple an analysis of (13). In particular, they show (c) and (e) to be optional actions for the performative structure
because these are both deletable and reorderable without serious damage to the text.

As G. Lakoff has shown in general and Heringer has shown in particular, inferences and presuppositions are useful in describing performative phenomena. An examination of (c) and (e) from this point of view reveals the matter of their optionality to be much less clear than the prior analysis can show. As (c) immediately follows (b), it is useful to realize that (b) itself analyzes into the following:

16)a Speaker has made a statement S using "induce" (presupposed).
b Audience makes an objection to S (presupposed).
c Speaker reports objection by audience to S.

Objections are either reasonable to the speaker or not. When they are reasonable, and not absurd or justifying immediate contradiction, the speaker typically admits this fact even while he is prepared to defend his original remark. (c) and (d) taken together then constitute an admission. This action of admitting is consistent with the speaker's belief that the objection is an understandable one.

17) OBJECTION: COUNTRADICTION -- Speaker believes objection to be unreasonable.
ADMISSION -- Speaker believes objection to be reasonable, but not telling.
CONCESSION -- Speaker believes objection to be reasonable and telling.
The position that holds that discourse text (13) may be taken without (c) appearing explicitly in response to (b) is faced with an anomaly. (17) shows that a response to an objection is obligatory but may take one of several forms, depending on the speaker's beliefs. Such beliefs are part of the preparatory conditions for these actions. Without (c), a reader could not be expected to know whether the author intended (d) to be taken as part of a contradiction or as part of an admission. In addition, as (c) is a necessary constituent of what is in this case an admission, it cannot be held to be deleteable.

The cases for (c) and (e) are similar. (e) is more integral to the performative structure of (13) than deletion tests can show. As a conclusion, (f) is drawn from two premises: first, all things being equal, one should not object to another's use of a term if one makes use of that term as well; and second, one would not be expected to object to the use of a term which is consistent with one's own ends. (e) is at once a conclusion reached from (d), a reason together with (d) for the speaker's feeling justified in making statement S in the first place, and a reason together with (d) for reaching conclusion (f). As a conclusion reached from (d), it should be explained that (e) asserts that (d) is a typical example of the sort of remark that leads one to understand Skinner's most general aims. (e)
is more than a paraphrase of "induce" by "create" but not yet a conclusion from (d) in the stronger sense that (f) is. The additional premises needed to go from (d) to (f) are less accessible than those from either (d) or (e) to (f). (e) is deletable only due to the fact that as a reason (d) is sufficient to infer (f). If (f) were "He should not object if others use terms consistent with his ends" (e) could not be considered optional, but the chief line from which (f) is drawn.

What is important here is that (e) and (c) reveal additional considerations that must be taken as part of the grammatical object that a theory of discourse structure is expected to describe. These considerations, derived as they are from cases of failed optionality, involve the notion of relevancy, and show how in general preparatory conditions for speech actions affect the performative structure of discourse.

**Relevancy as an Additional Structural Test**

As shown in the fifth section, reordering and omission tests are not sufficient for reaching decisions of optionality for all discourse constituent actions. I now want to continue this line by discussing relevancy as an additional test to account for mis-structuring in discourse. There
are cases of confusing utterances in which the irrelevancy principle is involved.

There are several distinct ways in which some utterance can be confusing as an expository action, all involving its relevancy to its performative context. As Gordon and Lakoff point out,

"In a conversational situation where one is not making small talk, that is, in situations where statements are meant to inform, you do not normally say something that the person you're talking to presumably knows or takes for granted." [1]

In cases like this the person addressed believes that something more is meant by the making explicit of what is taken for granted and searches for ways in which the speaker's utterance carries unrealized information. Lakoff uses "your wife is faithful!" as an example of what is meant by a confusing utterance of what has been taken for granted. However, in context, the situation is much more complicated, and raises questions of what has been "taken for granted" in a discourse.

18) The wildlife is dying out here. I can remember the good old days when you could see game on the way to work. Now to see anything you have to rent a helicopter and flush them from the brush in the far northern interior. You never hear of anyone seeing a game animal, although there are occasional tracks. So, as you can see, the wildlife is dying out here.

From (18) it is apparent that the simple fact that an utterance is repeated does not mean that it becomes
unacceptable in its second occurrence because taken for granted. In (18), the wild life is dying out here does not qualify as taken for granted because it is a non-factive claim that the speaker is offering supportive evidence for. Claims of this sort are not taken for granted by definition; to offer evidence for them is the speaker's motive in initiating communication. Similarly, (19) also contains acceptably repeated information.

19) We were amazed that Tom stayed awake during the opera so we asked his wife about it. She replied that the reason that he stayed awake was that she had hinted that there was a nude scene in it. Needless to say, when he found that he had been tricked into thinking there was a nude scene in it, he was furious.

Although the first case is in the factive mode, its repetition here is acceptable because it is part of a response to a question and is thereby introduced. The second case, as in (18), is acceptable because in the non-factive mode. Compare (19) with (20), which reveals a case in which an utterance in the factive mode reoccurs unacceptably.

20) Our spies reported the enemy's departure from the hilltop before our lookout was aware of it.* The enemy left the hilltop. We immediately armed ourselves and marched after them. Finally, we caught them at the ford and did battle.

(20) also shows that in "informing" an audience, the speaker must believe that his audience wouldn't know or
appreciate some fact if they were not informed. If we were to go to a lecture entitled "Did the Allies Win WWII?" we would not expect to be told that they did win it, but to hear instead of the remarkable success Germany and Japan have since enjoyed. Conversely, statements like "Your wife is faithful!" have a wide range of acceptable contexts in which they are not "obvious" to the audience.

21) You ought to be content you know. Your children are healthy, your wife is faithful, you're a success in your profession, and you own your own home.

From (20) one could argue for the existence of obviousness conditions. Speakers may not use information that is already obvious such that the audience will expect it to signify more than the speaker intends. This seems to be so, but as an account, it neglects to include the fact that obviousness conditions are part of the success conditions for speech actions: One might conclude from the examples above that where "known" information is questioned or placed in the counter-factual mode, or used as a reason for believing some claim to be true, its use will be acceptable. This is not the case.

22) You ought to be content, you know. Your wife is faithful, your children are healthy, and you're a success. *The reason you believe that your wife is faithful is that you've never caught her with another man, and the reason your children are healthy is because they are exercised.
The class of problems just presented involves less a matter of repeated information, than it does repeated speech actions and repetition in performative structure. The reason that the repeated children example above fails is not due to the fact that it is repeated, but due to the fact that it is part of a misplaced explanation. The counterfactual faithful wife example fails in that by placing it in a context in which the fact has previously been asserted, effectively denies the first assertion. Speakers making assertions for a performative task and then denying such assertions, act to offer the audience contradictory actions and to mislead any expectations about the structure of the utterance as a discourse action.

The class of problems just presented involved cases of a speaker saying too much. There is an equally complex class of problems involved with the speaker not saying enough. Below are gross examples of this. On the surface, (23) reads as if an entire essay fitting between the two sentences had been left out.

23) *I am going to discuss in this essay the mental health of Napoleon Bonaparte. Finally, we may conclude that his believing that he was invincible was symptomatic of catatonic schizophrenia.

24) I am going to discuss in this essay the mental health of Napoleon Bonaparte. We may conclude that his believing that he was invincible was symptomatic of catatonic schizophrenia.
Comparison with (23) shows that (24) is not deviant since its second sentence does not have the force of a conclusion (finally is a sentence adverbial of the consequence relation type). Again, unacceptability here is due not to what is said, but to the lack of appropriate preparatory context for the speech action attempted. Without such context or the presence of appropriate preparatory conditions, such actions are unordered. Below are less obvious but more common cases of this sort of mistake.

25) I am going to speak today on the subject of civil liberties. Civil liberties are very important to us because we would be subject to dictatorship without them. Whenever we are subject to dictatorship we must rise and fight.

26) Speech action theory is of considerable interest to disciplines other than philosophy. It is also of interest to political science. Whenever possible, different disciplines should undertake research in the field to see how it can be of use.

In the normal course of reading, these starred utterances seem simply ad hoc; but, in both cases they are in fact related conceptually to what had gone before. Their deviance is due to the fact that they violate speech action conventions. In the case of (25), the first sentence has the force of ANNOUNCE TOPIC and the second sentence has the force of CLAIM (ANNOUNCE TOPIC is usually characterized by statements of intention). Although it could reasonably be fitted later into an argument for the claim made in the
second sentence, the third sentence has the force of CONTEND here, due to the imperative modal must and the conditional construction (compare it to whenever we are subject to dictatorship, we might rise and fight). While it could be made part of the second sentence, or the claim, by virtue of conjunction, its CONTEND status in this example has no structural preparation; in fact, it announces a new topic. Although a reader will interpret that it is connected in subject matter to the text, he must find it confusing.

The situation in (26) is similar to that in (25) in that the third sentence is in fact related conceptually to the topic, but different in that here the situation involves a different sort of expository misordering. If a speaker announces a general topic and then commits himself to a particular instance of that topic, we do not expect him to return to the topic in general until he satisfies his reader's expectations as to why he committed himself to a particular instance to begin with.

A final type of relevancy mistake involves statements which follow from their antecedents but which are misleading as utterances with the force of conclusions.

27) Since he comes from Australia, John had never seen an elk before. *In fact, he had not even looked for one.*

28) *Waiting for Godot,* (?) as a play, centers around the action of two characters.
These two examples are typical of what Lakoff and Gordon have called "uncooperative" arguments. As an example, they cite: "suppose you are a witness to a murder and someone asks you what happened; it would be uncooperative to reply 'someone tried to kill Harry.' You would not have said anything false. . . but you would be giving the misleading impression that the attempt was unsuccessful." As a case of irrelevancy, (28) serves to point up the function of the relevancy conditions on information the speaker may offer in context.

Cōnclusion

This chapter has tried to demonstrate the number and complexity of considerations that a theory of discourse structure must take into account. In the last section, it has also tried to show that phenomena not ordinarily considered part of performance, like relevancy and obviousness constraints, are related directly to performative structure, and that failures in such ways have structural consequences. Generally, the chapter has also tried to show that discourse studies which depend on content analysis, a description fitting almost all previous discourse work, must be inadequate. Although common topic constraints are important, the essential object of an audience's intuitions of continuity and
well-formedness is the structure of the action of the discourse itself.
FOOTNOTES


Chapter 8

EXPOSITORY NOMINAL REFERENCE

Introduction

The analyses in the preceding chapters have each contributed in their own way to the contention that a language user's intuition of discourse well-formedness is by no means a simple judgement. It is not a gestalt impression of general understandability, nor is it simply a matter of recognizing acceptable relations between individual sentences. In fact, it is based on ordering and constituent organization of a performative type, where these constraints are joined by the standard constraints on performance in general: preparatory, essential, sincerity, and propositional conditions. The classes of errors brought to light in the chapters above each reflects a unique and distinct linguistic ability a language user must acquire, in order to avoid such errors. Without such abilities, the language user produces "unacceptable" utterances, where "unacceptable" refers to a large range of possible deviancy. As might be
expected, however, acceptability is not the only criterion by which the performative case for discourse may be made. An equally strong corroborative case can be made on the grounds of appropriateness, a term which describes utterances which are not obviously unusable or unacceptable but are peculiar nevertheless.

A speaker's intentions for the force of an utterance or a passage are not always the intentions he may have for the utterance or passage later; the same utterance may come to be given separate force in subsequent speech. What a speaker may have intended first as a contradiction he may refer to at a later time as an agreement (particularly if the speaker comes to learn that someone else had made the same assertion before he did). Decisions about which nominals of force to select, out of a class of terms which generally characterize the force of a specific utterance (see the second section to follow), are based on distinctions which reflect additional considerations a speaker must face in making judgements about discourse well-formedness. What the reader takes first to be well-formed as a description comes, after the reader discovers that the speaker intended an apology, to be ill-formed. Judgements of discourse well-formedness (or performative success) are relative not only to what has been done in a discourse (in terms of the ordering and organization of force, as well as the satisfactory meeting of felicity
conditions), but rest as well on the reader's appreciation and uptake of what the speaker intended to do in initiating speech. These intentions are nowhere communicated as explicitly as in the use of expository nominals.

This chapter develops five typical considerations which speakers must take into account when referring to expository action; these are of considerable interest in that they demonstrate the extent of the conventions which speakers must acquire in order to refer to expository actions appropriately. By examining the alternative forms of reference to action, along with the inappropriate cases of action reference, it is possible to show that speakers are dealing not only with felicity conditions and performative organization in discourse, but with classes of action, only one member of which is usually appropriate in a given situation. Otherwise, referential evidence is clearly more definitive than other, non-prima facie grounds. Although acceptability is a stronger criterion, because appropriateness relies on referential evidence it makes an equally important case for the performative analysis of discourse.

Notice that a range of possible reference exists within each of the numbered types below:

1) If Henry had read the book he would know what we are talking about. However, it's clear that he hasn't even seen the book, so obviously we must agree with John that he can't follow our discussion.
2) Reference to Individual Utterances
   a Your hypothesis isn't necessarily accurate.
   b Why would you want to concur with John?
   c Your assertion that he hasn't seen the book interests me.
   d Such an agreement serves no useful purpose.
   e I certainly understand your conclusion.
   f I can't argue with your premise.

3) References to the Text as a Whole
   a Your proof seems airtight.
   b Your argument is far too simple.
   c The case you make here is an obvious one.

4) References to Logical Organization
   a Your inference is the same one I would have made.
   b Your reasoning here seems complete.

From the examples in (2), one can see that no constraints on acceptability are broken in referring with either concur or with agreement to the second utterance, and that hypothesis and premise are both acceptable for referring to the first utterance in (1). However, a term like objection, although it is possible to construct a context in which (1) taken as a whole has the perlocutionary force of an objection, would seem to be inappropriate for either of the utterances of (1), since these utterances are connected within an intention to make a case. (See the third section below for a discussion of inappropriate nominals.) Besides being responsible for selecting appropriately from the multiple possible references to an individual utterance, a speaker may also make specific reference to the status of the text as a whole (as in (3)) and to the extent to which the text is ordered (as in (4)).
Classes of Expository Action Nominals

As classes (5a) through (5e) show, a speaker has several acceptable alternatives in referring to the force of his utterances, and although the members of such classes are clearly related, the terms are not synonymous:

5) a ADMIT, ACKNOWLEDGE, CONCEDE, CONFESS, ACCEPT, CONSENT, AGREE, GRANT, CONCUR, ACQUIESCE, ALLOW.

b CONCLUDE, SUMMARIZE, FINISH, CLOSE, BRING TO AN END, PROVE, ARRIVE AT JUDGEMENT, SETTLE, SOLVE, DECIDE.

c CONSIDER, LOOK AT, EXAMINE, INSPECT, SCRUTINIZE, NOTICE, THINK OVER, DELIBERATE, REGARD, REVIEW.

d ARGUE, BRING EVIDENCE, PRESENT REASONS, CONTEND, ESTABLISH, REFUTE, ADDUCE, SUPPORT.

e PROPOSE, INTRODUCE, SUGGEST, ANNOUNCE, PRESENT, PROPOUND.

For example, notice in the cases below that different members of class (5a) (a similar case could be made for any of the classes) may not introduce the same propositions:

6) a *I confess that John robbed the store.

b ?*I concede that I robbed the store.

c *I confess that it is true that John robbed the store.

d ?*I consent to his version of the event.

e *I concur that I robbed the store.

7) a I concede that John robbed the store.

b I confess that I robbed the store.

c I grant that it is true that John robbed the store.

d I concur with his version of the event.

e I admit that I robbed the store.
Thus, speakers must not only avoid errors of reference in which a term from the wrong class is used but must also learn to avoid errors of misreference within a class.

Concerning the type of error which occurs when a speaker refers to the wrong class of illocutionary action, such cases are indicative of gross misunderstandings of the propositional content or of the context in which the utterance appeared. In example (8), the text contains a syntactically marked imperative statement (be sure) which has the potential force of a warning or a command, depending on the context provided:

8) Henry knew that the cement trucks were coming so he told me to be sure to move my car out of the way. Otherwise, he said, they would simply push my car off the side of the road.

a *Luckily for me, I took his command seriously and moved my car.

b Luckily for me, I took his warning seriously and moved my car.

(8a) is representative of cases in which a speaker has misconstrued a particular context and consequently mis-ascribes the force of a particular utterance. Consistent with the notion of classes, notice that "Luckily for me, I took his advice (or suggestion) seriously" is not unacceptable; although neither of these are as appropriate as warning, they do belong within the same class.

Whereas (8) is a case of mis-reference, ascribing force incorrectly also produces another, altogether expectable,
set of problems. Where a force ascription is not obviously wrong, the nominal reference becomes ambiguous, producing confusion.

9) So, we found thus far that scientific revolutions depend on new models and scientists initiate revolutions when they discover previous paradigms are not capable of handling certain anomalies.
   a With this summation, I think that we should break for the day.
   b ?*After this concession, I think that we should break for the day.

The confusion caused by (9b), where nowhere in the context previous has the text tried to concede, derives from the inability of the reader/hearer to find the referent for this, where this is an concession. If the speaker had intended a concession then he could not reasonably have used force showing devices like so and found. These mark a consequence or result relation instead of an action. Notice that such force showing devices, while separating expositive nominals from different classes, rarely serve to separate members within a class. So and found could mark settlements, decisions, proofs, judgements, etc. To make such distinctions, propositional content and context are necessary.

As (6) and (7) show, there are certain internal constraints on the propositions with which performative verbs may appear. Confessions seem to require a first-person report; whereas, first-person reports seem entirely unacceptable with concessions. Likewise, grant, acquiesce, admit,
and concede all appear with material the speaker recognizes as dangerous to his position, while accept, consent, and concur commonly appear with material favorable to the speaker's position. Context, then, introduces material for use in separating the members within classes. How this takes place is the subject of the following section.

Expositive Reference and Appropriateness

Examples (8) and (9) involved mis-reference between classes of expository nominals. Otherwise, once the speaker understands what class is involved, from the propositional content, context, and force showing devices of an utterance, he must further be able to determine which member of the particular class is at stake. Since a language user must first select the proper class of action, and then select the appropriate action nominal out of that class, he is no longer dealing with a nominal which will either be flatly acceptable or unacceptable when used. Rather, he must choose within a range of usage extending from unacceptable to appropriate and decisions about where a particular nominal will fit in this range must be determined on the basis of appropriateness criteria.

In short, for situations in which a particular class of expositives is involved, if the speaker selects any member
of that class, he will not have immediately selected a nominal
the use of which will result in an obviously unacceptable
utterance. Rather, in each case that he has not selected
the single status term which most accurately characterizes
the force of an utterance, he will be producing a more or less
inappropriate utterance. However, as pointed out earlier,
what are inappropriate as utterances because they contain
nominals of a wrong class may have the added and unexpected
consequence of rendering entire discourses unacceptable, be­
cause they lead the reader to believe that the speaker means
another force for his discourse than the one it has.

Unlike many cases of unacceptable performance, in­
appropriate utterances are always intelligible and common
speech is replete with them. (9') below repeats the text in
(9), and ranges the members of class (5b) in order of descend­
ing appropriateness. While some of the terms are clearly
inappropriately used here, none result in unintelligibility.

9') So, we found thus far that scientific revolu­
tions depend on new models and scientists
when they discover previous paradigms are not capable of handling
certain anomalies.

a With this summation, I think we should take a break.
b ?With these conclusions, I think we should break for the day.
c ?After bringing this evidence forward, I think that we should break for the day.
d ?With these reasons presented, I think we should break for the day.
e ??With this finish; I think that we should break for the day.
Concerning the role that context plays in deciding between the different cases of \((9')\), notice that decisions about the appropriateness of a certain nominal may be based on both right and left branching search or processing. A first account of the process by which speaker/hearers decide acceptability would point directly to the so consequence marker and would dictate that only conclude or summarize (or another consequence marker) are consistent with the context. However, force consistency is not in fact at issue here. Notice first that find + [past] (followed by an identifying description) signals the oblique force of REPEAT (and thus one would have to select summarize rather than conclude). Also, the context in \((9')\) could acceptably appear with decide in this slot:

10) So, we decided thus far that scientific revolutions depend on new models and scientists initiate revolutions when they discover previous paradigms are not capable of handling certain anomalies. After arriving at these judgements, I think that we should break for the day.
Although both passages have the force of REPEAT, when *found* is replaced by *decide* the nominal *judgements* becomes allowable. Thus, the term *found* makes the important distinction here, or at least a distinction on which appropriateness decisions may be based. For instance, *conclusion* may not be substituted for *judgements*, but *settlements* may.

By *so* and *find* + past, the reader understands or recalls that the discourse text as a whole has been engaged in an analysis. With *so* and *decide* + past, the reader alternately understands that an argument or a discussion has been undertaken. When a speaker has committed himself to specifying a text to such an extent, the reader may reasonably expect only the member or members of class (5b) which are appropriate to *decide* + discussion (like *decision*, or *judgement*) to follow in the subsequent text. This is a case of forward or right-branching processing and satisfaction of the expectations which are part of the right-branching process results in judgments of appropriateness.

Conversely, a judgement of inappropriateness depends on the expectations aroused by such specifications being violated or deviated from. At this point, a left or backwards search is necessary, to try to recover the missing referent. As the cases in (2b) indicate, the range of possible acceptable and appropriate reference to previous discourse force is considerably greater than any single set of right-branching
expectations like that for decide + discussion + judgement. In short, no simple entailment relation is involved here. Utterances as varied as With these remarks, I think that we should break for the day or even Having proved that scientific revolutions are actually evolutions, I think that we should break for the day could have followed the text above as well as the examples of (9'). Left-branching search for a nominal like judgement must look for prior decisions, or claims which might have the force of decisions. If the reader finds or knows that only anaanalysis has taken place, and that decisions were neither necessary or appropriate in such a performative undertaking, then he must decide that either the particular reference is inappropriate or that the discourse as a whole has been a mis-performance, having failed to fulfill the speaker's larger intentions.

Clearly, the (e), (g), and (h) examples in (9') are the cases of greatest inappropriateness in the range provided by the nominals of class (5b). They would be questioned immediately if actually used by a speaker in such a way; but, for the purposes of this work it is desirable to draw a distinction between examples of gross misunderstanding like those in (8a) and (9b) and examples like these. While the latter are clearly peculiar, because they contribute to the general end of terminating the discourse they do not lead to the conclusion that the speaker has completely misunderstood his
text. They are not simply odd in the same sense that (9'b) is odd; rather, they belong to a class of irrelevant utterances. It should be recalled at this point that one subset of irrelevance errors concerned the drawing of misleading conclusions. While the passage in question is marked by so, or a consequence relation which stands between the text and whatever went before it, it is misleading simply to refer to this passage as a "closing." As indicated above, context has the more important role of determining specifically which nominals within a class have the correct reference, compared to force showing devices, which serve more generally to indicate the proper classes.

Suggestion and Oblique Action

In that the discussion above depends on the notion of oblique force for uptake and subsequent judgements of nominal appropriateness, it presents an over-simplified account of the role of oblique force. In fact, as shown by actions like suggesting, oblique force and the process of "softening" affect the uptake of force considerably. Generally speaking, references made subsequent to an indirect action may refer back either to the surface action or to the underlying action. In (9'), reference could be made back to find + past with findings (These findings support yesterday's conclusions) or
with summation. Notice, however, that repeat, as in "So, I repeat that scientific revolutions depend on new models: . . .," is not a proper object for reference: "*After these repetitions, I think that we should break for the day."

Clearly, a reader understands that the speaker of (9') is undertaking to repeat material. Uptake of this part of the force of the utterance is essential for deciding to opt for summarize rather than conclude.

II) We have turned once again to the case for Social Darwinism and reconsidered its great similarities with Marxist thought.

a This review should leave us well prepared to look at the international labour movement.

b My re-examination of this topic should be taken as an indication that everyone failed the last quiz.

c My repetition of this material should prepare us to go into European communism next week.

However, notice that in (11) repetition is an acceptable referent to the text. While this topic is outside the concerns of this work, it does serve to point out that constraints exist on discourse action reference beyond those I have briefly identified above. As pointed out in Chapter 5, the role of oblique action in discourse is considerable and perhaps for no other class of action does a speaker have to understand constraints on and conventions about indirect action as he does for expository action.

Examples (12) and (13) below concern a phenomena which Lakoff and Gordon have called "the softened suggestion."
Their example involved the question "Why are you painting your house purple?" to which both "What's wrong with purple?" and "I don't have much money and there was a sale on purple paint at the hardware store," are reasonable answers. In the case of "What's wrong with purple?" the original question must be construed as a suggestion that the person involved not paint his house purple. Suggestions have a very wide range of utterances which may be used successfully in their performance. For this reason, many apparently unacceptable cases of selecting a status nominal from the wrong class, turn out to be acceptable in the case of suggestion. In this sense, the nominal suggestion seems to stand in a class by itself:

12) I should tell you that the alligators are hungry.
   a. It won't do you any good to threaten me.
   b. I'll take your suggestion seriously that I watch out.
   c. Thanks for the warning.

13) This faucet has been leaking for days.
   a. I've heard your complaint somewhere before.
   b. If you're suggesting that I fix it, forget it.
   c. Thanks for the warning.

Indirect action often has a softening effect on underlying force, and suggestion reflects this softening by virtue of the fact that when the speaker uses it, he acknowledges that the surface utterance could have been expressed differently. Thus, nominals like suggestion, recommendation, and even reminder have a much wider range of reference than the analysis in the third section above would indicate.
Ad Hoc Nominal-Nominalization Choices

This study also might give the impression that reference to expository action could be carried out by the use of either nominals or nominalizations indiscriminately. If the uptake of force is dependent both on force-showing devices and context, and one can either refer to the action itself or to the status of the action in context, then nominals and nominalizations are not interchangeable:

14) I repeat, the A and Z sections are to go to room 222.
   a Your repeating that instruction strikes us funny.
   b Your repetition of that instruction strikes us funny.

15)a Your examining the issue in this paper is very odd.
   b Your examination of the issue in this paper is very odd.

As the cases in (15) show, reference to action and reference to the text in which the action has taken place are distinct. (15a) is a reference to an action that becomes a fact as soon as it takes place, while (15b) is a reference to either the manner in which the action was undertaken, or a misreference to the event: His examination of the issue took five minutes. Thus, the acceptability of utterances in discourse which refer to other utterances and their force is dependent not only on correct class choices being made, and on appropriate selections being made within a class, but on the correct nominal-nominalization choice as well.
Objects of Expository Action

A final type of consideration associated with status assignment concerns the confusing of what objects expository actions may take:

16) a. The difficulty you present.
   b. *The difficulty you criticize.
   c. *The difficulty you support.

17) a. The approach you take.
   b. *The approach you notice.
   c. *The approach you conclude.

18) a. The advice that you offer.
   b. *The advice that you introduce.
   c. *The advice that you settle.

19) a. The questions you raise.
   b. *The questions you acquiesce.

Particular predicates regularly occur with certain nominals, where only nominals are involved (*the approaching you take), and the predicates are of the performative kind. Raising questions, introducing topics, and supporting positions are examples of usage as common as that of talking directly about actions like questioning, supporting, and introducing. However, as one can see by comparing questioning with raising questions, the pairs are not identical.

The comparison here holds not between questioning and questions as such but between the asking of questions and the raising of questions. In the first place, a question nominal reference refers back to an instance in which someone acted to ask something. But, in the case of raising questions, the
object question is only some issue or claim or problem that is to be settled or explored. In such situations, the questions are never asked; instead, they are introduced into the argument as difficulties or unsolved problems. Thus, the nominal reference here refers neither strictly to an action nor to something which has the status of a question either. Nominals used in this way are indirect forms, or oblique forms, for referring to other actions. Notice as well that for support a position, position nowhere refers to an actual action of positing, and utterances don't have the force of positions; rather, they may be claims, reports, reason explanations, etc., but not actually positions.

(20) is an example of an utterance which has the force of supporting (it is marked by furthermore and involves the giving of additional reasons beyond a central body of reasons already offered):

20) Furthermore, had I known that the police were there, I would have reported the accident immediately.

21) What you say really doesn't support your position that you are innocent of criminal negligence.

Taken together with (21), (20) provides the referent for the nominal position. From (21), we understand that a speaker has argued that he is innocent of criminal negligence and has done so by offering reasons. Position here refers to the
status of this claim and support refers to the arguments offered in behalf of the claim. Thus, position is an oblique nominal for claim here.

On the other hand, approach (see (17)) does have a verbal equivalent: I want to approach the subject of birth control from the historical point of view. Nevertheless, approach refers uniquely to a decision made on the part of the speaker about how his message could be encoded most effectively. It refers obliquely not to any particular action but to a large group of actions, all of which fall together under the speaker's intention for perlocutionary effect. In short, nominals like question, approach, difficulty, example, etc., each have irregular referents when taken together with performative verbs. Utterances in discourse which contain this type of nominal reference may be deviant in two ways; the nominal may incorrectly appear with a particular performative verb, or may ascribe an action to the discourse which never took place.

Conclusion

The considerations above reveal the complexity of the ability to refer to previous force or illocutionary action. They also reveal the complexity of ways in which such reference can go wrong. In coming to judgements about discourse,
especially when the speaker's intentions are important for such judgements, these nominals are crucial. While performative structuring and utterance force organization and ordering are necessary for discourse well-formedness, they are not sufficient for a reader's final judgement of well-formedness. As shown above, discourses may be internally well-formed but must be found unacceptable if they do not conform to the speaker's intentions to act. A well-formed description is ill-formed if the speaker intended an argument. On the other hand, conformity to intentions is insufficient for well-formedness if the force of the utterances are improperly ordered. It is uniquely through expository nominals except in those cases of description in which no such nominals are needed, that the reader comes to know the speaker's intentions for his utterance, taken as a whole or in large parts.
Chapter 9

PERFORMATIVE CONSTRAINTS ON CONJUNCTION AND
FORCE INCORPORATION

Introduction

In this final chapter, I bring together the analyses in Parts I and II, and show that conjunction or successive sentence relations must be consistent with a discourse's underlying performative structure. This is a generalization that may be expressed as a constraint and appears as (1) below. In making an argument for (1), it should be pointed out, I simultaneously substantiate at least two of my prior observations, which are listed as (3) and (4). (2) characterizes certain hypotheses that result from my argument in general, but have not been part of any analysis previous to this point and are of interest in themselves. Thus, to avoid confusion between these various cases, I delineate them below:

1) No device may be employed where it alters or is inconsistent with the underlying force organization of a text, particularly conjunction or content relations between successive sentences.

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2) Uptake of expository actions must often be assisted by force showing devices.
   i. A generative account for the occurrence of force showing devices is possible in terms of a force incorporation operation.
   ii. Where force potential is high, context will be insufficient for force uptake.

3) Errors produced by failure to follow the consistency constraint of (1) add indirect support for the analysis made in Chapters 7 and 8: discourse has an underlying performative structure.

4) As mentioned in the Conclusion to Part I, conjunction grammar adequately handled only some of the various meaning relations between successive sentences. Additional meaning relations are covered by performance theory and are considered to be performative.

This chapter concentrates on (1) and (2) above, first demonstrating the role of force showing devices and then enumerating errors representative of inconsistency between discourse force requirements and successive sentence force. Subsequently, the later sections deal with certain counterarguments invited by (2). As (2ii) stipulates, in those cases in which force potential is high, or the danger of force ambiguity and misunderstanding is sufficiently great, context alone cannot be expected to ensure proper uptake. In these cases, or in any other cases in which a speaker anticipates "misfire," he may resort to force showing devices. (Many of these devices are part of the propositional content of certain acts and are necessary to the successful performance of such acts anyway.) Since force showing devices are
in fact elements of sentence propositional content, which means that they are potentially describable by a sentence grammar, a context model for uptake of force could be redundant. To examine this possibility, I include a section which takes up the most promising candidate for a model of force indication: J.R. Ross's analysis of declarative sentences.

In his article on declarative sentences, ¹ Ross utilizes the notion of force "incorporation," the natural basis of a generative model of force. Basically, his is an extension of the notion of incorporation into an analysis of performative phenomena. Incorporation first received attention following G. Lakoff's dissertation, as an essential part of the kill as CAUSE-to-die analysis. ² A central operation in Gruber's thesis as well, it was used there to account for a certain large class of verbs that seemed to have locative and durative prepositions "incorporated" into them, as in climb for climb up and pierce for pierce through. ³ Both Gruber and Lakoff held that the incorporated elements were to be considered abstract, and Lakoff specifically gave his the status of superordinate predicates. ⁴ As in cases of oblique force, in which performative predicates often are absent, these abstract elements do not appear as part of the surface structure of a sentence. However, they usually constitute an important sense in which a hearer understands sentences where they are part of an underlying structure.
By the time of the Ross article a solid reaction negative to the CAUSE-as-abstract-predicate analysis had formed and much more evidence was expected than before by way of proof for claims of abstract predicates. Ross took the task of showing the DECLARE, that explicit performative for sentences in a declarative mood, was an integral part of their deep structures, and attempted to argue the case from internal evidence. By calling attention to constraints on pronominalization and reflexivization, he argued for the existence of a high abstract preformative clause, I DECLARE + S, on the grounds that, given the constraints that he had shown, such a higher clause would be necessary. On the whole, his argument provided more support for a higher personal pronoun than for DECLARE. Nevertheless, the question of how such an abstract predicate might be incorporated into a sentence is of interest, particularly since it poses a possible alternative to the treatment outlined in Chapters 7 and 8. Force incorporation seems to be an attractive operation, at least at first, for use in accounting for the fact that while every utterance allows force uptake, few utterances are actually marked for or introduced by force predicates.

As it is possible to use a single sentence for different speech actions, one must ask what we know from the propositional content of an utterance that qualifies it for us as a particular action (what marked it as a case of defending
and not as an utterance that was used to criticize something). The objection to a context grammar (or a context-based model of discourse performance) rests on the fact that many utterances have such great force potential that they must be marked even in context so readers may know how to take them. Might not a context model be stronger than is necessary to describe audience uptake? Will a standard grammar be posed with any insurmountable problems if an attempt is made to subsume context within a theory of force incorporation?

This counter-argument, however, is secondary to the primary goal of this chapter: to demonstrate that successive sentence relations must be consistent with performative organization. Where these relations deviate from the larger organization, errors and unacceptability result. Specifically, these errors occur when a speaker mis-applies or omits force showing devices (like conjunction relation markers, negatives, evaluative predicates, and the like) and should be distinguished from those occasions in which a speaker has used the wrong utterance entirely for the action attempted.

Preliminary Evidence

When speakers want to support either their own or another person's argument, they add either further arguments
and reasons for belief to the ones present, or reasons showing importance.

1) a In addition, Henry got home late last night.
   b Furthermore, if we had known what we do now, we would have quit.
   c The reason he gave is indeed a good one.

The act of adding is marked by the sentence adverbials of addition and continuation, and the act of stressing importance is marked quite typically by a reference to status and some predicate of favorable evaluation. In contradistinction, the act of contradiction is marked by assertions of "not true" or of "not-fact" and are typically denials which identify the status of the act to which they are denials.

2) a Your remark is not true.
   b You did not pick up the Star of India with your teeth.
   c That is not the reason he gave his wife.

The difference in force between contradiction and criticism is largely one of degree, insofar as the actual truth of someone's utterance in criticism is not at stake. Compare (2) with (3).

3) a The reasons you give all seem insubstantial.
   b I'm surprised at the lack of reasoning this shows.
   c His Marxist interpretation leaves too much of the poem unaccounted for.

Similarly, as supporting stands in opposition to contradiction, so criticism is in opposition to defending.
4) 

a) Your argument against their position does not take its practical utility into consideration.

b) An attack like that completely ignores the fact that the program has been successful for three years.

In defending, one not only claims that some position is a good one, or gives reasons for something to be valued, but counter-attacks by showing a deficiency in the original attack.

From these few examples of utterances that are typical of different expository acts, one can infer that context is definitely not the only criterion by which we understand the status of expository action: rather, there will be elements in the propositional content that will serve to mark the act attempted. Often, these indicators of force are in fact necessary grammatical parts of the surface structure of a particular utterance and may not be deleted without leaving the utterance ungrammatical. Yet, they are always signals of deep propositional conditions for the act being attempted; and while other elements of the utterance might be deleted without seriously affecting success, these are not deleteable.

Factivity, the Subjunctive, and Negation as Force Showing Devices

In order to give advice successfully, the speaker must know that what he is advising his hearer to do has not in fact already been done. Consequently, the speaker must
refer to this future action non-factually or, more specifically, by using either the future tense or the infinitive of the verb. Otherwise, he could not be said to be giving advice about something his audience had an opportunity to do. More importantly, he must believe that this action is in the hearer's best interest, so he must also express the utterance in the subjunctive. Compare the examples of (5) with those of (6), which are suggestions.

5) a You really ought to do something about that faucet.
    b In that situation, you should try for a draw.

6) a You might move Q-R5 and force the bishop's pawn.
    b I would find the nearest exit if it were me.
    c If it were me I would find the nearest exit.

It might be argued that since the subjunctive mood presupposes non-factivity, the remarks on factivity could be eliminated. However, factivity enters into consideration in almost all of the expositives and could be expressed as a + or - feature.

Otherwise, the subjunctive markers essential to advising are ought and should, as they give the imperative emphasis necessary to distinguish advising from suggesting. In the case of suggestion (6b), which compares with (6c), the speaker stresses or extends what the speaker stresses. For many speakers, to say to another person that he should do something is to say that the speaker himself would do
whatever is in question in similar circumstances. For such speakers, the suggestion proper (but not the softened sug-
gestion as in (6a)) would not exist; all such usage would have the status of advising. Otherwise, the softened advising of (5a) is quite distinct from the softened suggestion (6a), pointing to the illocutionary load the subjunctive marker plays in such cases.

In this way, the use of the subjunctive here serves to make explicit the sincerity condition for advising that the speaker must believe the proposed action to be in the hearer's best interest. Without this sincerity condition being made explicit, (5b) would become a suggestion: In that situation, try for a draw. Concerning the factivity of advising, *I advise you that you did something about that faucet is deviant semantically precisely because the act of advising demands that the act in question has not already been done. You ought to have developed your knight earlier has the force of advising the hearer to act in a different way the next opportunity. (There are contexts in which it would have the force of analysis.)

7)a If you ever come here again, I'll steal your hubcaps.
   b If you don't consider our case, we'll call the mayor.
   c I advise you not to come here again, or I will cut your shoelaces.
   d ??You should not come here again, or I will cut your shoelaces.
(5), (6), and (7) are all expressed non-factively, but depend largely for their force on how that non-factivity is expressed. (7), each of which is an example of a threatening utterance, (I treat threatening as a special case of warning), takes a polar opposition to (5) in that while the utterances in (5) are expressed in the subjunctive with the result that the speaker says that some event should take place, the utterances in (7) are expressed in the conditional in such a way that the speaker is saying that some event should not take place. (7c) presents a case of explicit advice being incorporated into the conditional disjunction of a warning, in contrast to (7d). (7d) is peculiar precisely because the speaker is both wanting something to take place and not wanting it to take place.

(8) and (9) are examples which show deviance associated with unacceptable force indication for warning and advising.

8) I'm giving you gentlemen on the committee my last warning.
   a If you don't take responsibility for this action, I will.
   b *You really should take responsibility for this action.

9) Shortly afterwards, we were asked again for our advice.
   a We replied that if the bandits held us up again we should fight to the finish.
   b *We could only say that if the bandits held us up again, we would fight to the finish.
For example, in (8) the act of warning is made obligatory by the actual introduction of the predicate warning in the context sentence. The same situation obtains in (9), for advice, and in both deviant cases an unintroduced act is performed. This is especially clear in (8), where both the (a) and (b) examples advance the same propositions, with the result that one can see the important roles conditionalization and the use of the subjunctive have in the reader's deciding illocutionary status or ascribing force.

Concerning the role played by negation and evaluative predicates as force showing devices, the actions of criticizing, contradicting, and defending provide useful examples.

10) a Your position here is totally unwarranted.
  b His justification of his decision was astonishingly ill-conceived.

(10) presents two cases of criticism, an action which typically involves a nominal used to characterize the status of the material criticized and a negative evaluation predicate like unwarranted, insubstantial, unreasonable, etc. Primarily by the presence of these predicates we distinguish between denials (11), contradictions (12), and criticisms.

11) It isn't true that I knew what would happen.
12) That was not his excuse for being late.

The occasions of all three may contain status nominals and explicit negatives as well, but only criticism involves
predicates of negative evaluation such as those in (10). Stated simply, a denial is any action either involving an assertion that some statement is not true or that some relation does not obtain. A contradiction, as in (12), depends on immediate context, but is essentially a direct denial that someone's previous utterance is correct, or an assertion of the opposite state of affairs.

13) John testified that Phil wasn't at the scene of the crime.
   a But Phil admitted that he was there (non-negative contradiction).
   b I know very well that he was there (emphatic contradiction).
   c Given the evidence, such testimony is misleading (criticism).
   d What John said about Phil isn't true (denial).

Their involvement with negation is one way in which contradiction, criticism, and denial are similar. All three are responsive, or appear in the context of a prior assertion or claim. However, where the reader finds a negative assertion in the text subsequent not to a claim but to an attack (where a charge or accusation is leveled directly or indirectly at some person or organization), his alternatives in ascribing status are greater and he must be more discriminating. Where the reader understands the author to be responding to an attack negatively, the following options are available, given the corresponding possible sincerity conditions.
Discourse Constraints on Conjunction

The claim to be discussed here is that conjunction grammar must be sensitive to the combined force of the utterances it pairs. Force may be changed in various ways by the use of improper conjunction, thereby affecting the well-formedness of the performative structure and the acceptability of the discourse itself. It was argued in the first section that although we understand sentence pairs in terms of conjunction relations, whether a conjunction grammar operates in such a way as to make such relations explicit or not is, except in special circumstances, optional. Sentences like the following, each of which contains a distinct conjunction relation, are understandable whether explicitly marked by conjunction or not.
When the speaker makes these conjunction relations explicit, (a) is usually seen conjoined with so, (b) by and then, (e) by because, after reversing the clause order, and (g) is usually conjoined by but. However, as force showing devices, certain conjunctions must be explicitly present in the surface structures of the utterances for actions like admitting and explaining. In the action of admitting a but conjunction and its consequent denial of expectation (or the equivalent in sentence adverbials like however, and nevertheless) is the only marker the reader has available to distinguish between admitting and conceding.

The denial in (16a) is marked by but, which in this case must be a denial of the expectations raised by the admit clause. In the grammar, but is easily the most common means of denying expectations.
17) Your telephone is out of order.
   a I admit that it makes a queer noise, but you can
      still make calls on it.
   b I admit that it makes a queer noise, *and you
      can still make calls on it.

    That but should be an obligatory conjunct for admitting
    is not unreasonable, as the act of admitting demands that
    although the speaker will agree with a statement that seem­
    ingly contradicts his own position, he must deny that this
    statement is a telling one. Unless the expectation raised by
    the speaker's agreement is denied, the speaker concedes the
    point. The force of (16) is ambiguous unless the conjunction
    relation is made explicit.

    Similarly, consecutive sentences in which one explains
    some questioned element of its antecedent have a limited range
    of ways in which this relation may be made explicit.

18)a Pete refused to go upriver. He knew the natives
    would attack.
   bb Pete refused to go upriver because he knew the
      natives would attack.
   c The reason Pete refused to go upriver was that
      he knew the natives would attack.
   d His knowing the natives would attack explains why
      Pete refused to go upriver.

    In short, while conjunction grammar must provide syntactic and
    semantic constraints on conjunction, explaining acceptability
    and distinguishing between different conjunction relations,
    it is restricted to making explicit only those relations that
    already exist between successive sentences.
The degree to which conjunction showing is optional as an operation is shown by the fact that conjoining must not be allowed to alter the order of the utterances in the discourse. In formal terms, the discourse must be acceptably ordered before conjunction showing may be allowed to operate. Take (19) as an example. Previous theories of conjunction, at least prior to R. Lakoff's, took and then to be the only clause-ordering conjunction. In (19c), the force of one clause is changed by reordering.

19) a John isn't a savory character. You'd better be careful.
    b John isn't a savory character and you'd better be careful.
    c You'd better be careful and John isn't a savory character.

In (19c) we have an example of the clauses of (19b) reversed, with the result that the two are clearly no longer synonymous performatively with those of (19b). What we understand by (19b) is that the speaker is warning us to be careful, and identifying the source of concern; "you'd better be careful" is a warning consistent with the asserted danger. From (19c), however, the inference that John is the principal source for concern is not invited. "John isn't a savory character" has the force of an added warning, rather than the identified cause of concern. (19c) could be expressed as "You'd better be careful (about something else). In addition, John isn't a savory character."
The case in (20b) is quite similar to that in (19b), in that its opposite, (20c), offers an unintended reason.

20) a You'd better be there tomorrow. They're voting.  
  b You'd better be there tomorrow because they're voting.  
  c *They're voting because you'd better be there tomorrow.

In short, these explicit conjunction markers must not serve to change the intended force of their conjuncts, and will be constrained from reordering the conjuncts in an unacceptable way.

To continue the argument that a conjunction grammar may only make explicit what is, in essence, already there, examine the following text.

21) Henry said that he had been a bomber pilot during WWII. This struck us as queer, since he was nearly deaf. Although he was unable to hear after a shell explosion, he had to fly nearly thirty missions because they were short of trained pilots.

Although the entire text is in the form of a report of events that took place in the past, the reader may still infer the unique force the antecedents of these reports had during the actual conversation. All of the sentences are cases of indirect speech, a fact we understand without the presence of predicates like "said." The force of the text taken as a whole is that of a summation, because a summation allows the appearance of only essential information, and the utterances that were actually used are not part of the report of them. The second sentence could be a report of actual statements.
like "It's unusual to find a bomber pilot with a hearing problem" or even "That's an outright lie; they don't allow anyone to fly with physical impairments." The actual utterances would have to be known in order to determine how softened this summation is.

What is important here is that the second statement reports an objection made to Henry's utterance. The performative structure of the text is as follows:

S₁: CLAIM (Henry says he was a bomber pilot).
S₂: OBJECTION (Bomber pilots aren't allowed to fly with impairments).
S₃: EXPLANATION (Henry was forced to fly due to a pilot shortage).

In order to object to the first of Henry's statements, it is necessary to offer reasons why not, or to contradict some prior claim. We infer from the second sentence that the speaker does not believe Henry to be telling the truth; from the two clauses we infer a third clause, or "bomber pilots aren't allowed to fly with physical impairments," the utterance carrying the actual force of objection. Sentence two is a case of inference conjunction used as an objection. In other contexts, sentence two could be taken as a report of a private belief which could have been expressed but was not. However, from sentence three, one can only conclude that the belief was expressed, since a response was made by Henry and reported by the speaker. In this way, prior and subsequent context is
used, along with inference conjunction, to infer the status
of the utterance being reported here.

Otherwise, consider the following transforms of
sentences one and two of the above text.

22)a What Henry said struck us as queer. He said
that he had been a bomber pilot during WW II;
but, he was nearly deaf.
b For Henry to say that he had been a bomber
pilot during WW II struck us as queer because
he was nearly deaf.
c Henry said that he had been a bomber pilot
during WW II. This struck us as queer. He
was nearly deaf.
?He was nearly deaf and this struck us as queer.
*This struck us as queer and he was nearly deaf.
*This struck us as queer so he was nearly deaf.
*This struck us as queer but he was nearly deaf.

Notice that but is acceptable in the (a) example above but not
in the (c) example. The (a) example preserves the objection
but expresses it here in terms of violation of expectation.

We understand from Henry's response in the subsequent sentence
that this violation of expectation was expressed in response
to Henry's statement, and that the utterance had the force of
an objection. The case in (c), placed in context, establishes
the wrong antecedent for the but clause and is not a case of
violated expectations. More importantly, it voids the objec-
tion. One might reason from this that no objection could be
made in the (c) case because Henry is too deaf to hear such
an objection, rather than his deafness being connected to
flying. In the (c) case, Henry's subsequent account of the
shortage of pilots is only continued speech rather than a
response to the speaker's voiced objection. The and and so examples here present similar cases of voiding the objection.

From these examples, one can see that although a particular conjunction marker is a force showing device necessary in performing certain expository actions, conjunction typically must operate under constraints that serve to block unacceptable or force altering reordering. Such reordering may serve to void the force of some utterance or alter it, directly affecting the performative structure and indirectly affecting the acceptability of the discourse.

**Force Incorporation**

Examples (1) through (22) above demonstrate that when a speaker's intended force for an unintroduced utterance is not incorporated into that utterance with the proper force showing devices or otherwise, the consequences are serious. The utterance he uses will either affect discourse acceptability or be unacceptable itself. Although examples (1) through (18) involved situations in which there were no explicit performative verbs or nominals present, there are deviancies in the same class of force incorporation errors which involve explicit performative verbs. From the point of view of a theory that seeks to account for the various ways in which the speaker educates his audience concerning how to take some utterance of his, the explicit performative formula is not even the most
characteristic means by which this may be done. The force incorporation thesis takes support from the fact that the speaker has various means at his disposal for force showing. This section examines this important generalization, looking in particular at both the difficulties and strengths of the hypothesis that the several ways for showing force may each be ultimately derivable, after incorporation, from one underlying performative marker. 11

Generally speaking, of the three types of force uptake identified in the previous chapters, only one is of direct relevance to this hypothesis:

a) cases (like those of (14) above) in which uptake depends uniquely on context;

b) cases (as in the Lakoff and Gordon discussion) in which sincerity conditions are acceptable alternatives to the explicit forms;

c) cases in which uptake is effected by virtue of some explicit element in the surface structure, without which the utterance would be force ambiguous.

The (a) and (c) cases are those of greatest application here. For (b), notice that uptake is possible due uniquely to conversational implicatures. Since the language conventions these involve are irregular, the cases they cover are strictly limited. Concerning (a), the force of each utterance in (14) above was only slightly distinct from the force of its immediate alternatives. In fact, as Chapter 8 has shown, such similar actions fall naturally into groups, making precise force
uptake more difficult as a result. Thus, direct recourse to the speaker's intentions, in order to relate them to the immediate context, is the only adequate means for deciding force in such cases. As well, notice that many other expository actions fall between the conditions of (a) and (c), further limiting the application of the force incorporation hypothesis.

For example, the action of objecting may be announced, but only subject to irregular and context-imposed constraints:

23) The FMC has stated that they only make a marginal profit.
   a I object to this statement.
   b I object to this attempt to mislead the public.
   c *I object that they are trying to mislead the public.
   d Their remark is entirely objectionable.
   e They make well over 5% on their capital expenditure.
   f ??In objection to this remark, I want to say.
   g *I object that they do not make a marginal profit.
   h *They do not, I object, make a marginal profit.

These explicit references to the force of objecting are subject to strict limitations on what form they may taken and what propositional objects they may appear with. Contradictory (23g) and parenthetical (23h) show this plainly. Thus, to postulate an underlying OBJECT predicate for the sentences of (23) is to invite fewer regularities than irregularities into a generative treatment of objecting. Otherwise, with the exceptions of status nominal cases like (23a) and (23b), the propositional content of the acceptable cases is sufficient to effect the force of objecting independent of surface marking.
Clearly then, the force incorporation hypothesis will be of use only in such cases as will be force ambiguous without some explicit force showing device. To the largest extent, these will be those actions that are allowably announced by parentheticals, sentence adverbials, etc.

Urmson, in his article on parenthetical expressions, identifies a certain class of parenthetical and sentence adverbial expressions that serve to "indicate how to take the statement in regard to the context." Urmson offered examples like admittedly, consequently, I should explain, and in reply as typical of the sort of expressions the speaker has available to him for use in advising his audience of the action he is undertaking. Take a case in which a speaker explicitly informs his audience that what he is saying is to be taken as an admission. He might utter I admit that I forgot to mail the letter, but by the time you gave it to me I didn't have time to mail it anyway; but he might as easily signal this force with a parenthetical expression, I forgot, I admit, to mail the letter, but by the time. . . , or with a sentence adverbial, Admittedly, I forgot to mail the letter, but. . . .

Of course, luckily, unfortunately, certainly, probably, possibly, etc., are also typical sentence adverbials, but do not mark force. Rather, some of these are used to indicate the attitude the speaker takes toward his statement, and some to indicate the attitude he believes would be appropriate for
his audience to take as well. Following Urmson, other such adverbials, of the probably and possibly type, are used by the speaker to show how much "reliability" his audience should ascribe to his statement. Apparently, such sentence adverbials derive from constructions like "It is fortunate that..." and "It is possible that..." while the adverbial clause construction of interest here derives from a different source. "*It is a consequence that" is clearly deviant while the adverbial clause construction, "It is a consequence of x that y" is grammatical.

It seems to be the case with sentence adverbials like admittedly, in conclusion, analogously, resultantly, etc., that all have an expository performative or nominal they might be derived from. For example, compare the sentence adverbial and parenthetical forms of the following expositives:

24) REFER: referring to, in reference to, with reference to,
25) REFUTE: as a refutation, by way of refutation, in refutation.
26) EXPLAIN: as an explanation, by way of explanation, in explanation, to explain.
27) CONCLUDE: as a conclusion, by way of concluding, in conclusion, to conclude, in conclusion, concluding with.

The force incorporation approach to (23) through (26) would attempt to make the generalization that all of the forms are derived from their respective underlying performative verbs.
A sentence like "In reference to John, be sure and keep him away," might be represented as follows:

28) 

[Diagram of a syntactic tree]

28')

[Diagram of a syntactic tree]
To generate (28), the grammar would need a rewrite rule like $S \rightarrow (S_{ADV}) + S$. Such a rule has been proposed in Williams\textsuperscript{13} and is in fact only a modified version of the Katz and Postal rewrite series:\textsuperscript{14}

$$\text{Sentence} \rightarrow \{I\} + \text{Nucleus}$$

$$\text{Nucleus} \rightarrow \text{ADV}_{\text{sentence}} + \text{Theme}$$

$$\text{Theme} \rightarrow \text{NP} + \text{VP}$$

As I show in Chapters 6 and 8, there are motivated reasons for preferring (28') over the sentence adverbial construction in (28) proper. Performative nominals do not seem to derive from performative verbs and it may be the case that (28') is the more defensible of the two constructions. Otherwise, the transforms necessary to derive either (28') or the sentence adverbial in (28) to the surface "In reference to John," will have to include now deletion. The sentence adverbial in both cases has an ancillary function; it works as a temporal adverbial. Such expressions as in explanation, in reference to, in conclusion, signal that the act that the speaker undertakes is being undertaken immediately. Such adverbials contrast strongly with parentheticals like I conclude (He will never, I conclude, become a chess master) in that the latter has no such adverbial function and sometimes is used to repeat conclusions reached previously. Parenthetical
conclude is not synonymous with force introducing predicate conclude.

In fact, such adverbials as above also stand in contrast with other adverbials that have a discourse role. The sentence adverbial in explanation compares favorably with the phrasal adverbial above in "the brief sketch above," where the latter has a locative function, and with earlier in "as indicated in an earlier example" where earlier has a past tense adverbial of time function. Sentence adverbials function not only as markers of the particular force of some utterance, but also have the discourse function at times of orienting the reader to the time of the action. Of course, that this should be so is only consistent with the first person, present tense conditions for speech action in general.

Moving from time to reference, notice in (28') that both a direct and an indirect object are necessary. In every case in which the saying of something is to undertake an action in regard to something external, both objects will be necessary. (Contrast the difference between I now pronounce you man and wife and I object to your insinuation where only objecting has a prior object.) In the case of explanations, in explanation might stand for the incorporated form of I EXPLAIN [Q + the building burned down], for example, where Q + S would be the double object of EXPLAIN. Notice for examples that the remote structure for the sentence adverbial form would have
to contain *I GIVE an example of IT* (IT would refer to whatever the indirect object of the action of giving was) where IT could refer to either a sentence or to a noun: (*John is one of our brightest prospects. As an example of his ability, last week he scored four goals* or *I OFFER his four goals last week as an example of the fact that he is one of our brightest prospects*). In terms of generative theory, the sorts of operations needed to derive the appropriate surface structures from these constructs are at least problematic.

Although a grammatical commonplace, abstract predicate incorporation is very poorly understood even when it concerns only the much discussed notion of CAUSE. For performatives, as we can see for the COMMAND construction, incorporation is a complex operation. COMMAND here is marked by the imperative *be sure*, which signals the audience that the utterance has the force of a command. Thus, by postulating a particular set of transforms that result in an utterance's being either introduced by a performative verb or marked internally for the force in question, the theory preserves the generalization that such force showing devices provide the information by which readers conventionally ascribe force to an utterance. This set of transforms would account for the fact that although every utterance has force, not every utterance is introduced by a performative verb. As well, where propositional content, together with context, provides sufficient
information for the ascription of force, there would also have to be a null transform. As very little work has been done on parentheticals or sentence adverbials, the sort of transforms necessary for the incorporation of the force they carry must remain speculative at best.

Furthermore, such a transformational analysis would have to determine how a remote structure like (CONCLUDE) John is a pirate could be derived to So, therefore, thus, as a consequence, (etc.) John is a pirate. In this case the performative marker is not being incorporated within a sentence adverbial construction, but from the main clause into a sentence adverbial construction. To avoid this problem one might postulate that performatives should always be given remote structure representations as sentence adverbials. However, if this were the case, then our reason for representing performatives in such a way, which was to avoid seemingly ad hoc transformations, would become subordinate to the worse situation we would have trying to derive parentheticals and force markers like QUESTION from sentence adverbials.

On the other hand, to simply insert sentence adverbials into the lexicon in toto is not an adequate alternative. It misses the generalization that sentences like (23a & b) are identical in force, although different in both form and function. Concerning (27) and in reference to, the replies To Searle's position in Speech Acts on reference have shown
convincingly that simply referring to or using the name of something is not in itself a speech action. On the other hand, to say, "I now refer to," in the sense of announcing some new topic, would qualify as a speech action. As a lexical entry, in reference to must show that an actual reference to a new topic is not crucial to this expression's being applied in a force showing way. Rather, in reference to applies in contexts (see (31)) in which the topic has some prior introduction and is not "news" in the sense needed for I refer to at all. It introduces utterances with force similar to that of EXAMPLES:

29) John is a sailor's son.
   a Pete, on the other hand, is a sailor's son as well.
   b In reference to Pete, he is also a sailor's son.

30) John has three sons, all of whom are sailors.
   a John himself is a sailor's son.
   b *In reference to John, he is a sailor's son.

31) Our Parliament is filled with men whose origins were anything but aristocratic. Everyone knows of the background of the Prime Minister, but few realize that his case is typical of the cabinet as well. In reference to John, he is a sailor's son.

(29) through (31) show that propositional content plays an important role in determining acceptability for in reference to and that such an expression may not be inserted freely into context bound speech. One suspects a lexical entry that contains the needed information of a contextual sort would be inordinately elaborate.
Furthermore, to simply list such sentence adverbials in the lexicon would miss the generalization that they are related to and function very much like parenthetical expressions. Notice that the constraints on the appearance of such parenthetical expressions are similar to those on sentence adverbials.

32) a John, I repeat, can't hear well.
   b To repeat, John can't hear well.
   c ?John, I reply, can't hear well.

33) a *As a reply, John can't hear well.
   b As a reply, I repeat that John can't hear well.
   c In reply, I repeat that John can't hear well.

Otherwise, examples (32) and (33) show that many of the parentheticals, if they were to be lexicalized, would have to be marked for person, as person determines whether such utterances are to be taken as speaker's performance or reported performance. Some sentence adverbials are in the third person and are reportive, rather than identifying the speaker's intended force.

It is often only in the infinitive and participial forms that the adverbials and parenthetical expressions mark the force a speaker intends for his own utterance. (The examples of to reply below are not to be taken in their in order to sense as they do not serve as markers of an adverbial clause of purpose.)
34)a In replying to you, I can't only admit that I don't know.
b To reply to you, all I can say is that I don't know.

35)a In replying to him, John accidentally revealed the code.
b *To reply (to him), John accidentally revealed the code.
c As a reply, Mike quoted the N.Y. Times.
d By way of reply, Mike quoted the N.Y. Times.

36)a In response, I can only admit that I was at fault.
b To respond, I should say that I am very pleased.

37)a ?In response (I say), Jack sent his army.
b *To respond (to him), Jack sent the wrong ambassador.
c By way of response, Henry opened fire again.

If sentence adverbials were to be handled transformationally, the transforms would have to be sensitive to the person indicated in the main clause, so as not to transform to the infinitive in the case of third person.

From this discussion, two conclusions emerge. First, the notion of "force incorporation" preserves several important generalizations for the grammar. Force showing devices and the force incorporating hypothesis are important to any theory seeking to account for the fact that we are able to ascribe expository force for utterances without relying completely on context. Second, however, a sentence account of force faces serious difficulties, particularly in terms of adequacy, ad hoc transforms, and in its inability to account for reader's ascription of illocutionary status.
The Indirect Force Counter-Case

Early in the fifth section, I distinguished between cases in which uptake depends on context, cases in which sincerity conditions are sufficient for uptake, and cases in which there are force showing devices. The discussion immediately above has indicated that the "force incorporation" hypothesis deals only with the last of these three cases. This limitation alone disqualifies it as a serious alternative to a discourse theory which utilizes the force of previous utterances in uptake. There are, however, two sentence grammatical approaches which take cases of the second class above, or cases of indirect action, and these approaches should be considered as alternatives and possible counter-accounts in their own right.

The first of these is a transderivational account, proposed by Gordon and Lakoff. To account for uptake of indirect force, they distinguish formally between the remote structure of the utterance actually used, and the remote structure which represents the intended force. \( L^a \) (or the "surface" force) is considered to conversationally entail \( L^b \) (or the "indirect" force) and the transderivational rule relating the two is to be understood as an interpretative rule operating at the remote level. In short, they propose that conditions on \( L^b \), especially sincerity conditions, may
be expressed in remote structure as $L^a$. Often, expressing what is a sincerity condition for a given act is to perform that act itself.

The second approach is taken by J. Heringer and in this schema one and only one derivation is involved. (Heringer correctly points out with regard to the Gordon and Lakoff proposal that it is hard to see why "the derivation of $L^b$, the indirect act, is relevant to the derivation of $L^a$, the literal act." )\(^{16}\) To account for indirect actions and their relation to simple assertions and questions, he would map the appropriate felicity or "intrinsic" condition on the remote structure of what otherwise would be an assertion or a question. For instance, such mappings could explain how at some relatively early stage in their derivation commands and requests become questions.\(^{17}\)

Although these approaches are clearly similar, they preserve different but equally important generalizations with regard to oblique force. Sincerity conditions often may count as oblique forms for given acts, and language users do process indirect acts in terms of both the indirect act and its literal correspondent. Whether these sentence grammar approaches constitute an adequate, and necessarily more simplified and elegant, account of discourse force uptake remains to be seen, however. Both approaches entertain the speaker's point of view or perspective, rather than that of the reader. And,
more importantly, these approaches do not meet the requirements of expository acts, and were designed with requests, questions, and promises in mind. As Heringer has shown, many acts share identical felicity conditions, meaning that the mere usage of a felicity condition can in no way guarantee the uptake of a particular action. Simply asserting felicity or intrinsic conditions for expository acts will not be sufficient for their success: witness the strangeness of

*I believe that you are able to see the distinction between $x$ and $y$ when only the distinction itself needs to be made.*

Continuing with the act of making a distinction, a common act in discourse, notice that one felicity condition of such acts is that the speaker believes that the distinction needs to be made. Expressing *this* felicity condition will often serve to make the distinction: *A distinction needs to be made between $x$ and $y$.* However, in context, distinctions usually follow as solutions to problems (Carnap's distinctions are formal ways of postulating away problems) and may have such force ascribed to them, particularly if predicates of necessity are adjoined to them as above. Notice as well that the first sentence of this section refers back to a distinction made earlier, and in referring back makes the distinction anew for readers who have forgotten it. Correspondingly it merely serves as a reminder to those readers who had not forgotten it. Either force ascription is correct,
depending on the memory of the reader. Therefore, a grammatical account of uptake should and must begin where uptake actually takes place: with the reader and his special problems.

In (38) below, no felicity or sincerity condition is made for the second sentence, and it is not otherwise identified for force (although it could be). Nevertheless, due to context, an audience may experience no difficulty in determining that the second sentence enunciates or brings into definition an element of the first sentence:

38) Reciprocity can be positive or negative. In reciprocity, each may make himself a vehicle of the other's project, so that the other will make himself a vehicle of one's own.

In such cases, where no force indication or force showing device is available and where no intrinsic condition is utilized, there seems to be no resort for uptake except to context. Examples, as in (39), provide another case:

39) Among metaphors some involve transfer of a schema between disjoint realms. In personification, labels are transferred from persons to things; in synecdoche, between a realm of wholes or classes and a realm of their proper parts or subclasses.

(Nelson Goodman, Languages of Art, 1968)

Here the second sentence offers two examples of the claim made in the first sentence, yet no intrinsic conditions or force showing devices are available for this judgement.
The force incorporation and felicity condition approaches are inadequate to describe the problems readers typically face in assigning force to utterances in context. They cannot be taken then, as counter-accounts; rather, since they do describe certain uptake phenomena, they should be seen as complementary accounts.
FOOTNOTES


4. Lakoff, op. cit.,

5. These arguments are given a good summation in J.A. Fodor, "Three Reasons for Not Deriving 'kill' from 'cause to die',' Linguistic Inquiry I, #4 (Fall, 1970), pp. 429-438.

6. Notice that S. Anderson, "On the Linguistic Status of the Performativ/Constative Position," NSF-26 (November, 1970), p. I-7, makes the same point: "the reflexives...[which are primarily the examples on which Ross's case is made] could be explained by the NPs I and you in the higher performative sentence."


8. Arbini, ibid, makes this point with direct reference to statements: "Thus, a statement, in this sense, might have the illocutionary act potential of a judgement, description, statement, etc., and by its insertion in the appropriate frame the resulting utterance assumes the relevant explicit illocutionary force."
9. Furberg, *Saying and Meaning* (Oxford, 1971), p. 211, extends the types of force showing devices to include "tone of voice, cadence, emphasis; gestures and ceremonial non-verbal procedures; the circumstances of the utterance...grammatical mood; adverbs, adverbial phrases and connecting particles such as still and therefore..."


11. Although the Gordon and Lakoff proposal for deriving sentences with oblique force is of interest here, I avoid it for the same reason that Heringer states: "there is no case in which the derivation of Lb, the indirect act, is relevant to the derivation of La, the literal act," J. Heringer, *Some Grammatical Correlates of Felicity Conditions and Presuppositions* (Ohio State Doctoral thesis, 1971), Working Papers in Linguistics #11 (February, 1972), p. 49.


In early generative grammar, grammatical judgements were based on a speaker's intuitions about the syntactic structure of his language. These intuitions were based in turn on how well a speaker had internalized the possible constructions in his language for coding propositions. Since syntax is one of the more convention-bound and formal determinates of language, ungrammatical syntax is relatively easy to recognize. In fact, intuitions like these are developed through operant conditioning, and there are few intervening variables even from dialectical usage to consider in deciding grammaticality based on such intuitions. Here, however, material has been presented to indicate that a language user's judgements about discourse are extraordinarily complicated. Such judgements are made relative to many intervening variables, and a discourse may be unacceptable in exactly the number of ways these variables come together in texts.

Concerning the hypotheses examined herein:

a) Conjunction relations may be marked by force-showing devices and are dependent on the performative structure of discourse;
b) A conjunction grammar based on semantic relations between successive sentences in discourse, and sensitive to context, will account for most well-formedness decisions between utterances in a discourse;

c) Discourse performative structure, or the structuring and ordering of expository actions in discourse, is complex, with certain actions acting as preparatory and essential conditions for other actions;

each refers to a level of speech behavior not only complex in its own right, but integrally related to other types of speech behavior. Further complicating an already complicated language phenomenon, this study tried to view discourse from the point of view of the language receiver rather than the language producer. On theoretical grounds, the motivation seems greater, given that the object is to describe what a language user must take into account in deciding well-formedness for a discourse, to examine the ways a discourse may fail an audience rather than the ways it may fail a speaker's intentions. Many utterances have considerable illocutionary potential aside from whatever force their producer intended for them. Thus, for reasons of method, the illocutionary status of an utterance in context was more important for decisions of well-formedness than the illocutionary intentions of a speaker.

As well, as indicated in Chapter 6, a speaker may say too much or too little, all or any of which he clearly intends, and produce an unacceptable discourse. Further, although the terms optional and obligatory were used herein,
they were given a special sense, consistent with the notion of acceptability. In syntactical phenomena, omitting an obligatory element results in unintelligibility; in semantic situations this is not always the case. Optional and obligatory are taken as obligatory to be acceptable and optional for acceptability rather than obligatory to be grammatical, and so on. This special sense meant that formalization along generative lines:

\[
\text{DISCOURSE} \rightarrow \begin{cases} 
\text{(Argument)} \\
\text{(Description)} \\
\text{(Discussion)} \\
\text{etc.}
\end{cases}
\]

\[
\text{Argument} \rightarrow \begin{cases} 
\text{[claim]} \\
\text{[evidential utterances]} \\
\text{(counter-arguments, etc.)} \\
\text{[conclusion]} \\
\text{etc.}
\end{cases}
\]

is simply inappropriate, although possible.

A generative treatment of language phenomena as diverse as preparatory and essential conditions for speech action, relevance criteria for utterances in context, expository nominal reference, and the other conditions, constraints, etc., that occur in the production of discourse is beyond the present scope of what is taken to be "generative." Well-formedness of discourse does depend on meeting conditions like those above, and generative models are models which show dependency relations, but most such conditions as those above are contextual or environmental rather than internal.
On the whole, there are many syntactic claims and analyses which would bear re-examination in the light of discourse requirements. Several such claims, like those for similarity constructions and reason adverbials, were revised according to discourse and contextual needs, but clearly, any number of others would benefit from a similar reanalysis. Also, many of what are taken to be higher predicates, like neg, cause, aspect markers, and modals, have the additional role of force showing devices. A study which looked closely at the propositional content requirements of actions which use such higher predicates could do much to confirm or refute the higher predicate analysis. John frightened the monkey, which is taken to have the higher predicate intend in its underlying structure, can have the perlocutionary force of a charge. John caused the monkey to be afraid is a claim which takes no position on whether John intended to frighten the monkey or did so accidentally. It could have the perlocutionary force of a charge or accusation only in a context in which this force was specified. In such a case, although no predicate of intention appears in the surface structure of either utterance, the fact that they have distinct perlocutionary potential indicates strongly that intend should be part of the structural description of John frightened the monkey. On the same grounds, the causal form of this sentence might be rejected as an underlying structure for John
frightened the monkey. Causality is not at issue for charging or accusing here. On the other hand, since causals are hypothetical in the sense that they are not factive, *John caused the monkey to be afraid* could have the illocutionary force potential of a claim, whereas *John frightened the monkey* would be a report.

Certainly there are many interesting topics and subjects not covered in the present study, but at least many problems have been defined and the role of performative structure in the language user's judgements about discourse acceptability has been demonstrated. It has also demonstrated many abilities of a language user which serve to reconstruct anaphorized material from context. And finally, it has shown that relations do exist between discourse performance and utterance surface structure, and between individual utterances and the illocutionary status of groups of utterances in discourse.
BIBLIOGRAPHY


Firbas, Jan, "On Defining the Theme in Functional Sentence Analysis," *Travaux Linguistiques de Prague*, 1964.


Horn, L., "A Presuppositional Analysis of only and even," Papers from the Fifth Regional Meeting, Chicago Linguistic Society, Chicago, 1969.


Ives, S., "Linguistics in the Classroom," College English 17 (December, 1955).


Jesperson, Otto, Philosophy of Grammar, New York, 1924.


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Staal, J.F., "Some Semantic Relations Between Sentoids," 


