Linguistic Society of America

1924-1974
GOLDEN ANNIVERSARY MEETING

FORTY-NINTH ANNUAL MEETING
DECEMBER 27-30, 1974
NEW YORK, NEW YORK

Meeting Handbook
INTRODUCTION

This Souvenir has been prepared to serve as the official program for the Forty-Ninth Annual Meeting of the Linguistic Society of America, the Golden Anniversary Meeting. The first meeting of the Society was in December 1924 at the American Museum of Natural History in New York City for the purpose of organizing a linguistic society; the meeting was scheduled in response to a call dated 15 November 1924, issued by Leonard Bloomfield, G. M. Bolling, and E. Sturtevant, with the signed consent of twenty-six other scholars in the field. The result of this first meeting was the formation of the Linguistic Society of America, the object of which was the advancement of the scientific study of language. Now, fifty years later, the LSA Annual Meeting has grown from the presentation of 1926 of 15 papers (five additional papers were read by title only) to the presentation of 1974 of 159 papers, as well as a keynote colloquium and a special section of Papers on Indian Languages. This 1974 meeting has been the fifty-first meeting of the Society and would have been had not World War II intervened. In 1942 the Nineteenth Annual Meeting was scheduled, but cancelled the last week of November, in response to a request from the Office of Defense Transportation. For ministerial purposes it is interesting to quote the following note which appeared in the Nineteenth meeting announcement:

"The Nineteenth Annual Meeting of the Linguistic Society of America was to have been held on Monday and Tuesday, December 28-29, 1942, in two sections. The science section was to have met in New York City, before the meeting of the Language Association of America; the general section was to have met in Washington, jointly with the American Anthropological Association. This division of meeting was planned in order to comply with the request of the Office of Defense Transportation that long-distance travel be curtailed wherever possible. Some time after these arrangements had been made, the Office issued a new statement, stating that all meetings of scientific societies be cancelled. All plans for the meeting, the business of the Society, sought the advice of the Science Committee of the National Planning Board of the Executive Committee of the President, which Committee urged the holding of the annual meeting as a means of assessing the needs of linguistics to the war effort and of informing the members of the ways they might cooperate most effectively. Already it was from the number of our members who had been called into service and others in agencies of the government to posts where their linguistic knowledge was needed, that linguists have a direct and specialized contribution to make to the war effort. In response to the First Circular of the projected meeting, issued by the Secretary on October 18, a large number of papers were offered for presentation. Excellent programs could have been organized for both sections of the meeting, which not only would have been in the public interest, but would also have given a high measure of scholarly satisfaction to the delegates. For this reason, it was with considerable disappointment that the Executive Committee complied with the subsequent request of the Office of Defense Transportation that the meeting be cancelled.

This request was not released until the last week in November. Since cancellation of the meeting would make it impossible to conduct the business of the Society in the normal manner, the Executive Committee acted at once to secure a vote of the membership empowering it to conduct the business of the Society during the national war emergency until such time as a general meeting could be called with the approval of the national war agencies. At the same time the Executive Committee made provisions for a mail-ballot election of officers to substitute for the constitutional method of nominating from the floor at the annual meeting. In the poll to land emergency powers to the Executive Committee, the Secretary received no negative votes.

The Special Notice to Members, announcing the cancellation of the meeting and bearing the special ballots, was rushed into the mails at the earliest possible date. It has come to the attention of the Secretary that because of the congestion of the mails at that time, some members did not receive this notice until after the scheduled date of the meeting. Fortunately it was common knowledge by mid-December that all meetings of scientific and learned societies had been cancelled.

The Nineteenth Annual Meeting was not to take place until December 1944; thus, the 1974 meeting, although the Golden Anniversary Meeting, is actually only the Forty-Ninth Annual Meeting of the Society.

In anticipation of this Golden Anniversary year, a committee was established in 1971 to plan a program to celebrate the Society's fiftieth anniversary. This Committee, under the chairmanship of Rinars Haagensen, included J. Milton Cowan, Archibald A. Hill, John Lott (deceased), Kemp Malone (deceased) and W. Freeman Dredge, Robert P. Austin and Donald C. Freeman, and Morris Halle served as officers. This Committee organized a series of three symposia under the general heading AMERICAN LINGUISTICS: PAST, PRESENT, FUTURE.
Scope of American Linguistics, designed by Robert P. Austerlitz, was held in Amherst, Massachusetts, 24-25 July 1974, immediately prior to the LSA Summer Meeting. The second Symposium, American Indian Languages and American Linguistics, designed by Wallace L. Chafe and funded by the National Science Foundation, was held on 8-9 November 1974 at the University of California, Berkeley. The final symposium, the European Background of American Linguistics, designed by Henry M. Hoenigswald and funded by the American Council of Learned Societies, is scheduled for 27 December 1974 preceding the LSA Annual Meeting. The speakers and their topics are listed on page viii of this Handbook. In addition to this symposium, the Committee organized a session entitled “Golden Reminiscences: Fifty Years of the Linguistic Society of America”, a session of reminiscences by Secretaries of the Society Messrs. Cowan, Hill, Sebeok, and Abramson. Mr. Haugen, chairman of the Golden Anniversary Committee and Martin Joos, who is writing the first section of the LSA History, will also reminisce.

In 1972 Dwight Bolinger, then President of the Society, appointed a committee to prepare a film for the LSA Golden Anniversary. This Committee, under the chairmanship of Walburga von Raffler Engel, has prepared a film on child language acquisition which will be shown during this Anniversary meeting.

The abstracts in this Handbook are photocopies of originals submitted to and accepted by the LSA Program Committee, chaired by Paul Kiparsky and consisting of Robert P. Austerlitz, Eve V. Clark, John G. Fought, Philip M. Lieberman, Oswald Werner, and Harry A. Whitaker. The abstracts are arranged alphabetically, by author (or, in the cases of multiple authorship, by first author). The last abstract (page 159) is an overview of the one day Colloquium on Reading, organized by the LSA Committee on Linguistics and the Public Interest. Authors’ names, titles, and abstracts of papers for the one-half day session on American Indian Linguistics were not available in time for publication in this Handbook but will be listed in the report on the Annual Meeting to be published in the March LSA Bulletin.

Two other committees were also involved in this meeting and should be mentioned in regard to the planning for the Golden Anniversary. The New York Local Arrangements Committee, under the chairmanship of Robert P. Austerlitz, and including O. L. Chavarria-Aguilar, D. Terence Langendoen, Harvey Pitkin and Warren J. Plath has helped provide the support essential in mounting an annual meeting and the Resolutions Committee, Isidore Dyen, Chairman, Doris Allen and Timothy Light will prepare the resolutions.

The LSA Secretariat hopes that this Handbook for the Golden Anniversary Meeting will be a useful guide for those attending this meeting, as well as serve as a permanent record of the meeting.

Regay Atkinson
LSA Secretariat
November 1974
LSA BOOK EXHIBIT

There will be an exhibit of linguistic publications in Parlor A, B, and C of the Commodore. The hours are: 4:00 p.m. - 8:00 p.m. on 27 December; 8:30 a.m. - 12:30 p.m. and 2:00 p.m. - 6:00 p.m. on 28 and 29 December; and 8:30 a.m. - 11:30 a.m. on 30 December. The LSA will sell the display copies in the LSA Joint Book Exhibit on the 30th of December, beginning at 8:30 a.m., the proceeds to be donated to fellowships for the Linguistic Institute (the display copies having been generously donated by the publishers exhibiting in the LSA Joint Book Exhibit). Advance orders for display copies having been generously donated must be picked up on 27 December, from 4:00 p.m. - 8:00 p.m. on 28 December, from 8:30 a.m. and 10:00 a.m. or it will be sold and the advance donation paid to Linguistic Institute Fellowships.

JOB PLACEMENT

Job Placement will be available in the Club Suite on Saturday and Sunday, 26 and 27 December, from 10:00 - 2:00 p.m. and on Monday, 30 December, from 9:30 a.m. - noon.

LSA BUSINESS MEETING

This year the Business Meeting has been scheduled for the morning of 29 December from 8:30 a.m. to 11:00 a.m. in the Grand Ballroom. The meeting will be chaired by Morris Halle, LSA President and Victoria Fromkin will serve as parliamentarian. A Resolutions Committee has been appointed, consisting of Isidore Dyen, Chairman, Timothy Light, and Doris Allen. Rules for motions and resolutions appear in the program section of this Handbook (Sunday morning, 29 December 1974).

DAY CARE

The Linguistic Society has arranged with the Modern Language Association to share day care facilities for this meeting. The center will be located in the New York Hilton at Rockefeller Center (335 Avenue of the Americas at 53rd Street) in Room 22. This center will be staffed by the Babysitters Guild, Inc. of New York and light lunches will be provided. The hours are: 26 December, 6:30 p.m. - 9:00 p.m.; 27 and 28 December, 8:30 a.m. - 1:30 p.m. and 6:30 p.m. - 10:30 p.m.; 29 December, 8:30 a.m. - 12:30 p.m. The cost is $5.00 per day, $3.00 per child for the evening sessions, and $6.00 per child for the morning session on the 29th.

The Commodore also has baby sitters

LSA GOLDEN ANNIVERSARY SYMPOSIUM: THREE

There will be three sessions of the Symposium, "The European Background of American Linguistics" on 27 December in the Grand Ballroom of the Commodore. These sessions are scheduled at 10:00 a.m., 2:00 p.m., and 8:00 p.m. This symposium was planned by the LSA Golden Anniversary Committee, Elissa Haugen, Chairman, J Milton Covon, Archibald A. Hill, John Lots (deceased), Kemp Malone (deceased), W. Freeman Tadewell, with Robert P. Austerlitz, Donald C. Freeman and Morris Halle serving ex officio. Symposium three was organized by Henry M. Hoenigswald, and includes discussion and consultation from Mr. Haugen and the Committee, and the speakers will be: Rosane Rocher, R. W. B协作, W. F. Ouhlenbeck, and Roman Jakobson.

GOLDEN REMINISCENCES: FIFTY YEARS OF THE LINGUISTIC SOCIETY OF AMERICA

Mr. Haugen, as chairman of the LSA Golden Anniversary Committee, has planned a session of reminiscences by Secretaries of the Linguistic Society, J Milton Covon, Archibald A. Hill, Thomas A. Sebeok, and Arthur S. Abramson, and also including Martin Joos, who is writing the first part of the History of the Linguistic Society. The session will be chaired by Mr. haugen. This session will follow the Business Meeting on 29 December in the Grand Ballroom and is scheduled for 11:00 a.m. - 1:00 p.m.

LSA GOLDEN ANNIVERSARY FILM COMMITTEE

This Committee, under the chairmanship of Walburga von Raffler Engel, has produced a film on child language acquisition which will be shown at 1:00 p.m. on 30 December in the West Ballroom immediately preceding the session on Language Acquisition.

PRESIDENTIAL ADDRESS

Morris Halle, President of the Society, has scheduled his presidential address for 8:30 p.m. on 29 December in the Grand Ballroom, with a cash bar reception to follow.

SPECIAL INTEREST GROUP LUNCHEON

The special interest group luncheon will take place on Sunday, December 29 at 12:15 - 1:45 p.m. Tickets may be purchased at the registration desk. Tickets for the luncheon are $6.00, including tax and gratuities. Seating arrangements are available on a first-come, first-serve basis. The following individuals have agreed to chair luncheons: Harry A. Whitaker, Neurolinguistics; Lois Bloom, Language Linguistics; Henry M. Hoenigswald, Comparative Methodology; Robert P. Austerlitz, History of Linguistics; Ray L. Birnżulstæl, Anthropology; J. Peter Maier, Meta-theory; Karl Feldman, American Indian Linguistics; William C. Stokoe, Sign Language.

CASH BARS

Cash Bars are scheduled for the evenings of 27 December through 29 December.

MEETING OF DEPARTMENT CHAIRMEN

The Executive Committee resolved to include a meeting of Department chairmen as a regular feature of the Annual Meeting. This meeting is to be chaired by D. Terence Huddleston and will take place in the Grand Ballroom from 8:30 p.m. - 10:30 p.m. on 29 December.

STUDENT MEETING

A meeting of students and interested faculty has been tentatively scheduled under the sponsorship of the Center for Qualitative Linguistics to permit continuance and expansion of discussions held at the student meeting in Amherst, Massachusetts during the LSA Summer Meeting.

COLLOQUIUM ON READING

The Committee on Linguistics and the Public Interest is sponsoring a Colloquium on Reading on Monday, December 29, as part of a program to inform linguists about needs and opportunities for research, implementation, and potential employment in areas of reading related to linguistics. The morning session will feature researchers and practitioners in reading, psychology, artificial intelligence, and psycholinguistics. The afternoon session, presentations on linguistic contributions to reading will be followed by panel discussions of new directions for reading research and practical suggestions for beginning interdisciplinary cooperation between linguists and reading specialists.

AMERICAN INDIAN LANGUAGES AND LINGUISTIC AUTHORITY

The Program Committee is again sponsoring a session of invited papers from the American Indian Language Institute, which will be held during the Annual Meeting of the American Anthropological Association (Mexico City, November 1974). Memoirs of invited papers from the American Indian Language Institute will be submitted for publication in the American Anthropologist. A list of speakers and topics will be available at the meeting. This session is scheduled for the Tudor Room from 8:00 a.m. - 10:00 a.m., 29 December.

LANGUAGE AND CULTURE OF THE DEAF, Sunday, December 29, 6:30-8:30 p.m., Parlor E

This session is intended to bring together those who are doing linguistics in the deaf community, particularly those with an interest in sign languages, sociolinguistics, psycholinguistics, and minority or bilingual languages.

In this first get-acquainted gathering, topics under discussion will be the important issues of (1) information exchange and information sources, (2) promoting responsible scientific attitudes toward the language situation in the deaf community, (3) maximizing linguistic input in applied fields, e.g. counselling services, deaf education, (4) employment opportunities.

Also to be discussed is the potential for an organization to promote deaf linguistic studies. For further information, please contact Robin Battison during the Annual Meeting.
THE EUROPEAN BACKGROUND OF AMERICAN LINGUISTICS

Chairman and Designer, Symposium III: Henry M. Hoenigswald

27 December 1974 • Grand Ballroom

10:00 a.m.

EINAR HAUGEN Introduction

ROSANE ROCHER The Past up to the Introduction of Neogrammarian Thought

RULON S. WELLS Linguistics as a Science in Europe and America

HANS AARSLEFF Discussant

2:00 p.m.

YAKOV MALIKEL Aspirations, Organization, Achievement

E.M. UHLENBECK A Detached View

D. TERENCE LANGENDOEN Discussant

8:00 p.m.

ROMAN JAKOBSON The Twentieth Century in European and American Linguistics: Movements and Continuity

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SCHEDULE

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<td>Job Placement</td>
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<td>4:00 - 6:00 p.m.</td>
<td>Special Interest Luncheons</td>
<td>First Floor Suites</td>
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Monday, 30 December

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<td>8:30 - 10:30 a.m.;</td>
<td>Colloquium on Reading</td>
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<td>9:30 - noon</td>
<td>LSA ANNIVERSARY FILM</td>
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Meaning, Strategies, and Dialectal Variation: Leismo Resolved

One of the thorniest problems in Spanish dialectology is the extent to which different varieties of Spanish agree (or not) in their usage of the pronouns le and lo to refer to a "direct object". To a varying degree, all dialects will on occasion use the "native" le (invariable for gender) to refer to a "direct object", and the causes and circumstances of this variation (labelled leismo) are far from understood. The traditional --syntactic-- analysis in terms of "direct" vs. "indirect" object has not provided a satisfactory framework for the investigation of the le/lo alternation, so much so that the general picture of random chaos.

A Form-Content analysis of the opposition between le and lo in semantic terms or in syntactic terms has succeeded in explaining the distribution of le and lo in Buenos Aires Spanish, and shown it to be nonarbitrary. According to this analysis, the fundamental strategy in the use of these forms is that le refers to an object that is seen as closer to the subject than one referred to with lo. Different characteristics of the object or of the subject may determine the "distance" between the two, and thus call for le rather than lo.

A year-long survey of seven Spanish dialects covering the full range of leismo was undertaken to determine whether the Buenos Aires analysis holds for them also. Ten factors were examined (four "object" variables and six "subject" variables); thirty native informants of each dialect filled out blanks in a questionnaire testing each variable on each of four verbs.

The findings show:

a) That the meanings of le and lo are the same for all dialects.

b) That the dialects differ in the absolute "strength" of each factor but rank the factors in the same way.

c) That the dialects differ in the importance given to the gender vs. the case meaning of le.

d) That the characteristics of the object are more important and reliable than those of the subject in determining choice of le vs. lo.

This research shows that, in all dialects, use of le for the so-called "direct object" should not be seen as an arbitrary deviation from a syntactic norm, but as a semantically motivated choice.

Traditional labels like leismo presuppose the existence of syntactic norms from which speakers depart for arbitrary reasons. The random chaos forced by a syntactic approach to the use of le disappears when the analysis rests on the communicative function of language.

Contextual Testing and Communicative Competence

In this paper we argue for the use of contextual testing in second language acquisition programs. We also suggest guidelines for devising such tests and present sample tests.

Testing has recently become the focus of renewed interest. There is growing awareness that ability to communicate in a non-native language is not necessarily reflected in scores on 'typical' structure, vocabulary, and listening comprehension tests. We claim that this is because there are at least two parameters of communicative competence which are not tested: nonverbal cues and discourse rules. Awareness of what gestures, facial expressions, and body position mean affects ability to communicate. For example, a non-native Thai speaker naively pointing the bottom of his foot towards a native speaker will be unable to communicate with him effectively, no matter how fluent his speech, because his body position constitutes an insult. Also crucial to communication is awareness of how ideas, opinions, arguments, disagreement, social amenities, etc. are conveyed in the new language situation. For example, a Japanese speaker who knows English discourse rules will state his topic and express his opinion directly rather than speak delicately in circles, in the Japanese mode.

Communicative competence, as we define it, differs from Chomskian competence in scope and in purpose. It encompasses more elements, including verbal and relevant nonverbal performance factors, and, of course, refers to non-native competence. We have in mind a functional performance level similar to that of a native speaker of comparable intellect and education -- specifically that of graduate students or professionals in business or international organizations. We do not mean error-free sentences or even intuitive knowledge of all the grammatical principles of the new language.

To find how close students of a second language come to the goal of communicative competence, we suggest that present testing techniques, including the close procedure to which the term contextual testing has been applied, are inadequate. We define contextual testing in terms of theory rather than methodology. It refers to the testing of oral communicative abilities (i.e., the degree to which one can understand what is said in context and can respond appropriately) and writing abilities (i.e., the degree to which one can understand what is written in context and can communicate through the written word).

The sample test draws on the errors of non-native speakers produced in work and classroom situations, including pronouns and demonstratives, emphasizing and limiting adverbs, logical connectors, shortened and deleted forms, tense sequences, organisational signals, rhetorical devices, vocabulary and rhetoric choices for given relationships between the writer and his audience, and presuppositions. The use of various test formats, including multiple choice, rating for acceptability, and the labelling of sentences as well-formed and appropriate or anomalous in a given context are demonstrated within the framework of contextual testing.
Assertional Structure of Quantified NP's and the Category Squish

Using the category squish and corresponding gradation from asserted to presupposed predication, I extend Horn's (1969) analysis of only etc. to cases where the surface argument of only etc. is more structured than simply (Art+N). Only part of the NP is semantically within the quantifier scope; the remainder defines a background set within which presuppositions and assertions determined by the quantifier hold. This partitioning of the NP into quantifier argument and background set is governed by the verbiness of the NP's constituents: verbier constituents constitute the quantifier argument; nounier ones, the background set.

Consider the examples (all without contrastive stress):

(1) Only the men who ate Wheeties became impotent.  [Only N]  
(2) Only the tall men could see over the wall.  [Only Adj N]  
(3) Only the guilty who spoke English escaped.  [Only Adj N]

In Horn's analysis, "ONLY Fx" presupposes Fx and asserts that for y ≠ x, ¬Fx. With x more complex, as in (1-3), we see that if A is nounier than B (x = AB or BA), then A specifies a background set and B specifies the unique subset of A making F true. Note that (2) does not assert that short emus could not see over the wall nor presuppose that any emus could see over it--the quantifier argument a subset of the quantifier argument is part of the background set. When the NP consists of more than two major constituents, the above claim holds in part, but there are complications:

(4) Only tall men who were drunk made the team.  [Adj N]  
(5) Only the tall men smoking got caught.  [Adj N Part]  
(6) Only men drinking who wore red got caught.  [Part N]  
(7) Only drinking men who wore red got caught.  [Part N]

In (4) and (5) the verbier constituent (S) is the subset asserted to be unique and the remainder is background set; but (6), while it clearly has as background set a subset of [men] and as quantifier argument a subset of [who wore red], is unclear as to the status of drinking. Is it that, of [men], only the subset [drinking who wore red] got caught? or that, of [men drinking], only the subset [who wore red] got caught? As with the emus, these correspond to different data bases. The latter reading seems to be preferred, but the former is much easier to get than the similar reading of (7). This and similar cases suggest that fronting hedges--reduces--the verbiness of participles, so that they become part of the background set rather than of the quantifier argument. This seems to be due to the surface pre-nominal position of adjectives (whence "adjectivalization" of the participle) and to the (universal) tendency for new material to follow old (whence fronting backgrounds). Compare "I found a window broken" and "I found a broken window".

A related problem is the notion "NP head". It also apparently depends on nouniness of constituents, but when the nouniest daughter is lexical but apparently not a noun, "nominalization" takes place--note idiosyncratic number agreement for tall (*sg) and obvious (*pl) vs. annointed (sg or pl OK) when they head an NP. Even if such irregularity requires making all lexical heads nouns, the applicability of nouniness to determining the head, since the "apparent" category suffices, must be acknowledged at some level, possibly dischironically.
Old English Vowels and the Question of Vowel Heights

All Old English scholars assume that Old English long and short vowels differed in quantity only and coincided in quality. However, when open syllable lengthening occurred, the long vowel system changed from three vowel heights to four vowel heights:

<table>
<thead>
<tr>
<th>OLD ENGLISH</th>
<th>MIDDLE ENGLISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long</td>
<td>Short</td>
</tr>
<tr>
<td>i: u</td>
<td>I: U</td>
</tr>
<tr>
<td>o: e</td>
<td>e: o</td>
</tr>
<tr>
<td>a: e</td>
<td>a: e</td>
</tr>
</tbody>
</table>

To account for the development of a long vowel system with four vowel heights, scholars have assumed that the short vowels "lowered" in the vowel space just before open syllable lengthening occurred. This paper will challenge the assumption of short vowel lowering and will argue that the OE short vowels were lax, i.e., that they differed from OE long vowels in quality as well as quantity.

Three recent independent acoustic analyses (of Faroese, English, and the Cologne dialect of High German) show that the formants of lax [I, U] overlap those of tense [e, o, i], making the acoustic criteria for tense/lax differentiation in vowels questionable. Georg Heike in the Cologne dialect monograph proposes that when segments belonging to different phonemes overlap phonetically, one must assume that they belong to closed independent phonological systems.

Heike's proposal makes it possible to explain the development of a four-vowel-height system from a three-vowel-height system in Old and Middle English without short vowel lowering since pattern congruence between the long and short vowel systems is more important than phonetic similarity, especially in the phonological analysis of borrowed words by the native speaker. For instance, Vulgar Latin vowels which were redundantly short by position would be heard in Old English as distinctively short and assigned to the relevant member of the OE short vowel system; Vulgar Latin vowels redundantly long by position would be heard as distinctively long and assigned to the relevant member of the OE long vowel system, even though the formants of the two VL vowels in question were phonetically overlapping.

The assumption of closed independent phonetically dissimilar vowel subsystems linked by the distinctive feature length makes the completely unmotivated "lowering" of OE short vowels unnecessary, explains why native speakers match foreign sounds functionally to native sounds instead of phonetically, shows how four vowel heights can arise from a three-vowel-height system by the disturbance of the linking distinctive feature, and shows how limited phonetic means can be utilized to provide a very large number of distinctive differences in the phonology.
Dealing with isolated S₁ before S₂ sentences such as those treated in Heinamo 1972, 1973, this paper gives evidence that there is only one before in underlying structure and it is factual. It is hypothesized that factual underlying structures of the form S₁ before S₂ may be transformed into non-factual S₂ before S₁, e.g.,

(1) Max died before he saw his grandchildren. (NP)

(2) Max didn’t see his grandchildren before he died. (F)

Evidence consists of:

1) negative polarity items in affirmative S₂ of non-factual S₁ before S₂, but not in affirmative S₂ of factual S₁ before S₂.
2) non-occurrence of negative S₂ in factual S₁ before S₂ on grounds of selection, but yes in non-factual.
3) Restrictions on non-factual constructions, as well as on factual ones, are based on the non-occurrence of negative S₂ in factuals; unacceptable non-factuals have in their underlying structure factuals with negative S₂.

Contrary to Heinamo’s findings, S₁ before S₂ where S₂ contains modal would be shown to be factual. Thus regularizing the paradigm, and attention is given to sentences containing temporal measure phrases, which occur only in factuals.

The few remaining problems are:

1) The structures underlying non-factuals with intentionality, such as

(3) I caught the glass before it broke.

The underlying structures of these sentences include, in addition to a factual S₂ before S₁, a statement something like

(4) I caught the glass that it wouldn’t break.

2) Scope of the negative. In sentences like

(5) Don’t pat the dog before you eat, the not covers not S₁ alone, but the whole sentence.

3) A factual S₁ before S₂ sentences, e.g.,

(6) Like lost before anyone came, which behave like non-factuals, but with a few problems.

That the restrictions on S₁ before S₂ constructions don’t depend on before proves that there is only one before as it is used in these sentences, not different ones for factual and non-factual sentences as previously believed. It is possible to apply this type of analysis (factual vs. non-factual, negative vs. positive variables) to sentences formed with other temporal connectives; perhaps even these particular findings could apply in certain cases (e.g., after).


The syntactic relatedness of S extraposition and NP postposition in English

This paper argues that a lexicalist grammar of English (G) should incorporate neither Rosenbaum’s (1967) nor Emmonds’ (1972) analysis of sentences like 1a-b, but rather an analysis of such sentences based on Chomsky’s (1970) analysis of derived nominals like 2a-b.

(1a) That John smokes cigarettes bothers Bill.
(1b) It bothers Bill that John smokes cigarettes.
(2a) the growth of the corn
(2b) the growth before the corn

In particular, this paper proposes that:

(3) G should not only use Bar Notation rules to generate a Deep Structure Phrase Marker (DSPM) for 2a–b like:

a. [ { [ the corn] } [ { growth] ] ]

but should also use Bar Notation rules to generate a DSPM for 1a–b like:

b. [ { [ that John smokes cigarettes] } [ { PRES[ bother Bill]] ] ]

(4) G should not only introduce the expletive the of Zb into the underlying structure of 2b by an W Postposition rule like:

a. X-W-[[X-the-R-of-F]]

but should also introduce the derived subject of Zb into the underlying structure of 1b by an Z Postposition rule like:

b. X-S-[[X-it-S-]] , where it = the complex category symbol [[it, R]]

Discussed by Chomsky 1970.

This analysis of sentences like 1a–b is advanced as superior to Rosenbaum’s and Emmonds’ analyses for two main reasons. First, the proposed analysis postulates a DSPM for 1a–b which combines the best features, but none of the worst features, of the DSPM’s postulated for 1a–b by Rosenbaum (R) and Emmonds (E). Like R’s DSPM, DSPM 3b accounts directly for the fact that the embedded S of E’s DSPM, however, DSPM 3b also accounts automatically for all of E’s rather convincing data indicating that the embedded S’s of 1a–b should not be dominated by NP in Deep Structure.

Second, the proposed analysis enables G to capture two generalizations about English, hitherto unnoticed, concerning:

1. ill-formed sentences like 5a–b (discussed by Ross 1967, Emmonds 1972, and Higgins 1973) and ill-formed nominals like 6a–b (not discussed by them):

(5a) *That John smokes cigarettes bothers Bill is obvious.
(5b) *It is obvious that John smokes cigarettes bothers Bill.

(6a) *the corn’s growth’s rapidity
(6b) *the growth of the corn’s rapidity

II. ill-formed sentences like 7b (discussed by Emmonds 1972) and ill-formed nominals like 8b (not discussed by him):

(7a) *That John has blood on his hands proves that Jane is innocent.
(7b) *It proves that Jane is innocent that John has blood on his hands.
(8a) *the mayor’s brother Bill
(8b) *the brother Bill of the mayor

The proposed analysis allows the formulation of a generalized Surface Structure output condition and a generalized condition on the applicability of both W and Z Postposition which account respectively for parallel distributions of data like (5a–b)–(6a–b) and (7a–b)–(8a–b) in a principled way. These conditions, formalizable in terms of the Bar Notation variables X and Y, represent general constraints on the notion "permissible recursive surface structure of English" which are difficult, if not impossible, to formulate within a grammar of English that incorporates R’s or E’s analysis of sentences like 1a–b.
The First Course in Sanskrit

For the past hundred and fifty years at least some formal instruction in Sanskrit has formed a part of the training of a great many linguists. If, however, one examines the materials for elementary Sanskrit courses, one finds that they have been surprisingly untouched by every innovation in language teaching methodology.

In our presentation we shall first review the major approaches to Sanskrit teaching which are currently in use (Perry, Tyberg, Lanman-cum-Whitney) and we shall endeavor to show the ways in which each is unsatisfactory, given a modern philosophy of foreign language teaching.

We shall next discuss what we believe to be a basic postulate of all foreign language teaching:

Full passive command of linguistic structures can be most expediently achieved if the classroom goal is active production rather than simple recognition.

We shall argue that this postulate, which is widely accepted for modern languages, is equally valid for Ancient Languages.

Finally, we shall present excerpts from a set of elementary Sanskrit materials which we are in the process of developing and which are based on the analysis of the learning difficulties which Sanskrit structures present for English-speaking students.

At present on American campuses there is a great deal of interest in Indian philosophy, religion, and culture. If eager and earnest students who are linguistically naive can be given Sanskrit in such a way that they will not be defeated by it, this will provide yet another channel through which linguists can reach the community at large and, incidentally, find employment.
Some Alternating Patterns in Phonology

In A Directional Theory of Rule Application in Phonology, I. Howard discusses a number of alternating phonological patterns which he takes as evidence for a principle which predicts the directions in which rules apply. The purpose of this paper is to argue that these kinds of patterns do not actually provide any support for the directionality principle.

Two kinds of alternating patterns are of concern here. The first is alternating stress. A typical pattern is one in which the even-numbered syllables in a word are stressed, e.g., VCVCVVCV. It is true that a stress rule of the form V→ Estress / CV CO can correctly assign stress in such cases by applying from left to right. However, it will be argued that (a) within the directional framework, languages with stress on odd-numbered syllables must be described in a way that obscures their similarity to even-syllable-stress languages (b) the main stress apparently always falls at the beginning of the alternating pattern, suggesting a correlation between main and alternating stress which cannot be captured if rules like the one above are allowed. Two constraints on the form of stress rules are required to capture the observed correlation between main and alternating stress. These constraints force a uniform account of odd and even stress, and furthermore force the formulation of rules with intrinsic directionality.

The second kind of alternating pattern involves processes other than stress. An example is Voseian vowel raising, which converts underlying forms like aCaCa into CaCaCa. In cases of this type, there do not seem to be any relevant considerations like those mentioned above in connection with stress. It is true that directional rules are sufficient to produce these alternating patterns. However, it will be argued that (a) there are certain rules which must not produce alternating patterns, and within the directional framework, the ad hoc device of marking such rules as "simultaneous" must be resorted to (b) assuming simplex features, it can be shown that all those rules which produce alternating patterns of this kind involve identity deletions. If simultaneous application is taken as the unmarked mode, as would be the case in a theory such as that proposed by Koutsoudas, Sanders and Noll (1974), alternating patterns of this type are automatic consequences of an independently-motivated constraint against unrecoverable deletions, while the non-alternating patterns are produced by rules for which this constraint is not relevant. It is thus claimed that the type of pattern produced by all such rules is fully predictable, and there is no need to mark rules for a particular mode of application.

It is concluded that the two types of alternating patterns discussed in this paper do not support the axiom of directional application, and in fact, they provide evidence against it.

The numerous problems presented by prenasalized consonants have puzzled linguists for decades. Luganda, a Bantu language of Eastern Africa, should provide material for an excellent case study of prenasalized consonants. Since in addition to a contrast between prenasalized voiced and voiceless stops (mb, nd, nj, ng; mp, nt, nk, nk), there exist prenasalized fricatives (gy, nz; mf, nz).

I shall briefly review the accounts of prenasalized consonants within current phonological theory and show why all must be rejected for Luganda. Although Luganda prenasalized consonants evidence about the same surface length as underlying unitary consonants, instrumental evidence forces us to regard the two components of the prenasalized consonants as separate. Basically, for purposes of syllabification and timing, the nasal component functions in the syllable to its left and interacts crucially with the length of the vowel in that syllable, whereas the non-nasal component functions in the syllable to the right. It will be argued that the timing system of the language attempts to preserve a distinction between two basic syllable lengths, which distinction accounts for the interplay which is schematized below:

\[
\begin{array}{c}
\text{kutiga} & CV \rightarrow CV \\
\text{kutimba} & CV \rightarrow CV; NV \\
\text{kutikka} & CV \rightarrow CV \\
\end{array}
\]

(where \(VV\) = underlying long (not double) vowels and \(V\) = phonologically lengthened vowels).

Additionally, I show that there is a distinction in the respective lengths of the two components for voiced and voiceless series, a distinction that also interacts with vowel length crucially. A difference in the behavior of the prenasalized continuants [mf] and [mv] will be explained by reference to the derived status of the non-nasal components.

This evidence suggests that it may be wrong to speak in terms of 'prenasalized consonants' for Luganda and that a more accurate description would speak of nasal-consonant clusters -- one of the two types of consonant clusters allowed in Luganda -- since the two components function in separate syllables at the level of timing organization.

I will relate these Luganda facts to a phonological analysis in which prenasalized consonants are derived from sequences of NVC, an analysis which would otherwise be rejected on grounds of simplicity and naturalness. Data from other related languages will be examined which apparently cannot be treated analogously with the Luganda facts. Finally, if time permits, the general question of syllable- vs. mora-timing will be examined and it will be shown that the mora, strictly defined, is inappropriate as a unit of timing for Modern Luganda.
On the Use of Idioms as Evidence for Movement: A Cautionary Note

Idioms of the type to make headway have commonly been used to argue for the existence of movement transformations in the derivation of constructions such as passives, relative clauses, and easy to please phrases. The argument is based on the putative generalization that nouns such as headway only occur in the deep structure of English sentences as the direct object of the associated verb. The purpose of this paper is to present a construction in which such idioms can appear quite freely, and in which there would seem to be no way of preserving this generalization about the distribution of the object nouns. An example of the relevant kind would be:

John isn't making what I would call significant headway.

Such examples suggest that noun phrases containing nouns like headway can also appear in positions in which they are in some sense equated to an anaphor which is the object of the associated verb, but are not themselves the object of that verb. If this is correct, then no direct conclusions about movement can be drawn from examples like:

Headway isn’t easy to make in such conditions.

To deal with such examples, it is now sufficient to claim that the object of make is anaphoric to the noun phrase headway; it is not necessary to claim that headway was present in the deep structure as the object of make. Hence, the behavior of such idioms does not show that the derivation of these constructions must involve movement transformations. [I am assuming here an interpretive approach to anaphora, but similar conclusions would follow on a deletion analysis of easy to please constructions, or a matching analysis of relative clauses.]

Optional Pronominalization in Discourse

It is widely held that pronominalization across sentence boundaries is optional. Justification for this observation takes the form of (1), where either the repetition of a noun phrase or an appropriate pronoun results in an acceptable utterance.

(1) Sentaro Iwata died of cerebral hemorrhage in Tokyo on Tuesday. [Iwata was 73.]

This paper argues that pronominalization across sentence boundaries is not optional and that the use or nonuse of a pronoun in cases of this type signals a difference in structural organization at the discourse level.

A discourse consists of paragraphs, or stretches of language concerned with the same topic. Every paragraph consists of segments in which a major piece of information is presented. The sentence, or sentence fragment, of a segment in which the essential point is made is termed a peak. The peaks of a paragraph are semantically coordinate in that they each contain the major pieces of information to be communicated in the paragraph. All other sentences and sentence fragments in a paragraph are semantically subordinate to a peak in that they elaborate or further delineate the information presented in the peak.

Here, discourses with only one referent are examined. In these cases, the repetition of a noun phrase indicates that the sentence in which the noun phrase is contained constitutes a peak, while a pronoun indicates that the sentence is subordinate to a peak. Thus, pronominalization, rather than being optional in extrasentential cases, actually serves to identify a structural property of discourse.

In the case of (1), an overly simplified example, the use of the pronoun indicates that the second sentence merely elaborates the first sentence slightly. The use of the noun phrase in the second sentence indicates, perhaps, that Iwata’s age of death is something unique and hence constitutes a major piece of information, semantically coordinate to the first sentence.
On Limiting the Power of Transformational Grammars

This paper advances the hypothesis that deletion transformations can be restricted much more severely than they have been under the (standard) 'recoverability-of-deletions' condition of Katz and Postal. Peters and Ritchie have shown that transformational grammars with deletions (of a fixed set of terminal elements or of constituents under identity) are equivalent to Unrestricted Rewriting Systems in weak generative capacity. They have also shown that, given the 'recoverability of deletions' condition, the base component of a transformational grammar can be radically restricted without any effect on generative power.

The weak generative capacity of transformational grammars can be reduced to that of context-sensitive grammars (Type 2) if deletions are limited by a 'Strict Recoverability Hypothesis'. The hypothesis is equivalent to the claim that deletions are uniquely recoverable on the basis of surface structure alone. This seems certainly to be the case for deletions involving conjunction reduction (gapping and the like). For these structures, deletion is so strict that we do not even find it in such situations as: *Sam bought a Cadillac, and a Porsche by Bill (for Sam bought a Cadillac and Bill a Porsche) or *John hit and the dog was kicked by Max (for John hit and Bill kicked the dog). Other transformations involving deletion, such as imperative, it-deletion, Wh-deletion, Equi-NP, and Super-Equi, are examined and it is suggested that, of those that are viable, all obey the proposed hypothesis of strict recoverability.

The hypothesis has consequences beyond the limiting of generative capacity. For example, in the realization that his unpopularity dismays Bill bothers Oscar the deleted subject of realization is unambiguously Oscar; but the pronoun his (a substitution, not a deletion) can refer ambiguously to either Bill or to Oscar. The fact that the pronoun his is not deletable here is a result that is predicted by the hypothesis of strict recoverability.

The paper presents semantic and syntactic justification for the following claims:

1) Raising from Subject Position (RSP) is not a well-motivated linguistic operation.
2) Raising from Object Position (ROP) and Psych-Movement (as proposed by Postal in Crossover Phenomena) are sufficient to account for all sentences which have been hypothesized to require the application of RSP in their derivations.

Arguments in favor of RSP invariably include a discussion of the verbs seem and appear; one form of the argument claims that sentences like (lb) and (lc) are derived from underlying structures like (la). (See McCawley's "English as a VSO Language," for example.)

(1a) [Gloria nervous] seems
(1b) It seems that Gloria is nervous
(1c) Gloria seems to be nervous

This type of analysis requires the additional ad hoc constraint that either intraposition or RSP must apply, since seem and appear do not tolerate surface sentential subjects. The situation is further complicated by the fact that seem and appear do allow sentential subjects when followed by an adjective, as in (2):

(2) That Gloria is nervous seems strange

It is proposed here that seem and appear belong to the class of perception predicates, all of which are transitive in underlying semantic structure and all of which require a sentient "experiencer" NP subject. Included in this class are also taste, feel, smell, etc. If there is no overt surface experiencer, the underlying subject is Indef. Thus, (1b) and (1c) are represented semantically as (3):

(3) Indef seem [Gloria nervous]

A more precise characterization of Psych-Movement is proposed, and ROP and Psych-Movement are shown to apply freely to semantic structures which meet their structural descriptions; no particular restrictions are required for seem and appear.

The general conclusion of the paper is that sentences like (4) are entirely analogous in their derivations to sentences like (5),

(4) Kate seems upset (to NP)
(5) The butter smells rancid (to NP)

and that there exists no evidence for a single linguistic operation which raises the subject of a sentential subject.
Production and Perception: Their Respective Roles in one Case of Tonal Development

We have historical evidence from a number of languages (East and South-East Asian languages, South African languages, etc.) that the loss of voicing contrast in prevocalic position can lead to tonal contrasts, i.e. the intrinsic perturbations caused by consonants on pitches of following vowels are reinterpreted and used linguistically. The purpose of this study is to investigate how and why this reinterpretation is made possible.

First, I will report on an experiment done with five American subjects (Experiment I), showing the effect of voiced vs. voiceless aspirated consonants on the pitch of the following vowel. These two fundamental frequency patterns differ in their direction of change (falling slope of about 50 Hz/sec after voiceless aspirated consonants vs. rising slope of about 80 Hz/sec after voiced consonants) as well as their relative F0 values (varying from a 15 Hz difference at the onset of the vowel to a statistically significant difference of about 3 Hz 100 msec after vowel onset).

Second, data obtained from 10 subjects (Experiment II) will be presented in order to show to what extent the differences established in Experiment I are perceptible. In Experiment II, synthesized speech is used; the stimuli have a constant duration of 250 msec and are composed by a slope (changing frequency portion) of variable length (40, 60, 100, 150 and 250 msec) followed by a level tone (steady state portion). The onset frequency (beginning point of the slope) was either 10 msec below or above the frequency of the steady state portion which was fixed at 120 Hz. Under these conditions, subjects perceived the two F0 patterns as significantly different when the changing frequency portion was longer than 60 msec.

These data then, allow us to define the narrow limits — both perceptual and articulatory — within which the development of tones from former voiced/voiceless stop contrasts is likely to occur.

Psychological studies of the communicative function of the passive construction have generally indicated that the passive is employed in those circumstances when the patient is the topic or subject of conversation. Thus, in answering the question "What happened to the astronauts?" the response might be "The astronauts were attacked by the Martian." Had the question been "What did the Martian do?" the passive response would have been inappropriate. It is also the case, however, that the use of definite and indefinite articles serves to mark the distinction between something already referred to, the topic, and something not previously mentioned. This raises a question about the communicative function of the passive construction when the patient is marked as nontopical by the use of the indefinite article. For example, consider the sentence "An astronaut was attacked by the Martian". The use of the passive voice indicates that "astronaut" is somehow topical, but the indefinite article indicates that it is not topical, but new.

The thesis of the present paper is that such sentences, although perfectly grammatical, are nonfunctional and would not occur in normal language use. Two experiments have been conducted which support this position.

In the first experiment, subjects were asked to create questions for which specified active and passive sentences could be considered to be answers. In half of the sentences the agent was marked as definite and the patient as indefinite while the other half were marked in the opposite manner. Subjects consistently produced questions about the patient or the agent for all sentences except the passives with indefinite patients. For this sentence type there was no clear tendency to ask about a specific entity. Subjects would sometimes create questions about the patient, following the definite/indefinite markers, whereas other subjects would ask about the agent, consistent with the functional properties of the passive voice. This supports the hypothesis that this sentence structure contains contradictory information. Subjects' responses depended on which cue they attended to.

In the second experiment subjects were given a question and a choice of answers expressing the same logical constituents but using active and passive structures with either definite or indefinite articles on the agent and patient. Subjects were asked to select which answer they felt was appropriate. Only one subject out of eighty selected the passive sentence with an indefinite patient as an appropriate answer to any of the questions. Only when the patient was marked as topic by both the grammatical structure and the placement of articles was the passive generally considered to be an appropriate answer.

These results are considered as evidence for the need for a new type of nongrammatical constraint on sentence acceptability. That is, some grammatical combinations produce sentences which are functionally unacceptable.
The SOV Cycle: Toward a Hypothesis of Word Order Change

Benefitting from Greenberg (1963), Lehmann (1973) and other scholars, the present author will propose a hypothesis on word order change. This hypothesis first distinguishes two principles in ordering: (1) an OV principle, according to which the secondary component is placed first and the primary one last. Consistent to this strategy, such sequences as S-OV, O-V, modifier-noun, adverb-verb, and verb-qualifier are constructed. (2) The second, or VO principle, has a diametrically opposite effect. Taking the OV scheme as a basis, the VO scheme can be described as replacing the former. In terms of the major elements S, O, V, the change can be described as movement of the verb phrase (VP) and predicate phrase (PP). This movement process creates an SOV cycle as diagrammed below:

\[ \text{SOV} \rightarrow \text{SV} \rightarrow \text{VOS} \rightarrow \text{VSO} \rightarrow \text{SOV} \]

The course of change is reversible at any point on the cycle and three routes are distinguishable: I. SOV (\(\rightarrow\) SOV), II. SOV \(\rightarrow\) SV \(\rightarrow\) VOS and III. SOV \(\rightarrow\) VSO \(\rightarrow\) VOS \(\rightarrow\) VSO \(\rightarrow\) SOV. ('Free' word order is due to the competition among the movement rules.)

The VO principle usually operates on noun modifiers later than it does on the VP and the PP, and on route III, noun modifiers, once affected by the VO principle, do not change their position to conform to the OV principle until the final SOV stage. Thus, the following correlation is found in a VSO (or VO) language, the relative clause and the adjective either usually, or at least as often as not, follow the noun. The VOS (or VO) that has this trait and the SV and SOV that have developed from VSO can be termed mature VO systems.

The mature VO characteristic can be utilized as a diagnostic device in reconstruction. If a language qualifies as a mature VO, it is placed on the 'away-from-VSO' half of the cycle, otherwise it is placed on the 'toward-VSO' half. (Both Portuguese and English, for example, have the VSO order. Yet Portuguese is a mature VO evolving away from VSO and English is an immature VO developing toward VSO.)

The author justifies the SOV cycle by using it to account for well-known order changes in Indo-European languages and by employing it to reconstruct little known changes in word order in Austronesian languages.

References


The linguistic function known as 'topicalization' and/or 'focusing', though still far from understood, basically involves putting to the left presupposed, backgrounded, or old information (topicalization), and putting to the right un presupposed, foregrounded, or new information (focusing), usually the two are concurrent. This is the functional explanation of the relationship between sentence pairs such as John seems to be distraught, and it seems that John is distraught, active and passive sentences, and all the important so-called 'movement' transformations, including subject raising, object raising, 4-emailing, clefting and pseudo-clefting, there-inversion, and relativization. These transformations can be expressed formally and unitarily as simple NP raising from non-linear deep structures. There is no movement, just linearization of non-linear deep structure after raising. The deep structure input to the raising transformation should be non-linear, since the linear order of input elements is irrelevant to it, and since the linear order of elements of the output structure is determined by and large by the linearization rules which were stated in the standard theory as part of the phrase structure rules, but which are best stated independently and unordered extrinsically, rather than stated repeatedly and mostly redundantly for each so-called movement transformation.

Topicalization/focusing offers a functional explanation of such minor syntactic facts as: (i) constraints on dative movement with pronouns (*gave me it) including clitic pronoun movement in Spanish; (ii) constraints on dative movement with 'heavy' NPs (*gave an old overcoat that really wasn't worth keeping to me), and the obligatoriness of 'heavy' clause extraposition; (iii) why some verbs have no passives, e.g. cost, fit, weigh (that the steak was weighed is okay is consistent with the explanation from topicalization/focusing); (iv) why alternate orders such as all the people and the people all occur in different languages; (v) why some verbs occur almost always in the passive (arraying), and others usually in the passive (launch); (vi) why some idioms have no passives (*hard time was given); and others.

The commonness of the leftward and rightward relationship in topicalization/focusing in diverse languages, and its use in child language suggest that it exists as a universal. The universality is probably owing to the semantic value of iconicity in the linear relationships established in topicalization/focusing: left represents the past in discourse, and right the future. This argues for the unmarkedness of SOV order over other main constituent orders. The blurred distinction of subject and topic, and the cycle of diachronic word order changes seem to be manifestations of the ubiquitous tension of language, noted by Saussure, between the preference for the lexical or grammatical instruments, in other words, between the pragmatic and the customary.
Abstract Ideas: The Relation of Linguistic Tense and Psychological Time

Recently Bransford and Franks (1973) reported patterns of false recognition of sentences with single as well as multiple predicates in a short term memory paradigm. Their findings suggest that subjects encode sets of related sentences in the form of "abstract idea sets" rather than as syntactic sequences. The present study was undertaken to determine whether logical relations among the constituent predicates of an idea set are coded in memory. The logical relations under consideration were those involved in the temporal specification of the constituent sentences of the idea set: that is, the temporal relations among the events in the idea set as specified by a Tense Logic of the Reichenbachian form. If subjects encode the temporal information as they encode the abstract idea (establish an event space), then the high rate of false recognition responses found in the Bransford and Franks paradigm should only be elicited when the recognition set sentences have readings of temporal specification consistent with the event space encoded with the abstract idea from the sentences in the learning set. In the condition in which there was no manipulation of the temporal specification between learning and recognition sets, the high false recognition rate reported by Bransford and Franks was observed. Likewise, when the tense-aspect of the recognition set was manipulated in such a way that the correct temporal order of events (predicates) was maintained, a similarly high false recognition rate was observed. However, in the condition in which the tense-aspect manipulations yielded different temporal orders of predicates in the learning and recognition sets, the rate of false recognition was significantly lower. This finding supports the hypothesis that abstract ideas are encoded in the form of event spaces which include those logical relations among events which are expressed in the temporal specification of the constituent sentoids.
Some Observations on the Perfect and its Pragmatics - A Case Study from Japanese

At the 1973 Winter LSA Meeting in San Diego, I discussed one of the perfective forms in Japanese, TA KOTO GA ARU as in John wa London ni it-TA KOTO GA ARU "Speaking of John, he has been to London." One of its characteristics which I pointed out then is the fact that it conveys the 'recollective' meaning - one is looking back on an event in the past and reminiscing about it.

The main point of the present paper will be on how the perfective forms in Japanese, namely, TA KOTO GA ARU and another form TE IRU, which I will discuss in this paper, serve to convey not only the temporal distance between the speaker and the activity or event which occurred in the past, but also the spatio-psychological distance between the two, and possibly, the distance between the speaker and the addressee as well.

My discussion will proceed as follows: first, I will discuss the syntactic and semantic characteristics of the sentences with TE IRU which express the universal reading, i.e. John wa Tii hara mat-TE IRU "Speaking of John, he has been waiting since three o'clock and for it to rain," John wa London ni it-TE IRU "Speaking of John, he has been to London." I will then point out some differences between TA KOTO GA ARU and TE IRU, e.g., while John wa like de ude o nakushi-TA KOTO GA ARU is unacceptable, John wa like de ude o nakushi-TE IRU is perfectly acceptable although both can be translated into "Speaking of John, he has lost his arm in an accident."

Second, I will show that the existential reading of TE IRU conveys what I call the 'reportative' meaning. That is, the statement in TE IRU is based on some evidence, and therefore, it is an objective statement. Thus, this expression conveys a meaning which is distinctly different from TA KOTO GA ARU which conveys the recollective and more subjective or personal feeling of the speaker.

In Japanese, then, those perfective forms not only express the temporal relationship between the activity or event and the speaker, but they also serve to convey the spatio-psychological distance between the speaker and the event, and possibly even between the speaker and the addressee as well. Since each language has its own ways of expressing different features of human mental life, English, for instance, in its present perfect may not overtly mark this particular distinction. I suggest, however, that an exploration into such possibilities as a legitimate part of linguistic investigation may have some interesting surprises for us.

Quantifiers interact in two types of surface configurations: they may be members of the same clause, or members of two different clauses. Concerning the second configuration, current linguistic theories predict that the quantifier in the subordinate clause at the surface level will receive higher scope assignment (Lakoff: 1971, Jackendoff: 1972, and Chomsky: 1971). This paper gives evidence to show that the surface command relationship is inadequate to predict scope assignment. Syntactic deep structure command relations defined by the Standard Theory are more important in determining scope interpretation.

The (a) and (b) sentences in the following complement constructions are assigned the same structural description at the surface level by the Standard Theory.

1) a. I persuaded a foreign student to enroll in every course.
   b. I expected a foreign student to enroll in every course.

2) a. A senator is anxious to speak at every rally.
   b. A senator is likely to speak at every rally.

3) a. An interesting conversationalist expects to be invited to every party.
   b. An interesting conversationalist seems to be invited to every party.

4) a. A cake is ready for anyone to ice.
   b. A cake is easy for anyone to ice.

Though the surface command relations are identical in the (a) and (b) cases, the sentences have different preferred scope interpretations. Contrary to predictions, in the (b) sentences the quantifier in the lower S (and occurring rightmost in the tree) receives wider scope assignment on the preferred reading. The (a) and (b) sentences have different derivational histories in the Standard Theory and therefore differ from each other in their underlying command relationships. The (a) sentences result from equal NP deletion, while the (b) sentences have undergone a raising transformation. These distinctions provide a way of explaining the differences in scope interpretation. A quantifier must command at both the deep and surface levels to receive higher scope assignment.

Several implications follow from this realization:

1. The Generative Semantics model must define an underlying syntactic level to occur after predicate raising and before the application of cyclic transformations in order to correctly identify the underlying command relations needed to predict scope interpretation.

2. Interpretivist Semantics, in redefining the derivation of complement constructions so that deep and surface command relations are frequently identical, will have difficulty assigning the correct scope readings. In addition, their claim that logical relations are interpreted from the surface alone must be rejected.

3. The Standard Theory offers the best syntactic analysis of complement constructions in that it provides the necessary information for the semantic component to interpret quantifier scope.
Balto-Slavic presents in -i-

The IE *statives are represented in Balto-Slavic by verbs with infinitive stems in *-e- (e.g., Lith. mėtį 'remember', OCS мить 'idem') and present stems in *-i- (Balt: cf. Lith. 3 sg. mini, pl. minė) or *-i- (Slavics cf. OCS ∼-i-, 1 pl. miněti, 2 pl. minětė). While the historical affiliation of the stative morpheme *-e- are well-known, the origin of the present marker *-i- remain elusive. One widely-held theory (Stang, Melillet, etc.) views *-i- as the thematic or "semantic" (cf. Lith. 1 sg. mini, OCS мить) equivalent of the IE stative/transitive suffix *-i- (cf. e.g., Gk. μαμην, Skt. māmyate 'think'), etc.; this explanation is badly compromised by the total absence of comparable non-stative forms in Indo-Iranian, Hittite and Greek. Likewise unsatisfactory from a morphological point of view is Schmitt's attempt to trace the Balto-Slavic type to an ablauting paradigm in *-ē-i- (Kurylovs' derivation of Baltic *-i- and Slavic *-i- from *-i-, the inherited ending of the 3 sg. perfect, cannot account for the form of the stative paradigm in Latvian and Old Prussian).

Present stems in *-i- recur in another Slavic category—the inherited iterative-causative with infinitives in -iti (e.g., nositi, 3 sg. -iti 'bear'). There is evidence that this type, in which *-i- probably continues IE *-ei-, was originally found in Baltic as well. It is possible, therefore, that the Slavic stative in *-i- owe their long vowel to the influence of the Balto-Slavic itatives, and that the *-i- presupposed by Baltic forms like Lith. mini, ili, etc. continues the earlier state of affairs.

Among the statives reconstructible for Baltic and Slavic are several which go back to Old Prussian; one of these, Lith. garėti, OCS garēti 'burn' is found in both branches. There is some reason to believe that in Balto-Slavic times the perfect had a "mixed" inflection like that still preserved in the verb 'know' in Old Prussian 1 sg. wäldai, 2 sg. wämesi, but 1 pl. wäldi, 2 pl. wäldōt. It is clear in this case that the -i- of the plural forms has been generalized from the inherited third person plural in *-int(i) < *-er (or *-ir < *-ir). A similar development can be assumed to explain the spread of -i- as a union vowel in the Baltic future (Lith. 1 sg. būsi, 1 pl. būsin, but 3 būt).

A significant number of Balto-Slavic statives in *-i- can be matched with Indo-European or Greek root *orit middle, cf. Lith. mini, OCS minić; Ved. amūti; Lith. būtį, OCS būtiti, 'is awake'; Ved. bhaubhau; OCS lehítṛ 'lies'; Gr. ἔλθετο. In several IE languages such root ostoi appear to be the direct source of stative presents: thus Toch. B lynukēr 'shines' represents 3 sg. aor. *lušk(i), redundant suffixed further b. sg. ag. *lušk(ī). Among the *-i- statives continuing 3 sg. aor. *lušk(i) with suffixed 3 sg., etc., assuming an identical development for Balto-Slavic we may predict a 3 pl. form minintai < *-nti(i), or, with conversion to the corresponding active ending, mininti. By the generalization of -i- from the third plural, such a form would regularly engender Balto-Slavic 1 pl. minišči, 2 pl. minišči; once established as a these vowel in the plural, *-i- would have been free to spread to the singular in a variety of ways.

Some Properties of Stress-accent languages

McCauley 1964 contends that, in terms of the information required in underlying forms of morphemes, the primary typological distinction is between tone languages and non-tone languages; no further distinction being required among non-tone languages. I will argue that on the basis of the types of rules required, there is a major typological difference among non-tone languages: pitch-accent languages, which have accent spreading, and stress-accent languages, which do not. Halle 1973a and Kiparsky 1973 have analyzed the Proto-Indo-European accent system as a pitch-accent system, based on evidence from Greek, Sanskrit, Lithuanian, and Slavic, which are best analyzed synchronically as having pitch accent systems. The Slavic group has innovated in replacing the original pitch-accent system with a stress accent system. I will show that English in particular cannot be a pitch-accent language by showing that it cannot have a rule of accent spreading, and then extend this conclusion to Swedish, which superficially appears to have a pitch-accent system (Pike 1948, Lehiste 1970).

In languages with rightward spread, such as Greek and Sanskrit, the reverse occurs: the leftmost accent wins, and stress movement is rightward. Evidence that English cannot have a rule of accent spread includes the following: 1) there is no single prevailing rule of which accent of two in the same word becomes the main stress. There is systematic variation in noun-verb pairs like torment (N) torma (V); dialectal variation in locate (American) locate (British). 2) It is clear that in thirteen languages examined in thirteen of the types of various evidence, the rule is the same in all: Verner's Law, which states that within the same word, the nasal becomes the stress accent of the word.

The accentuation of Russian words. Language 49, 312-348

Halle 1973b Stress rules in English: a new version. LI IV 51-64

Kiparsky 1973 The Inflaccional accent of Indo-European. L 49, 549-559

Lehiste 1970 Suprasegmentals. MUP Press

MCCAULEY 1964 What is a tone language? ISA Summer meeting, Bloomington

John T. Jensen
U Colorado
At the turn of the century several hundred thousand Finns, most from the Östrobotnian province of Finland, emigrated to the United States and Canada. From the very beginning of contact with English, the speech of these Finns in America became strange to the point of unintelligibility to non-emigrant Finns. However, fieldwork done in the 1950's among the Finland-born (then in their 70's and 30's) as reported by Virtoranta ("Finskan i Amerika" Opuscula Instituti Linguae Fenniae, Universitatis Helsingiensiae) and Karttunen ("American Finnish" unpublished mimeo, 1966) revealed their "Finglish" to be unaltered Östrobotnian Finnish. Its unintelligibility to old country Finns lies wholly in its stock of loan words. These English words have been assimilated for the most part by the same morphological principles by which this dialect of Finnic had previously assimilated Swedish vocabulary. We call this Finglish 1. It is spoken by the Finland-born and to some extent by their eldest children.

Recently we came across a corpus of another variety of Finglish, which we shall call Finglish 2. Finglish 2 is virtually uninflected with only an occasional partitive relict. There is not much native Finnish vocabulary left either. But the fennicized English loans of Finglish 1 are pervasive. Also characteristic of Finglish 2 are unanalyzed forms such as kaary < got to konnu < going to, peteu < bet you (as in I petu poeta mil "I bet your boots") and kimme < give me (as in kimme holpolei "Give 'er hell, boy!"). kimme tat for mil "give that to me", and juu kimme for mil first; ten i kimme for you (gave it) to me first, then I give it to you". (The notation of the corpus employs both English and Finnish conventions.)

It seems unlikely that Finglish 2 could become fully intelligible to monolingual speakers of Finnish or English. To understand and speak Finglish 2 one must have a passive knowledge of Finglish 1. For this reason Finglish 2 must also be a single generation phenomenon.

Finglish 1 is Finnish, and Finglish 2 is English, but they share common, productive Finglish morphological principles, the legacy of speakers of one language to speakers of the other. We will describe this legacy.
Towards a Universal Definition of 'Subject of'

We report here on a cross language study designed to determine the universal properties of subjects. The motivation of this study is the validity of certain recent generalizations which take notions like subject as primitive e.g. The Accessibility Hierarchy (Keenan and Comrie), The Functional Succession Principle (Perlmutter and Postal). Such generalizations require that subjects of sentences from an arbitrary language be identifiable as a non-arbitrary, that is, language independent, way.

An initial checklist of 26 subject properties was proposed. About half of these occurred frequently enough to warrant comparative study in the languages of our sample (currently 14 in number, selected for typological diversity). The results:

1) There is no single, universal, defining property of subjects. Rather, subject is a cluster concept: A subject NP usually has most of about a dozen properties, some of which are more important than others. Languages are exhibited in which the NP having a majority of subject properties fails to have one of the more general ones. (e.g. in Tzeltal, and other languages, the subject NP usually follows nominalized objects in unmarked word order; in Dyirbal and Eskimo subject NPs appear not to undergo Relativization or Equi; in Tagalog subject NPs may occur as anaphoric reflexives).

2) Some languages (Hindi, Hungarian) are shown to be "subject-prominent" in that a single NP has a large majority of the relevant subject properties. In these languages the subject/non-subject distinctions is shown to be an important primary relation. Other languages however (Samoa, Maori) are "subject-diffuse" in that for certain sentence types the subject properties are shared by two NPs. Such languages are shown to rely more heavily on primary relations like left-right order, which can be stated independently of notions like subject of, than is the case with subject-prominent languages.

The Expression of Time in Language Acquisition

This paper is concerned with how the child uses linguistic structures which temporally relate 2 independent events. The research discussed here is part of a larger study which tests the hypothesis that the child learns to express sequence (before, after) prior to simultaneity (at the same time, while).

The concept of simultaneity has been given varied interpretations in the literature. Clark (1970;1973) considers simultaneity to be 'time at which X'. In this view the child's use of today and now marks simultaneity. Here two different events are not temporally related, rather one event is marked in time. The present investigation instead, considers the acquisition of simultaneity in terms of the child's ability to relate two spatially distinct events. In that sense simultaneity is 'time at which X and Y'.

Thirty-two children from 3 to 5 years were asked to imitate sentences containing the following temporal constructions: 1) before C1, 2) after C2, 3) First C1, Last C2, 4) C1, and then C2, 5) Before C1, after C2, 7) C1 and C2 at the same time.

It was found that sentences expressing sequence were imitated correctly significantly more often than sentences expressing simultaneity, F(3,72) = 5.63, p < .005. The order of acquisition, based on significant differences in the number of errors produced on imitations of the test structures were: A. Descriptions of 2 events in their order of occurrence (1-4 above); B. Descriptions of 2 events in reverse of their order of occurrence (5-6); C. Descriptions of 2 events which occur simultaneously (7-8).

It is difficult to predict these results on linguistic grounds alone. For example, before, after and while are all proverbialized as de+Tns+so and pronominalized as then. In addition, the object of the verb in these clauses cannot be questioned or relativized (Geis, 1970). The coordinate and subordinate clause sentences investigated permit verbs in the same or different aspect (Heinikëkâ, 1974).

In addition, such notions as derivational complexity fail to account for the results since C1 before C2 and C while C2 share similar transformational histories. Similarly, at the same time can be viewed as a specified coordinate clause which, according to some views, ought to be acquired before subordinate clause constructions. However, the data revealed that it was acquired after several such constructions.

This paper argues that children learn to express sequence first because it is cognitively simpler. A variety of psychological experiments supports such a view. First, Piaget (1969) found that children below 5 years are unable to determine that 2 events that cease simultaneously are in fact simultaneous. "...he (the child) fails to appreciate the simultaneity of the end points because he fails to attribute a common time to these separate actions" (p.134). Second, Ferreiro and Sinclair (1971) found that young children tend to focus on one event in a pair, resulting in an inability to coordinate two events into a coherent unit.

The significance of this finding is discussed for cognitively oriented theories of language acquisition. Implications for the role of semantics in child language are considered. A non-additive hierarchical model of lexical
On Pragmatic Inference and Communicative Strategies: The Problem of The Dutch “Pseudo-passive”

Unlike the “true” Dutch passive in (1), the so-called “pseudo-passive” in (2) refers only to human actions -- to events caused by specifically human agents, not inanimate forces or instruments:

(1) De huizen werden verwoest. 'The houses were destroyed.'
the houses became destroyed

(2) Er werd gefloten. 'People whistled; someone whistled.'
there became whistled

Faced with this fact, Dutch grammarians of all theoretical persuasions have denied that there is any syntactic or semantic relationship between the two passive forms. Nevertheless, their own attempts to link the "pseudo-passive" to other, impersonal constructions fail in many ways. Crucially, they do not explain why only those impersonal sentences which refer to human activities just happen to resemble "true" passives.

The present paper rejects the grammarians' view and argues that there is but one Dutch passive which, in both its "uses," signals a single, rather abstract meaning: HIGH PARTICIPANT NOT FOcused. i.e., the topmost noun-phrase on a scale of relative agentivity is not grammatical subject. The specialised interpretation of the "pseudo-" form is then shown to be a pragmatic inference from (a) the meaning of the passive, and (b) the avoidance of competing "impersonal actives" and deverbal nouns, all of which may be used to refer to events without raising the issue of the relative agent-likeness of participants.

The central argument is that the meaning of the passive lends itself to two distinct communicative strategies according to the reason for the defocusing (de-emphasis of the high participant). If, as in the "true" passive, the high participant is defocused (backgrounded) solely to focus on (foreground) a low participant (e.g., a dative or patient), little information is gained about the high participant itself. The backgrounding is merely a means to an end; one cannot deduce from it the kind of cause-agent-instrument involved. On the other hand, if, as in the "pseudo-passive," one claims HIGH PARTICIPANT NOT FOcUSED without placing focus elsewhere, it may be inferred: (i) that it is relevant to signal explicitly that the participant is agent-like, and (ii) that, without expressed defocusing, this high participant would be the center of attention. Given (a) that humans are high participants par excellence (Cohen 1972, Zweben 1972) and (b) that people tend to talk about people (Given 1974, Hawkinsin and Hylman 1974), the most obvious conclusion for language users is that the high participant is a human agent. This "natural" inference is reinforced by the fact that, if agentivity were not an issue, passive morphology could be bypassed altogether.

The analysis presented here thus supports the following theoretical claim: By positing invariant signal-meaning relationships and by recognizing both the communicative strategies and pragmatic inferences to which they lead, one may indeed explain rather than merely describe the data of language.
The Scope Semantics of Logical Operator Words for a Fragment of English

Sentences containing two or more scope-inducing operator words (quantifiers, negative elements, modals, etc.) are often ambiguous as to the scope order of these operators in semantic interpretation. A number of factors influence the possible scope orders associated with given sentences, including surface order, the lexical characteristics of operator words, and constituent structure. There are, in particular, systematic differences in the scope behavior of universal versus existential quantifier words and definite versus indefinite determiners. In this paper we shall describe these differences and attempt to account for them with a theoretically revealing formal mechanism.

We shall be concerned to explain, for instance, why under normal intonation sentence (1) is ambiguous as to the scope order of many and not while sentence (2) allows only the order not-all and sentence (3) only the order some-not:

(1) John didn't see many of the games.
(2) John didn't see all of the games.
(3) John didn't see some of the games.

We conclude from examples like the above that the basic scope order of operator words in English follows surface structure order and that other words are accounted for by semantic reinterpretation rules that change the initial scope order in certain environments. Where expected orders do not exist, they are ruled out by output filters. Our analysis refines and extends earlier work in the interpretivist tradition (Jackendoff 1969, 1972; Lasnik 1972), and we accept these authors' arguments for interpretive semantics. We note, however, that the analysis we present could be reformulated in a generative semantics framework without any essential difficulty.

Perhaps the most interesting consequence of our analysis is the discovery that determiners in English come in paired categories of universal and existential quantifier words which take opposite scopes with respect to negation. These category pairs, include no-any; some-/all every- etc.; and indefinite/definite determiners. Thus, no- words consist of a negative element and an existential quantifier with an obligatory scope order of negative-existential while any-words (in negative contexts) are universal quantifiers outside the scope of the negative. By contrast, quantifiers of the some-/all category are existential quantifiers that generally appear outside the scope of a negative while their pairs in the all, every- category prefer narrow scope with respect to negatives. Finally, on the interpretation we shall present (in which indefinites are existential quantifiers and definites are universal quantifiers) indefinite determiners have narrow scope with respect to negatives and definite determiners have wide scope with respect to them. We cannot at present explain the existence of these category pairs. We note, however, that the contrasting scope orders associated with the members of each pair are logically equivalent since NOT-ALL = SOME-NOT and ALL-NOT = NOT-SOME.
It is usually considered that the acquisition of syntax and of propositional semantics is correlated with the mean length of utterance [MLU], and some investigators believe that children do not construct sentences or propositions at the one-word stage. In the present paper we will show that some learning strategies are not so dependent upon the acquisition of vocabulary.

A total record was made of the early utterances of Jessie, a fifth-born child, over a period of six months when her productive use of language was primarily two-one word utterances: "cat" (cat?) and "mama" (mama). During this period she developed in succession a number of linguistic skills of a relatively high order of complexity. Identification of the referents of cat and mama was carried on intensively (up to 350 tokens a day), utilizing the features [+animate] and [+human]. A conjunctive definition of mama was established, coinciding with her nuclear family; this gradually contracted to the prototypical member, her mother. On the other hand, cat expanded to include a wide variety of animals defined around a core set of features. Data derived from Jessie's responses to 80 species of animals shows that each feature contributed independently to the probability of the term cat denoting, in a manner similar to the responses of adults to experiments with a continuous range of every-day objects.

Six other words were explored by Jessie during this period; three developed into associational complexes which then split into homonyms. Four-element syntactic strings were developed by combining gestures with single words.

For most of this period, the language system centered about these one-word utterances was devoted to existential propositions. In the later stages, the interactive use of language was developed intensively, beginning with vocatives, complaints, and requests for action. As this development accelerated, the lexicon was reduced to a different two-word set, "mama" and "dada".

These data show that the acquisition of words is not a necessary pre-condition for the development of syntactic, semantic and pragmatic skills, which can develop independently as in the learning strategy utilized by this child.
San Basilio de Palenque - a 'Post-Creole' Community?

Until recently, (Granda (1968), Lewis (1970), Escalante & Bickerton (1970)), no positive claims had been made for a clearly defined creole language in the Afro-Hispanic New World. (N.B. Papuans are generally regarded as Spanish-Portuguese based.) In this paper, I propose to examine the linguistic situation as obtains in the "haroon-slave" community of San Basilio de Palenque in the department of Bolivar, Colombia, South America, with a view to the following:

(a) to provide conclusive evidence that various aspects of the non-syntactic and phonological structure of the so-called Palenquero dialect are not of Hispano-Romance origin, and justify arguments in favor of a markedly creole character.

(eg. Morphosyntax) Verbal structure in which uninflected verb forms combine with a series of pre- and post-posed particles to express categories of aspect and tense.

(b) to show that the considerable degree of linguistic variation existing in that speech community may be best explained in terms of a "post-creole continuum", (DeCamps, 1971), where a creole language/dialect is in the process of merging with the corresponding standard language, whose lexical base it shares to a large extent, but with which it is not mutually intelligible.

(c) to discuss the implications arising from such variation for dynamic descriptive models in linguistic theory.

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This paper presents a number of systematic distinctions between subject and topic. On the basis of these distinctions, we propose a new typology of language: subject-prominent languages and topic-prominent languages (= SPL and TPL respectively). Evidence from several languages shows the importance of such a typology: many structural phenomena in a language can be explained only if the basic structure of its sentences is analyzed as subject or topic.

Significant differences between topic and subject:

(1) The semantic role of the topic in a sentence as the 'center of attention' is constant across sentences and sentence types. Subjects have no such consistent role.

(2) The topic must be old information; the subject may be either old or new information.

(3) The topic need not be selectionally related to the verb; i.e., it need not be an argument of the verb. The subject must be.

Consider a Mandarin sentence as an example:

Ming chang huo xingkui xiao fang gun pai de kui shai "fire, fortunately fire-brigade came quickly."

TOPIC COMMENT

(4) The verb determines which of its arguments will be the subject. For example, an intransitive verb takes the patient or actor as the subject; a causative verb takes the agent as the subject, etc. The topic, however, is not determined by the verb or any other constituent of the sentence.

(5) The subject often obligatorily controls verb agreement, but the topic never does.

(6) The subject, but not the topic, plays a prominent role in such syntactic processes as reflexivization and Equi-NP Deletion.

Some examples of structural correlates of the above distinctions:

(a) 'Double subject' sentences are found in TPL's but not in SPL's. Since the topic is syntactically independent of the rest of the sentence, it is not surprising that the comment can itself be a sentence. On the other hand, a predicate cannot easily be a sentence because that would leave the subject grammatically stranded, with nothing to be the subject of.

(b) The preponderance of passive sentences in SPL's but not in TPL's can be explained: in a SPL, if some noun other than the one normally designated by the verb to be the subject becomes the subject, the unusual choice must be syntactically 'registered' in the verb morphology.

(c) SPL's, in which the notion of subject may be grammatically indispenisible, but not TPL's, may have a 'dummy subject' like English it.

(d) All languages including SPL's have subjectification devices, but not all languages have subjectivation devices. The difference between the TPL's and the SPL's is that in the latter but not the former, 'topic' is highly marked. On the other hand, in certain TPL's such as the Phillipine languages and the Chinese languages, there is no clear way to identify the subject in simplex sentences. These facts follow from the claim that 'topic' is a discourse (semantic) notion, whereas 'subject' is a syntactic notion.

On the basis of structural properties such as these, we have discovered that languages such as the Chinese languages, Korean, Japanese, Cambodian, Burmese, and the Phillipine languages can be considered TP, while languages such as those in the Uto-Aztecan, Niger-Congo, Finno-Ugric, and Indo-European families should be considered SP.
Physiologic Structuring Principles and Phonetic Theory

Traditional phonetic theories like that implicit in IPA notation have been structured in terms of the possible maneuvers of the vocal tract. Feature theories like that of the "Sound Pattern of English" are derived from the 19th century "Visible Speech" theory of Melville Bell which ultimately formed the basis of IPA notation. The Chomsky-Halle theory does not significantly differ from the IPA theory. The anatomy of the vocal tract and observations of the tongue, lips, etc., furnish the primary data base for these theories. Acoustic measurements and perceptual considerations derived from the constraints of auditory perception have a secondary role in these traditional theories. The physical correlate of a feature is usually a particular articulatory maneuver, e.g., +Stable. Features are often related to the activity of a single isolated muscle, e.g., the constriction of the levator veli-palatini muscle is presumed to be the muscular correlate of the feature state -Nasal. Recent advances in our knowledge of both speech production and speech perception show that these theories are descriptively inadequate and that functional, i.e., physiologic principles may instead structure phonetic feature theories.

Physiology is the science which treats of the activity of the body as a text of function. The principle of Acoustic Stability, which follows from K. Stevens' computer-implemented studies, relates articulatory maneuvers to their perceptually significant acoustic consequences. Certain articulatory configurations yield sounds that don't change when the speaker is sloppy and makes small errors. The vowels /a/, /i/, and /u/ are +Stable and hence have a greater signaling value than -Stable vowels like /I/ and /U/. The principle thus explains why these vowels occur more frequently in human languages. The principle of Acoustic Stability also predicts the presence of four regions for consonantal articulations that appear to be universal in scope. We will discuss this principle and a second one, Determinateness, which involves the relationship between an acoustic pattern and particular underlying articulatory configurations. The vowels /I/ and /U/, for example, are +Determinate. The formant patterns that specify these vowels can be related to particular vocal tract shapes. This is not the case for -Determinate vowels like /I/ or /æ/. The articulatory specifications of these vowels given by traditional phonetic theories are meaningless. These two physiologic principles which, among other principles, structure the phonetic feature matrix will be illustrated with data drawn from recent cineradiographic and acoustic studies of Perkell, Ladefoged, Gay and others. The data demonstrate that (1) phonetic features have a physiologic basis that is at once more abstract and more meaningful than traditional notions of relevant physical correlates, and (2) that the "firm foundation" of traditional phonetics is a quicksand.

The Implications of the Tonogenesis Theory

Matsumoto (1973) has expanded into a coherent theory of tone origin in 'monosyllabic' languages a proposal originated by Haudricourt (1954). The tones proposed for Thai, Vietnamese, Chinese, and many Tibeto-Burman languages when the canonical shape of the segmental-level syllable is reduced, or when the number of fillers of a canonical slot is lessened by the loss of whole classes of segments. Simultaneous with such loss, nondistinctive features associated with the lost segment(s) become distinctive supersegmental features. Thus, pre-Vietnamese * -h and *-ʔ respectively led to falling and rising tones, and the merger of voiced and voiceless initial stops in Chinese led to two distinctive tone ranges in many dialects.

Important for the understanding of linguistic change through time are several implications of the tonogenesis theory.

1) Matsumoto's 'tone promenence', which leads to an overly small segmental syllable inventory and thus produces tones, requires a phonological description. It is proposed that the phonological impetus to syllable reduction is the development of strong sequence structure constraints via historical mergers and losses. These constraints prohibit most combinations of phones, and the language has no room to develop segmentally. Examples from Chinese.

2) The replacement of segmental distinctions by tonal distinctions gives credence to one type of functional load argument in the case of tones, for retention of distinctiveness does not rest on an measurable quantitative hypothesis concerning the relative usefulness of given phonemes (such as that refuted by King 1967), but on a clearly observable development of canonical category to replace a lost canonical category.

3) Understanding tonogenesis as the replacement of one category by another opens the way for recognizing a tendency towards the preservation of critical material in compensatory linguistic change. While this tendency underlies the intuitive understanding that too much homophony renders a language confusing, the determination of the minimum number of syllable positions in a given language is measurable whereas the measurement of the importance of given phoneme distinctions is at best fraught with difficulty.

4) The notion of 'drift' (Sapir 1921), which is the apparently strong tendency of a given language to change in one direction rather than another, may be explained as the result of a general 'conspiracy' between such elements as sequence constraints, morphological characteristics, and the identifiability (or nonidentifiability) of a phonological and syntactic word in a given language.

5) Various proposals over the past thirty years to interpret tones segmentally should be applied in the context of given typologies and stages of language development. The strict monosyllabic tone languages (e.g., Chinese) where virtually all syllables have distinctive, seldom varying tones, the traditional Chinese treatment of tones as a separate category of constituent is reasonable. But for tone sandhi types (e.g., Shanghai), the analysis of tones as a segmental-level constituent may be preferable.
Spanish Possessive Constructions

There exists in Spanish a special construction which makes use of clitic pronouns to express 'possession' or 'part-of' relationship. The following example, without a clitic pronoun, is ungrammatical:

(1) *Lavo mis manos 'I wash my hands'

The grammatical version being (2), which contrasts with (3) by bearing the definite article in the Direct Object noun phrase:

(2) Me lavo las manos 'I wash my hands'

(3) *Me lavo mis manos

The construction in question is commonly described in grammar books as an 'extended' use of the definite article to express possession. It will be argued that this view is basically misleading and an analysis is proposed instead wherein this type of construction is not exceptional but rather results from application of a general rule of clitic formation to double-object structures. Thus, it is claimed that the form of this construction results from application of a general rule of clitic formation to double-object structures. It is well-known that certain aspects of syntax are determined by the inter-personal relationships among the participants of the communication. For example, consider the following English example:

(1) Have you seen (a) my wife
(b) Shirley
(c) your Mum
(d) Auntie Shirley

Here, the relationships between the speaker, Shirley's husband, and Peter and also their relationships to the 3rd person, Shirley, are precisely reflected in the syntactic form used to refer to Shirley. And quite importantly, the choice is far from arbitrary. Any adequate theory of language must account for this interesting phenomenon. In this paper I shall discuss the principles governing the use of personal pronouns in Japanese. I owe a lot to the insightful work of Suzuki Takao (1977, Language and Culture), although my position is not quite the same as his. At the same time, this paper will be a direct critique of Kuno's remarks on the personal pronouns in Japanese. In his The Structure of the Japanese Language (p.17-19), Kuno maintains the following:

Japanese lacks authentic third person pronouns. In colloquial speech, in which there are many levels of first person and second person pronouns used, no third person pronouns are used. Where English would use he, she it, Japanese would either (i) have no overt forms, (ii) have attribute nouns such as titles, or (iii) have full-fledged noun phrases.

Examples of type (i) have been given in (34). Examples of type (ii) and (iii) follow:

(36) a. Tanaka-sensei ga irassyat-tara, sensei ni tanomoo,

b. Tanaka-sensei ga irassyat-tara, Tanaka-sensei ni tanomoo,

c. Tanaka ga kitara, ato ni tanomoo,

- that-guy

'When Teacher Tanaka has come, (I) will ask the teacher,

'When Teacher Tanaka has come, (I) will ask Teacher Tanaka,' that guy,' kare-ya 'he, kanozyo-ya 'she', kare-ra 'they', and kanzyo-ra 'they (female)'. Since these forms display peculiarities that are very similar to those of English personal pronouns, they could justifiably be called pronouns.

First, I shall demonstrate that if Kuno's (i)-(iii) are proper tests for non-authenticity of pronounhood in Japanese, then it will follow that there is no such thing as personal pronouns in Japanese. For (i)-(iii) are more or less equally applicable to both 1st and 2nd person pronouns like boku 'I (male speaker)', watashii 'I (neutral)', amata 'you', etc. Secondly, if kare 'he' and kanzyo 'she' are indeed the forms which appear 'in the speech and writing of educated Japanese', then (36a) ought to be a good s, which is not.

(36a) "Tanaka-sensei ga irassyat-tara, kare/kanozyo ni tanomoo, he she

I shall demonstrate that just like 1st and 2nd person pronouns, the use of kare 'he' and kanzyo 'she' is strictly governed by the principles which reflect the inter-personal relationships between the speaker, the addressee and the referent. I shall argue that they could be justifiably be called pronouns precisely for this reason and not because they 'display peculiarities that are very similar to those of English personal pronouns.'
On the Structure of the Internal Lexicon

This paper examines two general views of the internal lexicon. First, an Independent Unit hypothesis is considered, whereby complex words (eg DECISION) are stored as independent units in the brain and are generated as fully integrated units in natural speech production (by means of rather simple mechanisms). Second, a Derivational hypothesis is considered, whereby the internal lexicon contains the underlying morphological components of words such as DECISION and MUTATION plus rules for combining these components (DECIDE, REVISE, PROCEED) and for altering consonants, vowels and stress in the production of such words.

These hypotheses are not necessarily mutually exclusive. Indeed, evidence is presented which favors both hypotheses i.e. that words may be stored both as independent units and as morphological components. First, speakers are able to produce speech errors which suggest that complex words such as DECISION, MUTATION even though the base forms (DECIDE, REVISE, PROCEED) do not rhyme. This ability would not be expected under the hypothesis that only the base and affixes of complex words are stored in the internal lexicon. Moreover reaction times in this rhyming task do not vary with derivational complexity. Derivational complexity refers to the number of phonological differences between a derivative and its base, and is assumed to reflect the complexity of the phonological operations required to form a derivative from its base. For example, DECIDE - DECISION is a more complex derivation than CONCLUDE - CONCLUSION because of the additional operations for vowel alternation. However, reaction times for rhyming low complexity derivatives (eg CONCLUSION - REVISE) were found to be no faster than for rhyming otherwise similar high complexity derivatives (eg DECISION - REVISION). This finding suggests that complex words may be stored and referenced as phonological units in this task.

On the other hand, an analysis of a very large corpus of German and English speech errors supported the Derivational hypothesis, indicating that stems and affixes must also be separately stored in the internal lexicon and that complex words are produced by means of phonological alternation rules (at least for some words and some speakers some of the time). Moreover, a series of experiments on the perception and production of low frequency, complex words of Latinate origin (eg DECISION) and high frequency complex words of Anglo-Saxon origin (eg KIDNAP) provided further support for the Derivational hypothesis. In the production experiments, subjects were acoustically presented with verbs (eg DECIDE) which they had to nominalize as fast as possible in these experiments reaction times and error probabilities did vary with derivational complexity i.e. high complexity derivatives such as DECISION gave more errors (eg DECIDEMENT) and longer reaction times than low complexity derivatives such as CONCLUSION. The form of the errors also supported the Derivational hypothesis and suggested that different phonological operations for the same stem are to some extent independently specified in ongoing speech production processes. In the perception experiments, subjects heard either real words (derivatives such as DECISION and CONCLUSION) or nonwords (dummy words such as DECIDEMENT) and simply judged how rapidly as possible to indicate whether the stimulus was a word or nonword. Reaction times and error probabilities were higher for derivationally complex nouns (eg DECISION) than for derivationally simpler ones (eg CONCLUSION). These findings support the Derivational hypothesis and indicate that speakers may analyze complex words in terms of their morphological components in a morphotactic task that does not necessitate such analysis. Apparently complex words are stored in more than one way in the internal lexicon and the perception and production of derivates may involve complex rule governed processes as well as simple read-out mechanisms.

Clauses and Quasi-clauses: VSO Order in Old English

In stylistically unmarked sentences of OE, the surface order of main clauses is typically VSO while that of subordinate clauses is typically SOV. Several recent studies have attempted to select and motivate an underlying word order from one of the surface orders or from an abstract VSO order. In spite of these efforts, the issue, as Postal (1974) states, remains unsettled. In this paper, evidence is offered which supports an underlying VSO order for OE. As argued extensively by McCawley 1970, Postal 1974, SOV order can be derived from VSO (or SOV) order, and thus the choice reduces to SOV or VSO. In arguing for the latter order, the consequences of adopting a verb-final rule (VFI) to generate derived SOV structures in subordinate clauses are compared with those of adopting a verb-fronting rule (VFR) to generate derived VSO structures in main clauses. (OE data is utilized precisely because such a comparison is not possible in Modern English.) The choice between underlying orders for OE is thus made in terms of the choice between two putative verb movement transformations.

On the basis of data typically considered, i.e. sentences with one level of embedding and sentences with modal auxiliaries, both hypotheses (VSO order with VFI and SOV order with VFR) appear to be equally adequate solutions. There are, however, certain more complex sentences which violate the generalization that embedded clauses have surface order:

(1) Ic wæt þæt he wile þæm cyninge þæt land selle.

'I know that he wants that I the king the land give.'

Here the verb is not clause final if the clause itself contains an S node. If this S is truncated, however, e.g. by Equi-NP Deletion, then the verb of the first embedded S does appear in clause final position:

(2) Ic wæt þæt he þæm þæm cyninge þæt þæm land sellan wile.

Such sentences furnish clear motivation for the selection of VFI and hence the VSO order. Specifically, while (1) contains a full 'clause', (2) contains only a 'quasi-clause', defined in Postal 1974 as a complement clause where the subject NP has been removed by Equi-NP Deletion or Raising. 'Clause' and 'quasi-clause' appear necessary to correctly constrain a variety of syntactic phenomena, e.g. Wh-Q Movement and Complex NP Shift, and thus have independent motivation. Discriminating between (1) and (2) on this basis requires little modification of VFI: a 'clause' boundary, but not a weaker 'quasi-clause' boundary, blocks its operation. (If all rightward movement rules are bounded and clause-internal then no modification is required.) On the other hand, VFR would violate the 'clause' boundary and must be blocked by a 'quasi-clause' boundary. But this is inconsistent with other relevant syntactic phenomena, all of which are sensitive only to a full 'clause' boundary. We thus conclude that VFI is consistent with known restrictions on other syntactic processes while VFR is not. On this basis we can conclude that the correct underlying word order of OE is VSO and not SOV.
Observations on the Semantics of Time Modifiers

A brief analysis of two time modifiers in English, yet and still, is presented. Sentences of the form (1) and (2) are discussed. The order interpretations of such sentences:

(1) a. Jerry and Della haven't gotten married yet
b. Mr. Jones gave us yet another problem to do
(2) John still hasn't run a mile in under four minutes

is obtained by associating an expression (over which truth values are determined) with games of a special sort. The sentences in (1) differ from that in (2) in that the latter involves a relationship which has traditionally been called 'semantic presupposition', while the former sentences do not. It is shown that yet contributes to the meaning of sentences like (1) in a non-truth-functional fashion. Associated with this distinction are distinct games Presupposition and Expectation. The characteristic differences of the two games are discussed and it is noted that in the former a value results after a finite number of moves, while in the latter there are infinitely many possible moves. These games will be very much like intensional functions (from indices to extensions) but have certain advantages, especially with regard to the identification of individuals across worlds. The ultimate difference in the interpretation of sentences like (1) and (2) is laid at the door of epistemological considerations as to what we can actually know (and hence presuppose to exist) and that which we can only possibly know (but which we can expect to know at some future time). Both of these notions express an attitude towards knowledge; alternatively, they can be thought of as admissibility conditions to those worlds in which that knowledge is actualized.

Linguistics for Never-will-be-Linguists

Most practitioners in such fields as language teaching, remedial reading, speech pathology and so on are not and will never be linguists. Such non-linguists need different learning experiences in linguistics than do future linguists. Linguistic theory, linguistic fact, and linguistic practice do have a lot to offer such professionals, but the ideas and approaches of the field must be made accessible to them as much on their terms as on ours.

In introducing applied linguistics to such students, several basic truths must be faced: there is never enough time in their courses of study to do justice to the field, they are frequently fearful of linguistics and particularly of its formalism, and they are necessarily practical people with problems they have to solve tomorrow. Even if the full truth is not yet available about the nature of deep structure or the passive transformation, the goals of linguistics instruction for such professionals, therefore, must be primarily that of exciting them about the potential insights linguistics can provide them for their work as well as to enable them to learn enough linguistics so that they can begin to make their own way in the linguistic and applied linguistic literatures.

The tentative conclusions of the paper are based on five years of experience teaching such students. They include the necessity of learning theory in the context of practice, using linguistic insights as a way of criticizing current practice in their field, and treating linguistic theories in their broadest context including the social concerns of Labov and Hymes and the psychological insights of Miller and Brown as well as the theories and disputes surrounding the work of Noam Chomsky. Since most of their fields have been heavily dominated by behavioral-empiricist theories of learning, the paper will also discuss how such a course can help to re-orient such practitioners to a new view of both the creative processes of normal language use and of the active role of the learner in his own linguistic and cognitive development.
Was Grassmann's Law Reordered in Greek?

In his dissertation and recently in Sebeok's Current Trends volume (II, 115-36 [1976]), Paul Kiparsky has argued that Grassmann's Law (GL) was reordered in Greek. Without disputing reordering as a type of language change, I will argue that GL was not reordered, for the following reasons:

(1) Five of Kiparsky's six examples for the original ordering are either ambiguous or admit of better etymologies or other explanations, leaving one word (defin 'slime') that is potentially an unambiguous case for Kiparsky's alleged reordering.

(2) It is doubtful that on the basis of an ostensibly alternative *trphos (ultimately *trphos 'I nourish'): *trphos speakers of Greek would construct underlying representations as highly abstract as /dhrebh+s+o/ (with voiced aspirates that appear nowhere on the surface after aspirate devoicing) enabling GL to apply in the 'unmarked' order with respect to aspirate devoicing. Kiparsky's own alternation condition for recoverability is not met.

(3) In contrast with the one or two words that Kiparsky's reordering can potentially explain, there are no less than fifteen (better etymologies than Kiparsky's few) which he cannot explain because they enter into no alternations, e.g. *pakhs 'thick', *pithus 'arm', *kephalē 'head', *tuphēs 'blind', *pentherēs 'father-in-law', *pθchos 'wine jar', *tektēs 'wall', *tēphrōs 'ashes', *khāsios 'good' (Hesych.), *pathēnē 'base, foundation', and several more that I will defend.

(4) Kiparsky wants to relate GL in Greek and Sanskrit because of its 'unnaturalness'. But I will show that GL had to follow a postnasal despiration process in Greek, cf. *dhēngānō → *dhēngānō → thēngānō 'touch'; Kiparsky falsely predicts that GL should apply first, giving *dhēngānō; similarly, he falsely predicts *bhūndh-ak → *būndhak → *būndhak, and has no way to get the correct outputs *māndakas 'bottom', *thēngānō 'touch'. Since postnasal despiration was a Greek innovation and GL must follow it, this renders the independence of GL in Greek and Sanskrit highly probable. Moreover, it is not clear that GL is 'unnatural' (cf. Morris Halle, Lg. 40,928 [1973]). Parallels from Nyamweze ('Dahl's Law'), Hebrew, and Marathi are adduced, and it is suggested that it is not an accident that the only two IE dialects that retained the 'voiced aspirates' as aspirates (Greek and Sanskrit) put constraints on their occurrence, and, crucially, not in the same way.

(5) Kiparsky makes no attempt to deal with the historically attested facts about GL in Greek, such as aspirate forms like Lac., Thes., Loc., thesthmēs, Cret. *dhōnālī, and dialect alternants thesthmēs/thēmēs 'law', thesthmēs/thēmēs 'rate, luck' which presuppose fairly late aspirate forms. Contrary to the assumption of Schwyzer, Lejune, and others, aspirate forms in the earliest inscriptions are not 'sporadic' or 'late assimilations'. An examination of the inscriptions reveals that GL applied before 500 in West Greek, around the 6th cent. in Attic, between 550 and 425 in Boeotian, and Cymeian Ionic has no instance of GL in the early inscriptions.

The inescapable conclusion is that GL was not reordered in Greek. It was added to the grammar within the historical period.

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Southern Discomfort

When carefully analysed from diachronic and synchronic points of view, certain familiar sound-shifts raise serious questions about our assumptions regarding the organization and change of phonological systems. Of the examples I cite, the least comforting is the southern vowel shift, carried out most fully in the Appalachians, where it includes the following substitutions:

(1) *ag → a: example: wide
(2) *i → ag bad
(3) *ag → a: loud
(4) *a → ag saw
(5) *e → a oil
(I have omitted details here.) Although the order (1,...,5) correctly describes the synchronic facts, the relative chronology of these substitutions, on the evidence of earlier studies and currently co-existing dialects, seems to be seen I (1, 5), II (2, 4), III (3).

First, this shift challenges the 'push/pull' theory of chain shifts (Martinet, Labov et al.). Since the chain is forged from its ends to the middle, neither 'pushing' nor 'pulling' explains the changes and their chronology. Second, the shift provides a clear counterexample to Kiparsky's hypothesis of rule order, particularly the principle of minimization of opacity, since each successively added rule produces surface exceptions to previous rules.

Third, the shift presents a dilemma, forcing us to choose between two generally accepted assumptions about phonology. If we assume that rules operate in strict sequence, then we must abandon the assumption that rules are maximally general. The diphthongization process responsible for substitutions (2) and (4) is inserted, not only in the middle of the grammar, but between the subparts of another rule—the monophthongization process responsible for substitutions (1) and (5) [15]. Furthermore, a new monophthongization process (3) is inserted between the subparts of the diphthongization rule (2, 4), and separate from the previous monophthongizations (1, 5) which it parallels in form and motivation. Conversely, if we assume that rules are maximally general, we must abandon the assumption that they apply in strict sequence, because the correct outputs can be obtained from the generalized rules (1, 3, 5) and (2, 4) only by applying them simultaneously.

The explanation of such shifts, and the resolution of the theoretical problems they pose, require us to distinguish between two opposing forces in the organization and change of phonological systems: first, the phonetic forces responsible for the individual links of the chain, and second, the lexical forces responsible for the arrangement of the links into a system that produces the least homophony. My paper concludes with an elucidation of the interplay of these forces.
Properties, Quantification, and There-insertion

The following two generalizations about English existential sentences are encountered frequently in the transformational literature.

A. "Definite" NPs are excluded from existential sentences, as in (2).
(1) There were people shouting.
(2) *There were the people shouting.

B. The otherwise rather general rule of there-insertion, which is hypothesized to derive existential sentences by the movement of the subject NP rightward over an occurrence of be, is blocked in predicational sentences. Thus, (4) cannot be derived from (3) by the process which derives (1) from (5).

(3) Many people are tall.
(4) *There are many people tall.
(5) People were shouting.

The restriction against there-insertion in predicational sentences is itself not fully general, however; while (4) is deviant, (6) is acceptable, although it differs from (4) only in the choice of a different adjectival predicate.

(6) There were many people sick.

The present paper attempts to show first that the nature of restriction A has been misunderstood, and second, that when restriction A is more accurately characterized, it may be combined with certain independent observations about the behavior of property-denoting predicates like tall to construct a semantic explanation of restriction B. The account is in sharp contrast to previous treatments, which have either ignored the problem of restriction B or attempted unsuccessfully to explain it by syntactic means. First, examples are given which show that "definite", to the extent that it is a coherently defined notion at all, is insufficiently general to characterize the range of NP excluded in sentences like (2), and that restriction A is really a restriction on quantification. Next, it is shown that adjectival predicates like sick, which occur in existentials, are semantically distinguishable from those like tall, which do not, in that the latter denote properties while the former denote states. It is then shown that property predicates impose certain restrictions on the quantificational structure of their subject NP, and that these restrictions are logically incompatible with those imposed on the IP of existential sentences by restriction A. This non-intersection of requirements on the NP predicts that no property-denoting predicates should occur in existential sentences, which is exactly restriction B.

Since "style" may be seen as an author's characteristic pattern of linguistic choices (Ohmann 1958, 1962; Gleason 1965), it is essential to know what options are presented by the resources of the language (Halliday 1964; Gleason 1965) and by the requirements of the text—the field of discourse (Spencer and Gregory 1964). Concerning the resources of the language, though it has long been commonplace for "literary" stylistics to label whole languages either hypotactic or paratactic, some very detailed syntactic studies both support (Nichols 1964a) and attack (Andrew 1940) the contention that Old English is paratactic (Chambers 1932; Gordon 1966; Bennett 1971). But little is said about field of discourse.

Two treatments by Elfric of the same biblical narratives illustrate the syntactic influence exerted by the requirements of the subject matter: sections of the Hexateuch are literal translations of the Latin source (Nichols 1964b) while the parallel passages in the Catholic Homilies range from translation to paraphrase; yet the percentage of hypotaxis and parataxis in all three versions of the narratives—both Old English texts and the Latin—are almost identical; in contrast, the expository prefaces to the Old English works are similar to each other but different from the narratives in this respect. Clearly, hypotaxis and parataxis are as much functions of text style as of language style.
Is Naturalness a Natural Criterion in Synchronic Phonology?

In the literature on natural phonological rules, the rules that reflect phonetic processes or 'sound changes' in an undistorted form are considered natural and the rules that reflect the original phonetic processes in a distorted form unnatural. Thus, (1) would be considered natural and (2) unnatural:

1. \[ k \rightarrow \varepsilon / \ell \rightarrow [\text{V}][\text{back}] \]
2. \[ \varepsilon \rightarrow k / \ell \rightarrow \{[C]\} \{[\text{#}]\} \]

(Rule (2) is found in Sanskrit. It is known to have originated as (1) and to have assumed the distorted form (2) due to later developments.)

The distinction is, undoubtedly, of interest to the historical phonologist, who is interested in finding out how phonological developments come about. But, is it a legitimate distinction in synchronic phonology? Assuming that the goal of the synchronic phonologist is to characterize the speaker's knowledge of the phonology of his language, the distinction between natural and unnatural rules can be maintained in synchronic phonology only if it is part of the speaker's knowledge of his language. The distinction between phonetically conditioned rules and such 'unnatural' rules as morphologized rules must be obvious to the speaker. But, can he discriminate between natural and unnatural phonetically conditioned rules? It was reported by Ohala (1972) that in his experimental studies subjects did not discriminate between (1) and (3) in terms of learning difficulty:

3. \[ k \rightarrow \varepsilon / \ell \rightarrow [\text{V}][\text{back}] \]

This does not show that they do not have a knowledge of such a distinction. But if they did discriminate between (1) and (3) that would have provided some positive evidence. And, to my knowledge, no such positive evidence is available.

Linguists might have an intuitive feeling that (1) is natural and (2) as well (3) are unnatural. But, what is the basis of their intuition? They acquire the knowledge to what sorts of things are common, uncommon, or unknown in language structure or in historical developments in the course of their linguistic training.

One might question that if the speaker cannot discriminate between (1) and, say, (3) then why does he add rules like (1) but not rules like (3)? This question presupposes that the speaker's knowledge is involved in rule addition. There are historical developments such as analogical changes in which the speaker's knowledge is, in fact, involved. However, there is strong evidence that rule addition is the result of phonetic factors, articulatory and acoustic. The great majority of sound changes, assimilatory and dissimilatory, make sense only in terms of the way our articulatory organs operate. So such phonetic processes part of a speaker's knowledge? There is no reason to believe that the speaker must 'know' them in any sense any more than he must know his internal digestive processes in order to digest his food.

In Latin a rule like REF existed, allowing a reflexive pronoun to appear when its antecedent was in a higher clause provided that "the subordinate clause expresses the thought of the subject of the main clause" (Hale and Buck (1903)). Italian has considerably narrowed the environment in which REF may apply. Thus we find that:

(a) only objects of prepositions (not including the dative marker) may be reflexivized,
(b) the antecedent of the NP to be reflexivized must be the subject of its clause,
(c) the verb of the clause the reflexive pronoun appears in must be in the subjunctive mood,
(d) the predicate of the antecedent subject must express the emotional attitude of this subject to the statement or event of the lower clause,
(e) REF is blocked if an NP which could possibly be understood as the antecedent intervenes between the pronoun and its actual antecedent.

At first it appears that (a), (b), and (c) are purely structural conditions, while (d) and (e) are semantic ones. (Note that (e) is similar to Grinder's (1970) Intervention Constraint for SuperEqui.) However, all these conditions turn out to be semantic ones upon closer inspection. (a) and (b) both concern the role a given NP plays in the S and are consistent with principles established in the recent developments in Relational Grammar. (c) concerns mood, an element that is semantically determined (as Saltarelli and Scaglione, independently, have proposed).

REF is an important rule for present linguists to consider since the semantic factors affecting this syntactic process are further evidence of the interlocking nature of the semantic and syntactic components of the grammar.
The Social Origin of Pidginization

From the sociolinguistic point of view the origins of pidginization are not presently understood, although it has often been suggested that an attitude of racial or cultural superiority on the part of the group of higher social status leads to a sort of baby-talk based destructuring of the superstrate language by its own speakers. In this connection, we investigate the social attitudes toward pidginization that were current at the time of the origin of the Portuguese based pidgin that developed in Europe and West Africa as a result of the first direct contacts between the two areas (15th - 16th centuries). This pidgin is of particular importance because of the central role it played in the genesis of nearly all of the later European based pidgins through relexification.

An investigation of primary historical and literary sources indicates that the relative social status of the participants, and their attitudes toward one another, were irrelevant to the use of pidginized speech. Cases are documented in which this type of speech was used by inferiors to superiors, by superiors to inferiors, and among equals, cross-classifying with use by Europeans to non-Europeans, by non-Europeans to Europeans and among Europeans. Examination of the differential behavior of a character in an important 16th century play in several distinct contexts of difficulty of communicating shows that the motivating force for the use of pidginization was an attempt to facilitate understanding, independently of social standing or attitudes. Thus, it is concluded that, at least in the case studied, pidginization does not depend in any way upon assumption of superiority by the higher class, even when the social situation is clearly defined.
On the Semantic Irrelevance of Grammatical Relations

In The Philosophy of Language (J.J. Katz, 1966), Katz presents formal definitions of the semantic notions of 'analyticity', 'contradiction' and 'entailment' which make reference to the grammatical relations Subject and Predicate. He claims (p. 151) that the grammatical relations of his definitions refer to deep structure rather than surface structure grammatical relations. This claim is significant in that the definitions which Katz gives to characterize these semantic notions are correct, then they could be added as evidence to support a model of linguistic description which contains at least two distinct levels of grammatical relations, a deep and a surface level, such that model presented in Aspects of the Theory of Syntax (N. Chomsky 1965).

This paper will demonstrate that this position, held by Katz, Chomsky and many other contemporary linguists is incorrect, and that it is in fact impossible to characterize these semantic notions by making reference to any single level of grammatical relations, either deep or surface. The argument proceeds as follows. Katz (p. 154) defines a sentence as analytic iff the semantic reading of the Subject includes the semantic reading of the Predicate. While this is true at the level of deep structure but not surface structure for some analytic sentences, like (1), Lefkovitz (1965) has shown that in other analytic sentences, like (2), this definition holds at the surface structure level only and not at the level of deep structure.

(1) Horses are shod by farriers. (from underlying 'Farriers shoe horses')
   - 'Horses are shod by people who shoe horses.'

(2) Buildings are built. (from underlying 'PRO builds buildings!')
   - 'Things which are built are built.'

Furthermore, this paper will show that there are some sentences which are analytic but for which Katz's definitions do not hold at any level of syntactic structure: sentences like (3).

(3) People make artifacts.
   - 'People make things which people make.'

In an Aspects-type model, there is no syntactic level at which ARTIFACT is the Subject of sentence (3); therefore, Katz's definition of analyticity cannot be correct.

This paper will present a definition of analyticity which does not make reference to grammatical relations at all -- that given in (4).

(4) A proposition P is analytic on a reading R_p iff the reading of any argument A in P includes the reading of R_p minus the reading of R_A.

It will be shown that this definition of analyticity, and the definitions of contradiction and entailment which are derivable from it, are sufficient to characterize these basic semantic notions in complex as well as simple sentences. It will therefore be concluded that the characterization of these semantic properties as well as the other basic properties of synonymy, ambiguity and anomaly need not and cannot provide evidence for a level of grammatical relations different from the level of surface structure.

Language and Social Class: Pronouns of Address in Swedish

This paper continues a previous study of Swedish pronouns of address. The earlier paper examined address avoidance as an indication of cultural-political conditions of the social structure, in this case the dichotomy between social class stratification and Social-Democratic ideology. The present paper presents further evidence for such an analysis and for the emergence of a new form of address (du + no name, even when the name is known.)

This paper further investigates the major variables (age, sex, personality, mood, situation, etc.) which serve to influence choice of address (du, ni, 3rd person, in various combinations with proper names and avoidance of address) as they correlate with social class. The data is represented in a flow diagram model with hierarchies of decisions in an attempt to show the relative importance of these variables.

The findings also include the discrepancy between external and internal institutional usage (police, university), the varied usage within institutions as it reflects social class (department stores, the public transportation system in Stockholm) and, most interestingly, different rules of address between the upper and lower classes, partly for historical reasons. Both classes are unaware of this asymmetry which frequently leads to tension and miscommunication in communication.

The data was collected during a five months' stay in Sweden by methods of participant-observation, interviews, questionnaires and archive work.
On Irony

This paper deals with irony, as a figure of speech, in the framework of speech acts theory. It is intended to be a contribution to the study of indirect speech acts and to provide a new insight into the traditional discussion of rhetorical figures.

The paper shows that irony presents two aspects:
1) The speaker ostensibly violates the speaker's sincerity condition (speech act theory).
2) There is some disappointment expressed by the speaker or provoked by him in the hearer.

The first factor is common to specific kinds of speech acts such as wit to which irony is related. It remains the same in every kind of ironic sentence. The second factor is specific to irony and appears very differently in ironic statements, on the one hand and in ironic questions, requests and pieces of advice, on the other. In statements the speaker expresses his own disappointment: he states what he would not like to be the case, and this is shown by some subjective device of the sentence where an apparently positive value has to be interpreted as a pejorative one. In questions, requests and pieces of advice, the speaker deceives the hearer (or an impersonal hearer in the case of a piece of advice), who does not get what he wants (request) or is tricked by a question or by advice which is not genuine.

The difficulty to give a coherent description of irony comes from the fact that an ironic sentence can be a stereo-typed phrase where not wit nor real disappointment appear anymore, as with expressions like, "It was a brilliant idea!" It can also be the case that the disappointment expressed or provoked is such that the wit dimension disappears. Or the sentence can be also mainly witty so that the disappointment dimension fades away. But in those three cases the same mechanism will appear and the two factors basic to irony can be perceived, even if the emphasis is put on wit or on the expression or the provocation of disappointment.

Special attention is given to ironic statements, with French and English examples, to contrast cases of a pejorative interpretation of a positive form and of a positive interpretation of a pejorative form. The latter can never be ironic. Affirmative sentences are also compared to negative sentences where no irony can appear either.

A Problem in the Semantics of Adjectival and Adverbial Modification

A large class of adjectives and adverbs have a meaning that depends in part on whatever expression they modify, as is illustrated by examples (1) and (2).

(1) Dumbo was a small elephant but a large animal.
(2) Teddy is whispering loudly but nevertheless vocalizing softly.

Several semanticists have proposed analyses that make the modifier's contribution to the meaning of a modifier-head construction dependent on the meaning of the head. However, J. A. W. Kamp has pointed out that these proposals by generative grammarians (Bierwisch, Katz) and intensional logicians (Parsons, Thomason and Stalnaker) are descriptively inadequate because, for example, a different standard of bigness is relevant to (3a) than to (3b), a different standard of quickness to (4a) than to (4b).

(3)(a) The fraternity brothers built a big snowman.
(b) The three-year olds built a big snowman.
(4)(a) The woman on crutches crossed Harvard Square quickly.
(b) The woman on roller skates crossed Harvard Square quickly.

The 'hidden parameter' in the meaning of big and quickly is not just a single reference class or property specified by the head that is modified; the meaning also depends on constituents not contained in the modifier-head construction.

Procedural semantics is an important new tool in the kit of linguistic analysts which may unlock the meaning of the modifiers under consideration. It is clear that what counts as a big snowman in the case of sentence (3a) or (3b) depends on the size of snowman one would expect a fraternity or a group of children to build. These expectations have a more direct connection with the procedures by which one might verify (3a) and (3b) than with the truth-conditions of x is a big snowman for various values of x; the procedures involve comparing an indicated production with an appropriately chosen set of past performances. In fact, for each sentence the procedural description of its meaning seems to contain a part that can be taken as the meaning of the modifier, making the modifier's force suitably relative to the intension of the whole sentence. This thesis is explored by discussing the procedural analyses of a variety of sentences.
The purpose of this paper is to demonstrate that sentences such as (1), which would be assumed— in accordance with the literature of the field, to date—to follow the analysis of (2) (cf. Rosenbaum (1967), Bresnan (1970)), are in reality related in structure to (3):

(1)(a) John has to teach Mary
(b) John is to teach Mary
(2) John preferred to teach Mary
(3)(a) John has taught Mary
(b) John is teaching Mary.

That is, we are suggesting that the underscored elements in (1) are not main verbs of sentences containing verbal complements but, rather, are auxiliary verbs (as adjoined by the particle to) and the sentences of (1) are not complex but simple sentences.

In support of this assertion, observe that the sentences of (1) will not yield grammatical passives when subjected to the factorization of elements necessary to the passivization of (2) in effect, if (2) is factored as shown in (la) and we accept that the embedded S is immediately dominated by an NP (after Rosenbaum (1967)), then the structural condition for passivization is met by the structure underlying (2-qa), deriving the well-formed (qb):

(4)(a) John - preferred - to teach Mary
(b) To teach Mary was preferred by John.

On the other hand, when (1) is factored along the lines of (la), we derive the deviant sto teach Mary has been by John and sto teach Mary was been by John.

Notice, however, that if we choose to factor (1) in like manner to (3), as illustrated in (5), the resultant passives (6) are well-formed:

(5)(a) John - has taught - Mary
(b) John - has to teach - Mary
(c) John - is to teach - Mary
(d) Mary has been taught by John
(b) Mary has to be taught by John
(c) Mary is to be taught by John.

Other evidence has been amassed in support of this claim and similar arguments are developed and extended to similar forms (viz., use(d) to, ought to) as well as to "pseudo-progressives" (such as keep + ing) to cover a wide range of data.


How to Escape the Scylla of Homonyms and the Charybdis of Idioms: Sacrifice a Linguistic Generalization

The morphological identity of two tokens is usually taken to indicate that they are the same grammatical formant or morpheme. In French, the fact that *avoir* has the same inflectional paradigm in all *il y a* expressions has led to the assumption that *il y a* is a formant in all its occurrences. The consequence has been the postulation of multiple homonyms and idoms, an unhappy result which can be avoided by a rigorous analysis of the meaning of *il y a* expressions. Sacrificing the morphological parallelism makes it possible to account for otherwise puzzling distributional and semantic facts on the basis of coherence and incoherence of meaning combinations.

Time intervals (un mois, longtemps) can be introduced by *il y a* to express either the time elapsed since the occurrence of an action or the duration of an action:

1. *Il y a deux mois que je vous ai vu.*
2. *Il y a deux mois que j'habite New York.*

It could be hypothesized that *il y a* here has the same semantic value as in "Il y a deux chaises dans la chambre" with *que* as a subordinating conjunction. But several facts appear inexplicable given this treatment.

A. *Que* can be omitted in 1 where the time elapses after the action, but cannot be omitted in 2 where the time is the duration of the action:

3. *Il y a deux mois, je vous ai vu.*
4. *Il y a deux mois, j'habite New York.*

B. The morphological affirmative and negative forms of *il* (with the verb in a compound tense) communicate the same message:

1. *Il y a deux mois que je vous ai vu.*
2. *Il y a deux mois que je ne vous ai pas vu.*

But in 2 and 3 morphological negation produces logical negation.

C. The time interval can be questioned in 1 and 2 but not in 3:

6. *Y a-t-il deux mois que je vous ai vu?*
7. *Y a-t-il deux mois que j'habite New York?*
8. *Y a-t-il deux mois, je vous ai vu?*

The semantic analysis postulates two distinct morphological indivisible units:

*Il y aVOIR... que* = "the initial point of the given time interval"

*Il y aVOIR... a" = "the elapsing of the given time interval"

*Il y aVOIR... is thus a dating device comparable to English ...ago. Its meaning—a point in time—is semantically opposite, and hence contradictory to "duration", explaining the unacceptability of 4. The two interpretations of *il y aVOIR... que* in 1 and 2 are explained by the differing tense relations. Likewise, facts A-C follow from these meanings and their interaction with postulated meanings of the tenses and the particles *ne* and *pas.*

Conclusions:

I. Formal morphological units relevant to meaning are not intuitively obvious, and cannot be ascertained independently of a rigorous semantic analysis.

II. Semantic analysis in a functional framework may force an historical interpretation of some morphophonemic relationships.
Finnish Vowel Harmony and the Alternation Condition

Kiparsky (1968, 1973) has argued convincingly that Finnish stem vowel harmony and suffix vowel harmony are different processes. He proposes essentially the following Vowel Harmony Rule (VHR) to account for suffix harmony:

\[
V \quad \text{[back]} \rightarrow \text{[back]} / V \quad \text{[low]} \quad (C_0 + V) \quad C_0 + V \quad C_0 + C_0 \quad V \quad C_0
\]

and the following Backing Rule (bK) to account for the behavior of vowels in certain suffixes after monosyllabic stems with neutral vowels:

\[
(V \quad \text{[round]} \quad \text{[low]} \quad [ + \text{back}] / \quad \text{[low]} \quad [ - \text{round}] \quad [ + \text{low}] \quad C_0 + C_0 \quad V \quad C_0
\]

The purpose of this paper is twofold. First it is demonstrated that there are serious problems with Kiparsky's analysis, the most serious being that he cannot account for his own data without building a vowel harmony rule into his analysis. In particular, it is shown that the analysis defended here is inconsistent with the prediction of markedness theory, requires formulation of a backing process (rather than a fronting process as assumed by Kiparsky):

Vowel harmony rule revised (VHR')

\[
(V \quad \text{[round]} \quad \text{[low]} \quad [ + \text{back}] / \quad \text{[low]} \quad [ - \text{round}] \quad [ + \text{low}] \quad C_0 + C_0 \quad V \quad C_0
\]

It is argued that it is unnecessary to indicate a morpheme boundary in VHR' to restrict its application to suffix vowels, and that VHR', which is a non-automatic neutralization rule, applies only to derived forms (in Kiparsky's (1973) sense of "derived"), and thus applies only to suffix vowels.

The theoretical implications of the proposed analysis are discussed. In particular, it is shown that the analysis defended here is inconsistent with the prediction of markedness theory, requires formulation of VHR' as an iterative rule, and requires that VHR' be unordered with respect to at least one other rule.

I say "essentially" since the actual rule proposed in Kiparsky (1973) contains several minor technical or printing errors.

References

Kiparsky, P. (1968) "How abstract is phonology?" IULC mimeograph.
The purpose of this paper is to compare Leonard Bloomfield's discussion of endocentric and exocentric constructions and his description of compounds with certain characteristics of Pāṇini's grammar of Sanskrit. The data utilized include the chapters on synchronic linguistics in Bloomfield's Language; his 1929 "On Some Rules of Pāṇini;" a manuscript of his translation of part of the Kāḍika, a Pāṇinian work; and various Pāṇinian commentaries.

The analysis is done in the following manner. First, Bloomfield's definitions and examples of endocentric and exocentric constructions are reviewed. Second, a general outline of the sets of statements in Pāṇini's grammar concerning verbal roots, affixes, nominal stems (Bloomfield's free forms), and compounds is presented. Next, this general outline of Pāṇini's grammar is correlated with Bloomfield's discussion of compounds. The outline is specifically used to analyze Bloomfield's determinative (Pāṇini's tatpuruṣa), descriptive (karmadhāraya), numerative (dvigu), copulative (dvandva), and exocentric (bahuvrīhi) compounds. The analysis discusses, for example, the endocentric compound door-knob and the exocentric compounds gadabout, turnkey, and red-head. Whereas Bloomfield does classify door-knob as endocentric on the basis of the head member knob and the compound door-knob being in the same form-class, i.e., noun; he does not so classify red-head (as applied to an individual having red hair) because head and red-head do not have the same referent. Thus, an essential criterion for Bloomfield's subclassification of a compound as either endocentric or exocentric is whether the head member and the resulting compound itself both have the same referent or valuation. If they do, the resulting compound is classed as endocentric; if not, as exocentric. This paper underscores the contribution of Pāṇini to Western linguistics.

The semantic concepts of logical entailment and presupposition—as exemplified by the classes of Implicative and Factive verbs respectively—have been treated as two separate and distinct phenomena. This paper argues that the two verb classes are not completely distinct and that their differences can be accounted for through the interaction of two properties: 1) that of being transparent or opaque to negation, 2) that of creating or not creating a logical entailment.

The first property is illustrated by transparent verbs like think and opaque verbs like announce:

1a. John does not think that Dick passed the test.
1b. John did not announce that Dick passed the test.
1c. Dick did not pass the test.

Only (1a) ascribes (1c) to John. In contrast to non-entailing verbs like think and announce, Implicative verbs like manage and Factive verbs like know entail their predicate complement. The difference between the two is that manage is transparent and know is opaque to negation:

2a. Dick did not manage to pass the test.
2b. John does not know that Dick passed the test.

Only with (2a) does Dick not pass the test.

This analysis has the advantage of suggesting a unified basis for the treatment of entailment and presupposition. Furthermore, it is supported by the fact that it provides a framework for explaining why there are both negative, transparent, non-entailment verbs (deny) and negative Implicatives or negative, transparent, entailing verbs (fail), but no negative opaque verbs either non-entailing or entailing (i.e., there are no negative Factives).
Marked and Unmarked Categories in the Acquisition of Phonology

Several studies of articulatory substitution have confirmed that children tend to substitute a sound representing a change in status from marked to unmarked with regard to some feature of the target sound. Substituting /d/ for /t/, e.g., reflects a move from [m continuant] to [u continuant]. If the tendency toward reduction of complexity expressed by these articulatory data is a function of restrictions on the peripheral articulatory mechanism, the findings are of superficial import for a model of emerging phonological competence.

On the other hand, if reduction in phonological complexity can be shown to be characteristic of central phonological processes, investigators are faced with a governing principle essential to a developmental model. In the present study, an attempt was made to ascertain if the marked or unmarked status of various distinctive features has an effect on perceptual confusion of consonants by children.

Eighty children, aged three through six, were shown objects and asked to judge spoken words as correct or incorrect productions of the name of each object. "Incorrect" stimuli (distortions of the object names) were first-order approximations having initial consonants that differed from the target with regard to a single distinctive feature. Consequently, each distortion can be classified as marked or unmarked in relation to the target to which it corresponds. Thus, /mz/, a distortion of nose, is classified as a marked distortion since /n/ is unmarked on the feature [coronal], while /m/ is marked on that feature. No other feature distinguishes /m/ from /n/. The reciprocal distortion /nus/ for the target mouse is an unmarked distortion. To compare false positive response frequency across the two types of distortions as well as test the significance of the differences between mean error rates exhibited by the four age groups (3, 4, 5, and 6-year olds), a two-way mixed model ANOVA was performed on the error data.

The analysis showed, in addition to significant age-group differences, that there were significantly less false positive responses to marked distortions. Thus marked distortions are not heard as acceptable variants of an original unmarked form, while unmarked distortions are heard as acceptable variants of original marked forms. This finding conforms to what would be predicted on the basis of articulatory substitution data from children (Williams, Cairns, Cairns, and Blosser, 1971) as well as aphasics (Blumstein, 1973). Accordingly, marked and unmarked categories must be viewed as essential elements in the structure of the rules written to describe the emerging phonological system.

The Phoneme in Natural Generative Phonology (Revisited)

The theory of natural generative phonology, as has been put forth by Theo Vennemann and elaborated upon by Joan Hooper, differs in many respects from standard theory generative phonology. Two important differences may be seen in the following two claims which this theory makes: 1) lexical representations are in terms of systematic phonetics (as opposed to the systematic phonemics of the standard theory), 2) phonological rules must be phonetically, and solely phonetically, motivated, and act as redundancy rules in the lexicon, specifying redundant feature values. An unexpected, but welcome, result of these two claims is the ability of natural generative phonology to directly, and non ad hocly, represent the minimal units of surface contrast (i.e. the phonemes) of a language at a single point in the model. It can be shown that the lexical matrices of natural generative phonology are structurally and functionally equivalent to the phonemic-archiphonematic constructs proposed by the Prague School.

It will be argued that the criticisms leveled against the inclusion of a level of representation which depicts the minimal units of surface contrast do not hold for the archiphonemic-type representations of natural generative phonology. Problems such as the voicing of obstruents in Russian mentioned by Morris Halle, and the phonemicization of the voiced flap in American English 'writer/"rider' pointed out by Noam Chomsky are not in fact problems for archiphonemics.

Further, it will be argued that the inclusion of "behavioral" units, such as the phoneme-archiphoneme, in no way weakens the natural generative theory, but in fact strengthens it since these "behavioral" units are as much a part of speaker competence (as well as performance) as are phones.
The Verb Remind

Since Postal’s initial article on the English verb remind, three distinct views have been suggested for the verb’s range of meanings: (1) Postal claimed that remind was a case of HOMOPHONY, with two unrelatable senses “cause to remember” and “strike as similar”; (2) McCawley claims (in his review of Chomsky’s Studies on Semantics in Generative Grammar) that it is a case of POLYSEMY, where Postal’s “strike”-sense should be reassigned (in light of Bolinger’s criticisms) as also causative; and (3) several of Postal’s critics claim that the verb is NOSEMATIC, not ambiguous but merely neutral to causative and non-causative senses. This last view involves a number of demonstrations that Postal’s various paraphrases and semantic representations of remind are incorrect, even the apparently obvious gloss of “cause to remember”.

This difference of opinion regarding remind is indicative of quite different views of semantics in present linguistic analysis. I will compare the views and propose arguments for the NOSEMATIC view. I will show that arguments from “selectional restrictions” — Postal’s main source of support — are often equivocal, since they rest on the dubious assumption of “compositional semantics” that the sense of a sentence can be exhaustively distributed among its lexical items, and that lexical items carry features indicating contextual possibilities (but note, She wore the dress to the dance (Fillmore), where wore is not a movement verb, as required). I will also show that many relationships of “synonymy” are made too hastily, without exhaustive treatment of many particular cases; elements which appear synonymous on a small range of data diverge when a wider range is considered. I will propose instead the relationship of “specificity,” and explain how a lexical item such as John can acquire the sense John’s appearance; or how remind can acquire a causative sense, both from contextual limitation, without any limitation in the sense of the lexical item. Assuming that remind is monotonic, and developing the consequences of that claim, I show that present semantic procedures typically misread the sense of sentences and fail to fully account for the semantic contribution of context.
Hindi causative paradigms can have as many as four members, e.g. /dikh/ 'get seen', /deekh/ 'see' /dikhaa/ 'show' and /dikhwaa/ 'to have someone show'. In the transformational framework these forms are derived by successive applications of the Causative T. I present data on the semantic and syntactic irregularities of causativisation in Hindi. This data weakens the transformational analysis proposed for Hindi and explicitly or implicitly assumed for most languages. It further argues for a lexicalist model that uses Redundancy Rules to express the generalisations associated with the process.

Syntactic Irregularities: (1) Selectional restrictions on number and animacy alter when a verb is to be embedded under CAUSE. (2) Syntactic relations between the arguments of CAUSE and the noncausative verb do not always hold up as predicted by the T analysis. (3) A single noncausative may have two morphologically and semantically similar causatives. (4) The noncausative sentence from which a causative would derive may be nonexistent. (5) Finally, in the four step derivation there are frequent morphological gaps where a hypothetical form (i.e. one marked (-lexical insertion)) cannot be posited because it would predict the wrong syntax for the corresponding causative.

Semantic Irregularities: (1) Causatives acquire idiosyncratic meaning features such as (+ Try to CAUSE) (+ Contactive Cause), (+ Durative) etc. (2) Causatives may be extremely restricted in meaning, referring to specific conventionalised activity, e.g. /parhaa/ 'cause-study' means to teach. (3) The meaning of many causatives cannot be rendered literally, e.g. /baccaakhilaanaa/ 'cause a child to play' means to look after a child. (4) Finally, there are many morphological causatives which do not signify the appropriate semantic causativisation. e.g. /maar/ 'cause-die' most commonly means to hit.
In an attempt to restrain runaway abstraction and freewheeling practice in generative phonology language-independent criteria for "rule plausibility" have been proposed by Bach and Harns (1970), Kisseberth (1969) Zwicky (1971), and King (1974). Kiparsky (1968) proposed the "alternation condition" to eliminate absolute neutralization in underlying representation. In this paper I propose a language-dependent condition of "paradigmatic relatedness" which coupled with the assumed "lexical relatedness" plus Kiparsky's Alternation Condition significantly impoverishes the capacity of the theory and provides a criterion for "rule plausibility" based on the paradigm/morphological system of the language in question.

The case treated is the diphthongization rule in Standard Spanish (Harris, 1973, 1974). Evidence from paradigm leveling in Chicano dialects shows a gradual "fading" of phonological rules strictly governed by morphological, rather than lexical domains. For example, alternations of the type a-ue have been leveled to ue, but only in first conjugation verbs in certain dialects. In others the leveling is spreading to other conjugations, but not to nouns.

Consequently the formulation of a rule of diphthongization in Spanish is in close relation with the paradigm structure of the particular dialect. In the case of Standard Spanish the scope of the rule is the entire paradigm, whereas in Chicano its scope excludes first conjugation verbs as no alternations are found in that subparadigm.

A squish (Ross 1973, 1974) of paradigmaticity is proposed for Spanish with verbs at the top of the scale, nouns toward the middle and prepositions at the bottom. The degree of plausibility of a rule is determined by the place which its scope (paradigm) occupies on the morphological squish. The higher the paradigm (i.e., the more significant in the given language), the more plausible is the rule formulated on it.

In all previous generative analyses, English gerundive nominals have been derived as transformations of underlying sentences. But there are reasons for preferring an analysis in which the basic structure assigned to gerundive nominals is more like that assigned to ordinary noun-headed NP's. Specifically it is suggested that the basic structure of gerundive nominals should be assigned by means of the following three phrase structure rules, of which the first two are also used in the derivation of ordinary NP's: 1. NP -->(DET) NOM; 2. DET -->(DET) NOM; 3. NOH -->(VP), etc. These rules assign to gerundive nominals with and without initial possessives the respective basic structures NP[DET]NOM[VP]) and NP[NOH][VP].

Among the reasons for preferring this nontransformational analysis to the usual transformational analysis are the following:

1. The nontransformational analysis gives a better account of certain structural properties of the nominals: e.g.,
   a. While sentences must normally have subjects, gerundive nominals, in common with ordinary NP's, need not have initial possessives: e.g.,
      I took the bus, but Fred recommended taking the bus.
   b. Gerundive nominals may include certain constituents that are typical constituents of ordinary NP's but not of sentences: e.g., demonstratives and postposed possessives, as in This burning the midnight oil of yours has got to stop. (cf. This book of yours, This burned the midnight oil of you).
   c. Gerundive nominals may not include certain constituents that are typical constituents of sentences but not of ordinary NP's: e.g., initial adverbs as in Yesterday we had beans again, but I was surprised at yesterday our having beans again. (cf. I was surprised at yesterday our meal).

2. The nontransformational analysis also gives a better account of certain distributional properties of the nominals: e.g.,
   a. Like ordinary NP's, but unlike true nominalized sentences (such as that clauses), gerundive nominals may occur after auxiliary verbs as subjects of questions: e.g., Did Ellen's getting married surprise you? but Did that Ellen got married surprise you?
   b. Like ordinary NP's, but unlike true nominalized sentences, gerundive nominals do not ordinarily occur in extraposed positions: e.g., It surprised me Ellen's getting married, but It surprised me Ellen's wedding, but It surprised me that Ellen got married.

If the nontransformational analysis is correct, how is the parallelism between gerundive nominals and sentences to be explained? Much of this parallelism is accounted for by the proposed postulation of VP as a constituent of both gerundive nominals and sentences. As for the parallelism between initial possessives of gerundive nominals and subjects of sentences, this can be handled by an extension of the "X convention" of Chomsky's Remarks on Nominalization":

The nontransformational analysis of gerundive nominals does, however, have some dramatic implications. Notably, it entails a nontransformational derivation of various types of VP's for which a transformational derivation is ordinarily assumed: e.g., the passive VP of the gerundinal nominal in Being nominated by the committee was a thrill. The analysis also raises the more fundamental issue of how, given the present state of syntactic theory, one is to choose between transformational and nontransformational analyses in general.
Rule Breaking in English Spelling

Within an orthographic system there are 'spelling rules' and 'graphotactic rules', analogous respectively to the phonological rules and the phonotactic rules within phonology. An example of a spelling rule is the deletion of final 'silent' e before a vowel initial suffix: arrange, arranging; blue, bluish. This rule is broken (i.e. the e is retained) in sing, singing; dye, dyeing; hoe, hoing; glue, gluey, etc. Examples of graphotactic rules are the prohibition word finally of certain germinate consonants (for example, 1): hatt, *hatti; or of 'silent' e after certain consonant clusters (for example, 2): barn, *barne. Some exceptions to these rules are putt, butt, borne.

The orthographic rules are broken for two reasons: (1) by following the rule a spelling is created identical to that of some other word—hence, breaking the rule eliminates homographs: singing, singing; dyeing, dying; putt, put; butt, but; borne, born; (2) by following the rule an inappropriate pronunciation and morphemic division are suggested—hence, breaking the rule guarantees morphemic integrity and appropriate pronunciation: *hoing (instead of hoing) suggests /hɔɪŋ/ and *gluey (instead of gluey) suggests /ɡlɛju/. Some rules are not broken—for example, words do not end in y but in ey: save, give, twelve, etc. Because this graphotactic rule is rarely violated homographs may result: live for both /lɪv/ and /ˈlɪv/. Different 'breakable' and 'unbreakable' spelling rules and graphotactic rules of English will be examined in light of the constraints governing homographs, morphemic integrity, and 'expected' pronunciation.

Evidence from Sentence Stress for the Notions of "Topic" and "Comment"

It has frequently been suggested that the notions of "topic" and "comment" or "theme" and "rheme" are grammatically relevant notions which must be incorporated into an adequate theory of linguistic competence. The purpose of this paper is to present evidence to this effect from English sentence stress. The necessary notions of "topic" and "comment" which emerge from consideration of stress evidence cannot be defined in familiar semantic terms but are rather to be characterized in terms of their communicative functions; they thus bear importantly on the issue of how the entities needed in linguistic descriptions are to be characterized.

The evidence for "topic" and "comment" to be considered here comes from simple subject-verb and subject-copula-adjective sentences (since complicating factors enter into the evaluation of subject-verb-object and other more complex sentences). When such sentences are pronounced with primary stress on the subject, as in the examples in (1)-(3),

(1) General Abrams died.
(2) The statue's head is missing.
(3) I didn't have any trouble getting into the house because the front window was open.

they are appropriate to report events or describe states of affairs where these are complete "news", i.e. where the speaker can assume that his audience has no special expectations as to the propositional content of these utterances. These sentences contrast with sentences like (4)-(6),

(4) General Abrams died.
(5) The statue's head is missing.
(6) I didn't have any trouble getting into the house because the front window was open.

about which there is general agreement among informants that they are appropriate in somewhat different contexts. Sentence (4), for example, seems appropriate in a context where it is known that General Abrams has been in serious condition and the speaker is informing his audience that Abrams has actually died; this sentence, unlike (1), is not completely "news" but rather the report of some awaited "outcome". Similarly, while sentence (2) might be a report of vandalism, sentence (5) sounds like part of a description of the statue, such as might be given by a museum guide. Sentence (6), unlike sentence (3), seems to presuppose that it would have been the expected thing for me to enter the house through the front window.

Speakers' intuitions about contrasts of this sort are accounted for if it is assumed that sentences like (4)-(6), unlike those in (1)-(3), are organized into a "topic" and "comment". A functionally based characterization of these concepts is presented, based on the contexts in which these and other examples are appropriate. It is also shown that an account is terms of "relative semantic weight" of the different items in an utterance, as proposed by Bolinger, is unable to account for the relevant intuitions. This paper concludes with a discussion of the theoretical implications of the existence of such functionally characterized notions.
In Jackendoff's (1972) discussion of the use of stress in defining focus, he appeals to the Nuclear Stress Rule for the assigning of sentence stress. Schmerling (1973) and others have shown that such a rule will not give correct results. A principle of sentence stress assignment is offered in this paper which will account for the cases discussed by Jackendoff, questions with contrastive stress and those sentences involving "association with focus." The principle also subsumes several of Schmerling's principles by which sentence stress is assigned.

Sentence stress is a pragmatic tool, responsive to discourse structure, which binds asserted material. Stress placement appears rightmost in simple NP VP constructions as the bounding element of the "comment," or predicate. In sentences like "Mother's coming," discussed by Schmerling, the strategy requires a bounding left of the supposedly normal stress placement precisely to avoid the presupposition-assertion pattern given by rightmost stress.

Additional cases in which rightmost sentence stress does not occur include contrastive stress, identifying sentences, like "Here's a man I'd like you to meet," and sentences in which the deep object or complement, when moved, retains chief sentence stress, eg. "What book do you want?". It is argued that contrastive stress follows the same principle of bounding. In a sentence like "Jack hit George and then Bill tripped the son of a gun," stress bounds precisely the newly asserted material to the right of the stress is presupposed. In identifying sentences like "I saw the man that I liked," vs. "I saw the man that I liked," stress bounds the limits of the identification. In the third set of cases, those in which deep objects or sometimes both the sentences stress, it is argued that the demands of deep and surface bounding conflict, causing the possibility of alternative stress placement. An analogous situation obtains in the interpretation of quantifiers in passive sentences where, in a sentence like "A man was kissed by every girl," the active sentence interpretation that for every girl there was a different man kissed is possible.

Discourse provides the presuppositions against which newly asserted material is presented; a principle such as I maintain for stress assignment is tied closely to discourse structure. A notion of bounding requires consideration of sentence syntax as well, however. For example, despite the fact that both A and B know that C is female, the normal stress pattern would be "She's a beautiful girl." With the definite article, the same stress pattern would be felt to be contrastive, as would a sentence with "what's on" or "what's being." An explicit account of the term "asserted material" requires examination of other syntactic contributions to the sentence.

Linguistic Portrayal of Girls and Women in Texts

The textbook remains the main tool in American classrooms. Texts impart two types of information: specific information targeted at improving skills in a certain discipline and latent material about values and behaviors. This dual input means that while one learns about history and reading, she learns about ethical values and standards of behavior for women and men.

This paper cites conclusions from an exhaustive study of the portrayal of females and males in 8,000 text illustrations and analyzes the linguistic behavior of the women in the same texts. The analysis of illustrations was done on the most widely used textbooks during the period from 1967 to 1972 in science, mathematics, reading, spelling and social studies. Each illustration containing one or more persons was analyzed as to age, sex, race, expression, activity, occupation and other dimensions. The findings showed that 1) females are scarce in all texts and constitute only 31% of the text tone, 2) that females decrease as the grade level of material rises; for example, in a spelling series women are 43% in the second grade and a mere 15% in the sixth grade, 3) that the occurrence of women or girls in illustrations depends in part upon the subject; for example, only 26% of the persons depicted in science texts are women. The text illustrators also treat girls differently from boys regarding their range of emotions; girls cry, sulk, and tremble. Moreover, girls are often pictured as passive and supportive in their responses to adults and boys; bungling and self-deprecating in their activities.

Textbook illustrations give a single uniform indicator for text content analysis; however, they convey only a part of the substantive and latent content. This study completes the examination of texts by researching the linguistic portrayal of males and females in the same text materials from which the 8,000 illustrations were drawn. Owing to the sheer volume of data we randomly selected text pages and analyzed 1) references to how female and male subjects spoke and 2) the language spoken by the characters. This material was studied according to quantity of speech (number of words, count of qualifiers, length of utterance) to determine assertiveness and passiveness. Supportiveness was measured by affirmative responses to other characters' language and behavior, as well as questions which allowed other characters to display knowledge and skills. Affirmative responses included expressions of support (see, great), and qualifiers (I guess, I think). Questions are typified by What do you think we should do?

Preliminary analysis indicates that widely used textbooks depict the linguistic performance of female characters to be supportive and to lack assertiveness. In texts, females talk less than males in the same way that females are shown in only 2,500 out of 8,000 illustrations. Further, females are assigned supportive and passive roles in linguistic scripts in the same way that they are illustrated standing, watching and admiring. In brief, the latent content of the illustrations is reinforced by the linguistic characterization and scripts of the school texts. Text analysis is critical in helping publishers, practitioners and consumers select sex-fair curriculum materials.

L. Weitzman "Images of Males and Females in Elementary School Textbooks in Five Subject Areas" (Audiovisual) NEA Meeting Chicago (1974)
2 Similar indicators are used in Lynette Hirschman's "Analysis of Supportive and Assertive Behavior in Conversations" Summer LSA Meeting (1974)

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Complement Subject Deletion and Cyclic Lexical Insertion

The problem of complement subject deletion in sentences like (1) and (2) has thus far resisted solution.

(1) (a) I refused to resign.
     (b) *I refused Dick to resign.

(2) (a) I expected to resign.
     (b) I expected Dick to resign.

As these and many similar examples show, the permissibility of an overt complement subject in embedded infinitives is idiosyncratically determined by the verb of the matrix sentence: refuse takes only subjectless infinitival complements, while expect takes infinitives either with or without subjects. Previous attempts to account for such facts (e.g., by means of rule features or ad hoc constraints on deep structures) have led to undesirable consequences for the grammar.

Data like (1) and (2) can be accounted for with no unnecessary increase in the power of the grammar if two steps are taken. First, it is necessary to postulate an obligatorily deletable dummy NP PRO (for which there is independent motivation), as suggested by Chomsky and others. This permits verbs like refuse to be lexically subcategorized for PRO, thereby specifying at the point of lexical insertion of refuse that its complement be subjectless in surface structure. Second, lexical insertion must be performed at the beginning of each cycle, prior to any non-lexical transformations. This step is necessary because the deleted NP may be the derived subject of the embedded sentence.

(3) A1 refused to be fingerprinted by the police.

If refuse is to be subcategorized as requiring PRO as the subject of its complement, then when refuse is inserted, PRO must already be in subject position, i.e., the cyclic rules must have previously applied within the embedded sentence.

Reorganizing the grammar in this way makes it necessary to revise the notion of deep structure. Instead of a single deep structure in a derivation, there may be several post-lexical structures, one for each cycle in a derivation, and each defined as the point in a given cycle prior to which only lexical rules have applied but preceding the application of any non-lexical transformations.
A Semantics for Cleft Sentences

Transformational analyses of cleft sentences are quite varied. Whatever the details of analysis, however, one feels that a cleft sentence, for example, (1) It was John that left is related to the sentences (2) John left and (3) Someone left and the matrix (4) X was Y. One difficulty with various deep-structure proposals proposed for (1) is that they do not indicate the nature of the relation to (2)-(4) and do not capture the complexity of the use of (1) in a text. The relation can be made clear in terms of conditions on information states in a semantics of English based on states of partial information.

Roughly, the relation is that for (1) to be used to map an information state I₀ to an information state I₁, (3) must be true in I₀ and (2) not true in I₀ (not true does not mean false in partial information states) and (2) must be true in I₁ and the difference between I₁ and I₀ is one accomplished by identifying of referential indices for (4) to accomplish the map. The specific realization of the matrix (4) as, say, (l) depends on the linguistic information state is an evaluation of a partial set of possible mapping structures of the reflexive pronoun in the surface sentence offer maps in sequence, which are then selected using the above evaluation.

Syntactic restrictions receive an interesting accounting. The unconcern of an occurrence of a reflexive pronoun in the matrix as in (9) It was himself as is explained as simply the surface form appropriate to the place of missing information in a surface sentence. The basis for a mathematical semantics of information states and operations on them can be found in the work of Dana Scott and Christopher Strachey. Since the concept of computability figures in their semantics, it is perhaps more congenial to a linguist than the set-theoretical semantics of Richard Montague. We need to extend and modify the semantics to cover parallel functions, evaluated functions, and ambiguity, but the basis for a mathematical semantics of natural languages is there.


Stockwell, Robert P., et al (1968) Integration of Transformational Theories on English Syntax, MIT.

This paper reports on a study of lexical usage, focusing on the textual context and that they frequently accommodate to others' usage (without necessarily becoming "bi-dialectal"). Therefore, the notion that a speech community's usage can be described exhaustively as a set of discrete "dialects" is fallacious.

(1) Various linguists have pointed out that linguists' descriptions of meaning (as well as informants' statements about meaning) are often too specific. In the context of this study, this can be explained in terms of social factors which restrict meaning but which tend to go unobserved. These factors become more apparent when the descriptive focus shifts to the speech community level.

The above findings lead to the conclusion that semantic structure cannot be adequately described without taking into account patterns in the speech community level, which have hitherto been ignored by most linguists.
Lexical Decomposition in Spanish

Within the context of Fillmore's case grammar, there are certain deep structure relations or case roles which are not realized on the surface because they have been lexicalized into the surface verb form. The process of lexicalization from deep to surface causes these roles to become hidden in the surface verb root. Enmarcar 'frame', for example, is analyzed in this way as poner 1 put, place' plus the LOCATIVE case in the form of en un marco 'in a frame'. In addition to LOCATIVE lexicalizations such as enmarcar, embotellar 'bottle', enlatar 'can' OBJECT case lexicalizations of the following types are productive in Spanish, for example,

dar un beso 'give a kiss'
dar un regalo 'give a gift'
hacer un viaje 'take a trip'
hacer una pregunta 'ask a question'

besar 'kiss'
regular 'give a gift'
viajar 'travel'
preguntar 'question'

On the surface, the lexicalization process sometimes allows that a lexicalized root such as alabar 'praise' from darle a alguien una alabanza 'give someone praise' where the OBJECT case has been lexicalized may take a surface direct object as in

(1) Al embajador le alabaron la intervención.
They praised the ambassador for his speech.

Although la intervención appears as a surface direct object it is to be interpreted in Fillmore's case grammar as coming from a higher predicate.

The need to identify these covert case types derives from the need to provide more explicit information about the verb in the lexicon. The kind of lexical decomposition described by McCawley (1968) and Dowty (1972) also provides some deep insights into the lexicalization process in terms of the CANSE, COME ABOUT, BE types of semantic primes. On the lexical level, there also seems to be a finite number of primes (which are probably universal) of the type dar 'give', hacer 'do, make' poner 'put', tener 'have', etc., which would allow for a reduction of the number of verb entries in the lexicon on the basis of the lexical primes and lexicalized roles. The result of the combined insights of Fillmore, McCawley and Dowty are a simplified lexicon which will specify the properties of verbs which are necessary for semantic interpretation.
A Law of Order

Proto Uto-Aztecan was a verb final language. Postpositions, the genitive order Possessor Possessed, certain auxiliaries which follow the verb -- all can be reconstructed for the proto language and point to its verb final character. While all the daughter languages exhibit these characteristics to some degree, one daughter language (Classical Aztec) has verb initial word order as its unmarked surface word order. How Classical Aztec, a descendant of a verb final language, came to exhibit regular verb initial surface word order is the topic of this paper.

The proto language had a clitic complex, including emphatics and modals, that marked as topic whatever preceded it. It is the continuation in Classical Aztec of this function of the clitic complex and the development of another function for it that has resulted in the verb initial word order. In Classical Aztec the clitic complex marks the beginning of the verbal complex; anything between the modal and the verb is incorporated in the noun. Thus, a subject -- or an object -- which is not also a topic may not precede the clitic complex. An object -- which is not also incorporated may not occur between the clitic complex and the verb. The verb is initial.

The development of the Classical Aztec verbal complex is a direct result of the presence in the proto language of reumptive and presumptive pronouns which could co-occur with, but filled different positions than, their noun referents. Re- and pre-sumptive pronouns are demonstratives that are promoted from the determiner node in an NP to the NP node itself, thereby allowing the noun to occur in front of the clitic complex or after the verb. Bound more closely to the verb than their noun referents, the re- and pre-sumptive pronouns create the possibility of reinterpreting as part of the verb that section of the sentence between the clitic complex and the verb.

Re- and pre-sumptive pronouns may develop in ways different than they have in Classical Aztec; other Uto-Aztecan languages attest to other possibilities. However, since there is a strong tendency in verb final languages to exhibit a clitic complex of the sort found in Uto-Aztecan, and since topic tends cross-linguistically to occur clause initially, the operation of a language's pronominal system may be an important measure of its potential for a change in word order.
Complement Structures and NP-Preposing

Two views of rule operation have appeared in the recent literature, the Bounded Hypothesis, an extension of Chomsky 1973, states that the application of transformations is limited to the same or adjacent cycles (the subadjacency condition). Under a more powerful alternative, the Unbounded Hypothesis suggested by generative semanticists and others, transformations are limited only by global derivational constraints and may apply at any appropriate stage in a derivation. The Unbounded hypothesis allows (1c) to be derived directly from the underlying structure (1a) by wh-movement, while the Bounded hypothesis requires two applications of this rule and the intermediate stage (1b):

(1) a. Pat saw [s, the shark eat who]
b. Pat saw [s, who the shark eat]c. who did Pat see the shark eat

Evidence from the interaction of NP-preposing rules (e.g. wh-movement, it-replacement) supports the Bounded hypothesis over the Unbounded version.

First, the Bounded hypothesis claims that only one wh-constituent can be preposed from a single embedded S. According to the Unbounded hypothesis all of (2) should be grammatical:

(2) a. Sue learned what belonged where b. what did Sue learn belonged where c. what did Sue learn where belonged

There are also cases where the presence of an intervening complementizer at the intermediate stage prevents the extraction of a wh-phrase and where the intermediate position required by the Bounded hypothesis can be filled, as in (3a) and (3b) respectively:

(3) a. *who does Mike regret that the shark ate b. the police found out who sold the grass

Second, the Bounded theory captures a significant generalization about complement structures of different types, describing the ungrammaticality of the (b) examples below by a constraint which includes preposed constructions:

(4) a. where is it fun to tickle Paul b. where is fun to tickle Paul

(5) a. in whose garden does there seem to be a unicorn b. in whose garden seem to be a unicorn

Comparable sentences containing a wh-NP (who, what) are grammatical both with and without the expletives it and there:

(6) who is (it) fun to tickle the garden where

(7) what (seems / does there seem) to be in the garden

Two methods are available for preposing wh-NP's in complements such as these, wh-movement and it-replacement, whereas only wh-movement can be used for wh-constituents that are not noun phrases.

The Bounded hypothesis presents a unified picture of otherwise disparate facts that must be stated as separate restrictions under the Unbounded analysis. The added power of the Unbounded hypothesis is unnecessary as well as undesirable, and the data select the Bounded hypothesis as the superior of the two theories.

The Latin "Genitive with Verbs" of the Type Floci Facere, Quanti Emeren

The aim of this paper is to establish an adnominal origin for the Latin "Genitive with verbs" in expressions such as floci facere, quanti emere. A noun in the genitive is usually dependent upon another noun, but may be governed by verbs of remembering, filling, etc. These few adverbial uses are inherited and have parallels in other Indo-European languages. Floci facere, quanti emere fall into neither category but their peculiar structure is not explained in traditional descriptions. Some Latin scholars resort to semantic classifications of the nouns involved as genitives of value, price or quality (Hale-Suck, Allen & Greenough) but fail to explain the absence of a head noun. Others relate the -i ending of the Latin Genitive to an -i ending in Sanskrit labeling the state into which something has changed (Bennett) or claim that the relationship between the verb and these genitives is the same as the relationship between two nouns, one of which is in the genitive (Kaiser). Since all of these explanations limit themselves to the surface manifestation of these adverbal genitives, some accounts for the facts in a satisfactory way. Both floci and quanti are better viewed as genitives that were adnominal in origin but which either lost or became syntactically independent of their head nouns. Adverbial genitives of the type floci facere 'to consider worth a lock of wool' can be derived from a noun phrase in an underlying infinitive clause. Thus to non floci facio, I don't give a hoot about you; would ultimately derive from non facio te esse aliquem floci. I don't consider you to be someone of (worth) a lock of wool.' The infinitive clause is attested with facere 'to consider', and there is ample evidence for rules allowing for the deletion both of esse and of accusatives like aliquem.

The use of the genitive quanti 'how much' may derive from a reinterpretation of an original noun phrase consisting of a head noun + quanti. In early Latin quanti (and the other adverbial genitives of price tanti 'as much,' pluris 'more,' minoris 'less') appear most commonly with esse 'to buy.' In Plautus' plays, especially the Mercator, and in Terence's The Runuch buying and selling revolve mainly around the acquisition of slaves, not things. The underlying noun phrase for quanti may be postulated as servum quanti/emiti? 'a slave of (costing) how much did you buy?'; reanalyzed as servum quanti ementi? 'how much did you buy the slave for?' This reinterpretation led to the lexicalization of quanti and its extension into other contexts.
This study treats a problem in historical syntax/semantics in the stratificational (SG) model and shows that SG predicts a side to syntactic change not predicted in transformational-generative (TG) studies. The interrelation of deictic function and negation in simple clauses in Russian is described in three related parts: semotactics (linguistic semantics), lexotactics (surface syntax), and the realizational relations connecting them. Structures describing earlier and later stages are detailed, and changes are found in all three parts of the description. The problem centers on the distinction between negated clauses with the normal genitive direct object and those which retain the accusative direct object found in non-negated clauses. Accusative signals deixis in the environment of negation: 1) Ivan ne čitáet knígu(gen)/knígu(acc) 'John isn't reading a/the book'. Adding the demonstrative etot 'this, that' gives 2) Ivan ne čitáet etoj knígu(gen) and 3) Ivan ne čitáet etu knígu(acc). (3) is redundantly marked for deixis (by the demonstrative and by the accusative in the environment of negation). Two generations ago, (2) was ungrammatical. The situation is now in flux, with (2) gaining preeminence over (3). The probable conclusion will see both variants of (1) and (2) said and understood, but (3) will be understood though not spoken, except in recitation from literature. Comparison of the SG descriptions of earlier and later stages shows a semotactic change (corresponding to R. Lakoff's change in lexical redundancy rules), a change in semo-lexemic realizational relations (corresponding to Chu's change in transformations), and a lexotactic change. It is argued that the lexotactic change was not predicted by Lakoff or Chu because no TG model includes an integrated description of surface syntax. The lexotactic change parallels changes in only the right-hand side of some transformation(s) or phrase structure rule(s).

It has frequently been pointed out before this body (see Nilsen and Stanley: both LSA papers, 1973) and elsewhere (see Lakoff, 1973 and accompanying editorial note) that such poetic devices as personification, synecdoche, dehumanification*, as well as other metaphorical forms are regularly employed to refer to, to pejorate, or to depersonalize women. It has further been maintained that the use of these devices is typical of (some say, unique to) the male author and that the referent is almost exclusively a female.

The task of this paper will be to present specific and copious evidence from classical literature as well as such popular sources as Kazan, McCarthy, and Updike. These data indicate that both the above mentioned poetic devices resulting in depersonalization and denigration are not confined to male writers and, further, that the person referred to need not be female nor, for that matter, of the opposite sex from the writer. It will be maintained that the primary cause of the difference in the volume of male- and female-authorized material containing depersonalizing poetic devices is merely the logical outgrowth of a sociolinguistics and socioliterary environment which is male dominated.

*This term names the poetic device which attributes inanimate characteristics to human or living beings; "George oozed into the chair" or "Mary melted in the sun" are good examples. The device, in fact, may be considered the compliment of personification.
Composition teachers have long realized that many college students cannot write coherent and unified paragraphs in their native language. We suggest that this deficiency stems to a large degree from the fact that most instances of verbal communication consist of dialogue between two or more speakers. In most conversations, speakers rarely contribute more than short stretches of speech at a time, while relying heavily on the dialogue partner to fill in omitted information. The amount of information withheld depends greatly on the relationship and the degree of familiarity between the dialogue partners, as Joos has so aptly sketched in *The Five Clocks*.

Reliance on dialogue as the dominant form of discourse can be expected to have among others the following three consequences:
1. Concentration on clausal and sentence units rather than on longer stretches of discourse;
2. Neglect of transition markers between sentence units; and
3. Loss of awareness of the importance of logical sequences.

Every freshman composition teacher will verify that these are, indeed, three of the major shortcomings in freshman themes.

We intend to show further that interclausal and intersentential transition markers and logical sequence indicators (connectives, conjunctions, and adverbials) play an important role in paragraph recognition. We have prepared a number of paragraph recognition tests, each testing the role of different information in the recognition of paragraph divisions. Our preliminary results indicate that the elimination of all content elements does not significantly affect the recognition of paragraph divisions. But a significant drop results when some of the intersentential transition markers are eliminated as well.

We argue in this paper that the structural markers primarily responsible for paragraph coherence (as demonstrated by paragraph recognition tests) can be expected to represent the greatest difficulty for the composition student. The high degree of correlation between the elements that make a paragraph coherent and those elements which present the greatest difficulty for composition students suggests that the treatment of transition markers should be much more fully integrated into the discussion on paragraph coherence and unity than is done in most freshman composition texts.

### Some Aspects of Aspectual Verbs

Perlmutter (1970) proposed that aspectual verbs (eg. *begin*) occur both as transitives and intransitives. His arguments are based primarily on the like-subject constraint for verbs like *try, intend, refuse*. These verbs can, however, take what are usually analyzed as one-place raising verbs in their complement. Extending Perlmutter's analysis, *seem* and *appear* would also have to be both transitive and intransitive:

1. John intended to see*
2. pTq at t₀ if p at t₋₁ is true and q at t₁ is true

We propose that aspectual verbs (eg. *begin*) presupposed the truth of their complement at a time prior to the time of utterance. (see also Givon 1972). L. Karttunen (1974) has observed that there are reasons for believing these "backward presuppositions" are merely assertions. Consider sentence 3 uttered by a N.Y. cop who has observed that a certain teenager does not use heroin:

3. If that kid has stopped using heroin, I really admire him.

Similarly, contrastive stress easily suspends the truth value of the complement of aspectual verbs. Contrast 4 and 5:

4. Has John stopped smoking?
5. Has Nixon forgotten that he was nearly convicted?

A context dependent analysis of the truth values of aspectual verb sentences is necessary. To preserve Von Wright's classical logic of change, Gricean conditions on the use of aspectuals will be given. Sentences with aspectual verbs are uttered in contexts where the speaker believes in the probability of the "backwards presupposition". Transderivational constraints restricting the contexts which admit aspectual sentences will be proposed. For example:

6. STOP (S) is admitted by the context X at t₀ if f X∈(t₋₁+kₜ₀)(BELIEVE(Speaker,PROBABLE(S at t₀)))) at t₀.
An Acoustic Explanation of a Sound Change: *-at to -e, *-ap to -o, and *-ak to -ae in Lisu

In Lisu, a member of the Lolo-Burmese family, -e is the modern reflex of *-at, -o is the modern reflex of *-ap, and -ae is the modern reflex of *-ak. These changes lack a convincing articulatory explanation, but a simple and straightforward acoustic-based explanation exists, at least for the first two changes: the steady-state values of the second formant assimilated to the second formant transitions of the final consonants, and the consonants were eventually lost.

-\( p \) entails the coming together of the flat surfaces of the lips, with a closed velum and an unspecified tongue position; -\( o \) entails the rounding and fronting of the lips, and optionally open velum (in other words, the sound can be nasalized) and a highly specific tongue configuration. What these sounds have in common is that the second formant transition for -\( p \) and the steady-state values for -\( o \) both tend toward 720 Hz. Similarly, -\( t \) entails the extreme raising of the tongue and a complete closure around the alveolar ridge, an extremely different gesture than that required for -e. Both the second formant transition of the consonant and the steady-state value of the vowel, however, tend toward 1800 Hz. An articulatory explanation would likewise be inadequate for the change from *-ak to -ae, and an acoustic-based explanation, parallel to the other two cases but somewhat less clear-cut, seems to be indicated. The facts here are yet another demonstration that the acoustics of the speech signal can explain certain phonological processes that cannot be explained in terms of articulation.

Morpheme Boundaries in Phonological Change

Several linguists (Kim and Hyman "Non-status of Morpheme Boundaries", Vennemann "Rule Inversion") have recently suggested that morpheme boundaries are not relevant to phonological rules. In this paper I will use evidence from phonological change to show that this position is in principle correct, but it requires the modification that phonological rules may refer to morpheme boundaries during the process of change. During change, boundaries typically interfere with the operation of a phonological rule, so that rules are innovated later (and lost earlier) at boundaries. Boundaries thereby provide one way for change to proceed gradually. I will present two examples, one illustrating rule loss and the other rule innovation.

(1) Russian used to have regular assimilation of palatalization in consonant clusters. The rule of assimilation is being lost, in part according to a hierarchy of boundaries (in the order of decreasing likelihood of assimilation: internal morpheme/prefix/preposition/word). It may be assumed that when the rule of assimilation is fully eliminated, no reference to boundaries will be made.

(2) Subsequent to the loss of phonemic quantity, Polish has been shifting its automatic ictus from initial to penultimate syllable. Basically the penultimate syllable is determined from the word boundary, but in some cases it is determined from an intervening enclitic boundary. Evidence from dialects and from stylistic variation shows clearly that reference to boundaries other than the word boundary is being lost.

The fact that the completion of a phonological change involves the loss of reference to morpheme boundaries suggests that phonological rules in principle do not refer to morpheme boundaries; nevertheless, boundaries are relevant during change. This evidence supports the view that a distinction must be drawn between phonological rules in the narrow sense, which cannot refer to morpheme boundaries except during change, and morphophonemic rules, which typically do refer to boundaries as well as to other kinds of morphological information.
This paper discusses and seeks to resolve a number of controversial issues regarding the description of vowel harmony. Original arguments are presented, using data from the vowel harmony system of Hungarian.

Previous analyses set up abstract back vowels for those neutral (unrounded front) vowel roots which take back vowel suffixes. Jensen (1972) posits abstract vowels also for mixed vowel roots, i.e. those which contain both neutral vowels and back vowels. This analysis is refuted by two empirical arguments.

First, an argument is given showing that the underlying representation of beka is /beka/ and not abstract /bAxka/. This implies that the vowel harmony rule (VH) does not apply within roots; otherwise, /beka/ becomes /bAke/. However, there are two general cases where VH does apply within roots: epenthetic /o/ and /u/ derived from /w/ by a syllabifying rule, undergo VH. Thus: /bokr/ → /boker/, /tukr/ → /tukor/, /falw/ → /faly/, /tetw/ → /tetul/ → /tetal/ → /tetul/. These facts support Kiparsky's (1973a) claim that non-automatic neutralization rules apply only to derived representations. The facts also show that the morpheme boundary + or a diacritic feature like [lROOT] can not be mentioned in VH.

Secondly, it is argued that radf is underlying /radf/ and not abstract /radfr/. Since roots like radf take back vowel suffixes, VH assimilates a suffix vowel to the last preceding non-neutral vowel. Thus, non-adjacent assimilation must be permitted, contrary to the claim advanced by Jensen (1972) and Howard (1972).

Lastly, the formalization of VH is discussed. Two VH rules are postulated: a marked backing VH rule which backs a suffix vowel to the non-adjacent (last preceding) back vowel of the root, and an unmarked /w/-variable VH rule which assimilates a suffix vowel to the adjacent (preceding) root vowel. The conjunctive application of these rules supports the "Elsewhere Condition" of Kiparsky (1973b).
Islands and Coreference

Pronominalization rules are widely thought to be completely unaffected by Ross' island constraints. The aims of this paper are to demonstrate the existence of a coreference rule which is sensitive to islands and to consider the consequences of this fact for linguistic theory.

Howard Lasnik has observed that epithets may not be understood as coreferential with NP's which both precede and command them. Similarly, two fully identical NP's may not be coreferential if the first commands the second, as George Lakoff observed some years ago. Thus, in the following examples, the underlined NP's may not refer to the same individuals.

(1a) Al admits that the bastard stole the money.
b. Oscar realizes that Oscar is unpopular.

Lasnik proposes roughly the following rule of non-coreference.

(ii) NP₁ and NP₂ may not be coreferential if NP₁ both precedes and commands NP₂ and NP₂ is not a pronoun.

(iii) requires some modification, but if it is a good enough first approximation. The examples in (iii) all appear to be counterexamples to (ii).

(iii)a. John is in more trouble than the poor fool realizes.
b. My boss fires anyone who criticizes the bastard.
c. He will keep talking until someone shuts the loudmouth up.
d. Our landlord denies the fact that the dirty pig overcharges.
e. Max thinks that for the s.o.b. to find another job would be easy.

The epithet in each of the examples in (iii) is in an environment which prohibits extraction (e.g., by questioning or relativization); that is, the epithets are in islands. This suggests that rule (ii) may be inapplicable if NP₂ is in an island not containing NP₁.

If this conclusion is correct (and there seems to be some corroborating evidence), then the problem of specifying formally the categories of rules subject to island constraints becomes even more difficult than it seemed before. It is well known that some deletions (e.g., comparative deletion) obey the constraints, while others (e.g., sluicing) do not; it now appears as though at least one interpretive rule (i.e., rule (ii)) obeys them, although others (e.g., the rule for interpreting do so) do not. I can find no principle which predicts which classes of rules are subject to the constraints and which are not.

Three classes in introductory linguistics on the undergraduate level were each taught by a different method: class one was taught by a rote method in which class lectures and handouts were the norm, and all issues, problems, and theories were presented with a full explanation by the instructor without requiring any involvement from the students other than asking questions; class two was taught by a deductive scheme in which principles, concepts, and issues were stated and the class was asked to generate examples, applications, and extensions; and class three was taught by an inductive system, wherein students were given sets of cases or interrelated problems and asked to come up with the theory or principle.

The courses were all alike, each being concerned with three content areas--developmental psycholinguistics, syntax, and sociolinguistics. On the first day of the course in all three sections, students were pretested for knowledge in all three areas. Students were tested again with the same test on the last day of the course. Students were also asked--on the last day--to rate the teacher and the course on a scale from 1 to 4 (4 being excellent). The results are as follows:

<table>
<thead>
<tr>
<th>Improvement as measured by Pre to Post change scores (class means)</th>
<th>N=92</th>
</tr>
</thead>
<tbody>
<tr>
<td>rote dev. psycholinguistics</td>
<td>syntax sociolinguistics</td>
</tr>
<tr>
<td>1.86</td>
<td>5.01</td>
</tr>
<tr>
<td>2.43</td>
<td>3.29</td>
</tr>
<tr>
<td>2.14</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Ratings

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>rote</td>
<td>3.42</td>
</tr>
<tr>
<td>deductive</td>
<td>3.57</td>
</tr>
<tr>
<td>inductive</td>
<td>3.00</td>
</tr>
</tbody>
</table>

The rote scheme effected the greatest change for syntax, the deductive and inductive for sociolinguistics. There was the least improvement in dev. psycholinguistics overall, perhaps because initial scores were high, as most students had just had developmental psychology as part of their program. Students enjoy the deductive scheme the best, and inductive least. And within a given class, there was high correlation (zho=.75) for individual improvement in an area and rating of the course and teacher. Most teachers mix styles for all content--perhaps a more specifically stylized approach might generate greater improvement and enjoyment for students.
Preliminary data analysis of tests of the language behavior of identical (N=9 pairs) and fraternal (N=12 pairs) teenage twins suggests that there are different correspondences for different language behaviors. Twin subjects, aged 12-16 years, were asked to (1) explain what the subject was doing in sentences such as "Mother thanked Sam for taking the garbage out and I did the same", (2) state the main subject in a sentence such as "Sue is the girl is eating supper", (3) offer a paraphrase of three part compound nouns such as "baby peel radish" and "storm dark night", and (4) define 40 words which are used as a section of the WAIS. 1.2 test.

For judgements of what the subject is doing in sentences with slightly ambiguous construction, fraternal cotwins agree with one another 56% of the time, and identical cotwins agree with one another 92% of the time. For determinations of subject in sentences like "Sue is the girl is eating supper", fraternal cotwins agreed 62% of the time, and identicals agreed 88%. In the paraphrasing of compounds however there was high agreement in both groups: for fraternal, cotwins agreed 87% of the time; in the group of identicals, the twins agreed 80% of the time. Analysis of correct definitions of words is two part, the first part, a simple quantitative score difference shows again that identicals have more identical vocabularies (4 point difference) than fraternals (10 point average difference), the second part—which is not complete—is an analysis of the way cotwins in both groups define the words they do which may or may not show the same pattern as the other data.

False pairs of twins, made of a random pairing of age matched twins in groups gives an estimate of correspondences between randomly selected non-related subjects. These data appear as follows: ambiguous construction, false frats 44%, false ident 38%; cleft type sentence, false frats 63%, ident, 68%; compounds, false frats 51%, false idents, 62%.

Eliminating performance factors, if competence were universal and equal, then identicals should be no more alike than fraternals, and fraternals should be no more alike than any two random individuals, a pattern not found in these data. If further data analysis supports these findings, it may be argued that a genotypic contribution to performance variance exists, and itself offers evidence for continuing natural selection.

The Semantics of Syntax: A Semantic Analysis of Adjective Position in French

It is taken as basic to the following study the Jakobsonian view of language as a system of semiotic signs (a combination of a form and a meaning) the purpose of which is the communication of information. Given this definition, all units of language are to be studied in the light of their semantic role with respect to the communicative function of language. While it is claimed that all grammatical (syntactic) constructions have a semantic basis, this will be exemplified only on one area of grammar—word order—and, in particular, the order of the attributive adjective with respect to the noun in French. It is hoped that the results in this area will demonstrate how a semantic analysis should proceed with respect to more complex grammatical constructions.

In order to do such a semantic analysis of a syntagmatic construction, the following principles are applied. The principle of Formal Determinism, whereby it is assumed that a unity of form normally gives a unity of meaning. The units of meaning, Invariants, are expressed in terms of semantic distinctive features, by the principle of Paradigmatic Opposition and the use of minimal pairs, whereby the pairs [adjective + noun] and [noun + adjective] are abstracted from time and considered to be paradigmatic replacements for each other, the only differentiating factor being the word order. The difference in meaning, then, will be the feature attributed to word order itself. Since we are dealing here also with the process of modification, its semantic nature—The intersection between (different) parts of speech, where the modified (here, the noun) is considered to be more basic than the modifier (here, the adjective)—is defined.

With the aid of minimal pairs (e.g., furieux mentour vs. mentour furieux, pauvre soldat vs. soldat pauvre, ancien bibliothèque vs. bibliothèque ancienne) other pairs will be provided on a handout) and by discussing the difference in interpretation which one gets for various adjectives in post-position as against pre-position, it is shown that post-position of the adjective is the unmarked word order in French. That is, post-position is little different from the semantic nature of modification itself: it presupposes little more than the parts of speech involved and their roles as modifier and modified. Pre-position on the other hand is the marked word order, whereby the modification situation presupposes not only the noun as a part of speech but also as a complex of lexical features. That is, in pre-position, the adjective modifies a noun in its lexical capacity as well as in its part of speech capacity. In pre-position it is assumed that the lexical range of the noun has already been identified and that the adjective then modifies this range.

It is concluded that (1) word order is a semantic phenomenon of language and can be described in terms of distinctive features, (2) word order with respect to other categories (e.g., adverb/adjective, noun/adjective) can be handled with the same feature, (3) other grammatical problems can also be handled with the same principles. (4) Most importantly, since the semantic system of language is assumed to be characterized by a small number of distinctive features, then the feature found for word order should return, mutatis mutandis, in other systems. My research shows that it does not appear in the prepositional system (deux vs. en, sur vs. à), the verbal lexical system (marcher, partir vs. aller), and the 'tense' system (the subjunctive, the passé simple).
Broca's Area

Since the 19th century, neurolinguistic approaches to language and brain have grappled with the question of localization, and Broca's area has remained at the center of this controversy. Exemplifying one point of view, Prévost (1971) claims that "an intact Broca's area...is not necessary for normal speech." Lenneberg (1967) claims that there is no anatomical uniqueness to Broca's area compared to non-human primates and "there is no clear cut evidence that Broca's area is more specifically related to speech than areas adjacent to it." However, Prévost has misinterpreted his data source (Mattler, 1949) and Lenneberg was evidently unaware of the work of Bonin & Bailey (1951) and Sarkisov (1966, from the 1964 Russian text), which cast doubt on their respective claims.

An important source of data on the function of Broca's area is brain autopsy material. The relevant clinico-pathologic details of some classic cases (Broca, 1861; Simpson, 1867; Tuke & Fraser, 1872; Fouliis, 1879; Bramwell, 1886; and some more recent ones (Nielson, 1946; Luria, 1970; Mohr, 1973; and the ones of the author) support (a) Luria's hypothesis of both an afferent and an efferent speech mechanism and (b) Mohr's hypothesis that under some circumstances the right hemisphere homologue to Broca's area may take over certain functions of those mechanisms. From these it must be concluded that the "speech area" is larger than what has been traditionally labelled Broca's area; in fact, it approximates the area of the lesion in Broca's original case.

Contributing to the difficulty in establishing the role of the speech area is (a) the well-known fact that brain lesions are variable in etiology and locus and (b) the less-well-known fact that there is a striking degree of individual variation in the physical size of component areas of the brain (Blinkov & Glezer, 1968; Sarkisov, 1966), including the traditional Broca's area. Therefore, the same size lesion could destroy all of Broca's area in one brain but only three-fourths of it in another.

Additional sources of data which are not discussed in this paper (EEG analyses, angiography, neurosurgical ablation, Sodium Amytal testing, and computerized axial tomography) are, however, consistent with the autopsy data. The conclusion drawn from this mini-review is that the case against localization is not at all substantiated; however, the picture is not a simple one of merely accidental variation in brain damage, interaction of the right and left hemispheres and the obviously incomplete linguistic analysis of speech production, pose a complicated problem for future research.

A topic of general interest in the current syntactic literature is the relation of pseudo-cleft sentences like 1) and 2) to cleft sentences like 3).

1) What struck the house was lightning.
2) The thing that struck the house was lightning.
3) It was lightning that struck the house.

It has been proposed (e.g. Akmajian, 1970) that there is a transformational relation between clefts and pseudo-clefts like 2) obtains, the existence of "it" in clefts follows automatically from independently motivated principles of grammar. More specifically, given that sentences like 3) are derived from structures like that represented in 2), it follows necessarily from the following independently motivated processes of English that "it" should occur in sentences like 3): Pronoun Deletion, Article-Pronoun Conversion, and Extraposition. The following derivation is illustrative:

The thing that struck the house was lightning

\[
\text{\textit{\dag Pronoun Deletion}}
\]

*The that struck the house was lightning

\[
\text{\textit{\dag Article-Pronoun Conversion}}
\]

*It that struck the house was lightning

\[
\text{\textit{\dag Extraposition}}
\]

It was lightning that struck the house

Assuming the non-controversiality of Extraposition, the existence of the first two processes is independently supported by facts about right and left dislocated sentences and by facts adduced by Postal (1966). This explanation has as a natural consequence the heretofore unexplained fact that sentences like 3) cannot have adjectives as the post-copular constituent (e.g. *It was tall that John hit). The one that John hit was tall) because of an independently needed restriction on Pronoun Deletion. Moreover, the analysis correctly predicts the existence of other structures which have not seriously been considered in studies of the derivation of cleft sentences, but which bear remarkable similarities to clefts, namely, structures like 4):

4) That was lightning that struck the house.
Recent research in American Sign Language (ASL) has concentrated on demonstrating that ASL, a language channelled through the manual-visual modality, has linguistic properties similar to those of oral languages, except for physical sound. The absence of sound, however, really presents no theoretical problem since ASL has a formational level of structure analogous to, but not dependent on, the phonological component of oral languages.

This paper will discuss a relatively new area of research in Sign linguistics, ethnic-social variation. Because of attitudes and educational policy, Black signers in the South have developed different varieties of signing from Whites. Concentrating primarily on Black signs in Georgia, this paper will discuss some of the lexical and formational (phonological) variation observed in old and young Black signers.

Certain types of variation, such as the lexical unit PREGNANT (made on the face rather than in the space in front of the trunk) and sign phonological rules related to the use of '8' (middle finger contacting thumb) and '9' (Index finger contacting thumb) hand shapes appear to be continuations of older historical forms that were also present in some other varieties of White signing.

Other variation appears to be primarily synchronic, such as formational (phonological) variation between signs made on the face rather than on the hands.

The paper will also include a discussion of methodological problems (primarily due to attitudes) in gathering the data and observations on the effect of changing educational policy on Black Southern signing. The conclusion will briefly discuss the theoretical and descriptive problems of incorporating this variation into a grammar.
Bilingual Morphology: Gender Assignment in Loanwords

Grammatical gender as a feature of the category noun is marked in some languages, unmarked in others. Nouns loaned by an unmarked language to one that is marked are assigned gender by the speakers of the recipient language. This morphological adaptation is in addition to phonological and any other kinds of changes that affect the word as it goes through the loaning process. Research presented through this paper seeks to determine factors that rule gender assignment to loan-words.

Loans to Spanish, a marked language, are studied. To achieve a higher degree of accuracy two periods of Spanish are investigated: a) the language of the XVI Century in the Spanish colonies in America (in non-literary contexts, from previous research); b) the language of Puerto Rican residents in present day Northeastern United States. Loans for the first period are from unmarked Amerindian languages (Arawak, Caribe, Nahual, and Quechua); loans for the second period are from American English, also an unmarked language. The first period was studied descriptively; the second involved analysis of an inquiry into criteria for gender assignment by speakers of the recipient language. Informants were questioned on: a) actual loan-words already incorporated into the language (e.g., draiwe<driveway), b) probable or possible loanwords (e.g., jiter<chester), and c) English nouns which would not be expected to be loaned, because of the high frequency of usage of the Spanish equivalent (e.g., table). Item a) and partially b) try to elicit analysis from the informants. Item c) and partially b) search for insights into the automatic assignment of gender to non-learned forms.

Previous assumptions and theories are discussed. Tentative (at the time of writing abstract) conclusions seem to indicate three major reasons for assignment of gender: 1) determination by final phoneme(s), 2) semantic association with an equivalent in the borrowing language, and 3) higher productivity of the masculine gender in Spanish.
The Unity of Contrast, Complementary Distribution, and Free Variation in Semantic Analysis

In determining the meaning of grammatical forms, contrast, complementary distribution, and free variation are treated as fundamentally different cases requiring different approaches to analysis. The contrast of two forms in the same syntactic frame leads to the assignment of different meanings. Complementary distribution, however, is taken to indicate the lack of a semantic distinction. And when two forms are in apparent free variation, i.e. when there is no obvious semantic contrast, the variation is studied in terms of extra-linguistic variables. This paper will show that, at least for one case, contrast, complementary distribution and apparent free variation as syntactic phenomena all derive from the same underlying semantic system.

In German there is a semantic contrast between the dative and the accusative cases when they appear in the same clause:

1. Bruno schenkte dem Mädelchen einen Blumenstrauß. 'Bruno gave the girl (dat) a bouquet (acc).'

The dative (traditionally the "direct object") indicates an entity which is more potent or active in the event than the accusative (traditionally the "indirect object"). Minimal contrasts are possible, as in:

2. Werner gab dem Mädelchen freili. 'Werner gave the girl (dat) time off.'
3. Werner gab das Mädelchen freili. 'Werner gave the girl (acc) up' (e.g. broke their engagement).

Dative and accusative are in complementary distribution for a large number of verbs ("case government"). But an analysis of 200 prose contexts in which predicates indicating visual contact appear—such as aussehen + acc and zusehen + dat—shows that dative entities as in (4) are consistently more active than accusative entities as in (5):

4. Es machte mir eine Freude ihr zusehen, wie sie ihre Hände Würstele. 'It was a pleasure to watch her (dat) as she scrubbed her hands.' R158
5. Sie leg regungslos mit geschlossenen Augen, und ich sah sie an. R38
   'She lay motionless with her eyes closed, and I looked at her (acc).'

In addition, an informal study of all predicates indicating 'avoidance' (such as aussehen + acc and auswelhen + dat) shows that the dative is consistently preferred for a more potent entity, and the accusative for a less potent entity. Thus the same potency-activity factor which appears in the contrastive contexts (1)-(3) is also evident with complementary distribution.

Finally, (6) and (7) are taken from a connected narrative and describe the same event. Dative and accusative appear to be in free variation:

6. Ich trat ihm mit voller Wucht zwischen die Beine. Grün 45
   'I kicked him (acc) with all my strength between the legs.'
7. Der, dem ich zwischen die Beine getreten hatte, sprang auf mich zu. 'The one whom (dat) I had kicked between the legs jumped at me.' Grün 45

But in (6) more attention is paid to the force of the blow than in (7), reflecting, again, a difference in the potency-activity factor. An analysis of 123 prose contexts of this type confirms that a (sometimes subtle) difference in potency-activity is consistently present.

Thus the 'potency-activity' factor, deriving from a general semantic analysis of the German case system, is shown to be present in instances of contrast, complementary distribution, and apparent free variation of the case forms.
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