Linguistic Society of America
Fifty-fourth Annual Meeting
December 27-29, 1979

American Association for Applied Linguistics
Second Annual Meeting
December 27, 1979

Los Angeles, California

Meeting Handbook
CONTENTS

Introductory Note iv
Notes on the Annual Meeting v
Program Information and Highlights vi
Program vi
Abstracts of Regular Papers 1
Abstracts of Symposium Papers 63
Abstracts of the AAAL 75
Exhibitors 79
Advertisements 80
Introductory Note

The LSA Secretariat has prepared this Meeting Handbook to serve as the official program for the Fifty-fourth Annual Meeting of the Linguistic Society of America. The Program Committee, chaired by Bernard Spolsky and consisting of Stephen Anderson, Jean Berko Gleason, Henry Hoenigswald, Peter Ladeoged, William R. Merrifield and Richard Smaby, reviewed the submitted abstracts and assembled the program for this meeting.

We would like to take this opportunity to formally acknowledge the help which has been given by the Los Angeles Local Arrangements Committee. This Committee was chaired by Peter Ladeoged, University of California at Los Angeles, and consisted of Paul Kirk, California State University at Northridge, Stephen Krashen, University of Southern California, Ronald Macaulay, Pitzer College, Burckhard Mohr, California State University at Dominguez Hills, Janet B. Sawyer, California State University at Long Beach, Donald B. Sears, California State University at Fullerton and Robert Stockwell, University of Southern California.

We hope that this Meeting Handbook will be a useful guide for those attending the meeting, as well as serve as a permanent record of the 54th Annual Meeting.

LSA Secretariat
December 1979

LSA Business Meeting

This year, the Business Meeting has been scheduled in the Emerald Bay Room on Level 3 on Friday, 28 December from 2:00-4:45 p.m. The meeting will be chaired by William Labov, LSA President. The members of the Resolutions Committee are Stephen Anderson, Chair, John J. Gumperz and Robert E. Longacre.

Presidential Address

William Labov, the 1979 LSA President, will deliver the Presidential Address on Friday, 28 December at 4:45 p.m. in the Emerald Bay Room on Level 3. The address is entitled "Resolving the Neo-Grammatical Controversy."

Cash Bars

Cash bars are scheduled from 5:30-7:00 p.m. on 27 December and from 5:45-7:00 p.m. on 28 December.

National Endowment for the Humanities

Mr. Nick Demara of the Division of Fellowships of the National Endowment for the Humanities (NEH) will be available to discuss the NEH programs with LSA members on Friday, December 28 from 9:00 a.m. until 2:00 p.m. in the Los Felix Room of the Bonaventure Hotel.

National Science Foundation

Dr. Paul Chapin, Program Director for Linguistics at the National Science Foundation (NSF), will be available to meet with LSA members in the La Brea Room of the Bonaventure Hotel at the following times:

Thursday, 27 December 10:00-11:00 a.m.
3:00-4:00 p.m.
Friday, 28 December 10:00-11:00 a.m.
Saturday, 29 December 10:00-11:00 a.m.

American Association for Applied Linguistics

The Second Annual Meeting of the AAAL will take place 27 December 1979 in the Palos Verdes Room of the Bonaventure Hotel in conjunction with the 54th Annual Meeting of the Linguistic Society of America. All members are encouraged to attend the AAAL Business Meeting at 1:30 p.m. There will be an evening session, chaired by President Roger Shuy, which features Eugene A. Nida addressing "Languages Are For Communicating." Abstracts of the papers begin on page 75 of this handbook.
1979 LSA ANNUAL MEETING

GENERAL INFORMATION

Registration for the 1979 LSA Annual Meeting will be conducted on the Lobby Level. The Job Placement Center will be located in the San Bernardino Room. The Santa Anita Room will be the site of the Exhibit and the Paper Copying Center will be located in the San Fernando Room.

<table>
<thead>
<tr>
<th>Registration &amp; Copying Center</th>
<th>Placement</th>
<th>Exhibit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wednesday, 26 December</td>
<td>7:00-9:00 p.m.</td>
<td>8:30 a.m.-6:00 p.m.</td>
</tr>
<tr>
<td>Thursday, 27 December</td>
<td>8:00 a.m.-4:00 p.m.</td>
<td>10:00 a.m.-2:00 p.m.</td>
</tr>
<tr>
<td>Friday, 28 December</td>
<td>8:00 a.m.-noon</td>
<td>8:30-6:00 p.m.</td>
</tr>
<tr>
<td>Saturday, 29 December</td>
<td>9:00 a.m.-noon</td>
<td>8:30-11:30 a.m.</td>
</tr>
</tbody>
</table>

SPECIAL INTEREST HIGHLIGHTS

<table>
<thead>
<tr>
<th>Wednesday, 26 December</th>
<th>Thursday, 27 December</th>
<th>Friday, 28 December</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSA Executive Committee Cash Bar</td>
<td>Cash Bar Los Feliz Room</td>
<td>Emerald Bay Room Emerald Bay Room</td>
</tr>
<tr>
<td>Presidential Address: 5:45-7:00 p.m.</td>
<td>Presidential Business Meeting 2:00-4:30 p.m.</td>
<td>Presidential Address: 4:45-5:45 p.m.</td>
</tr>
<tr>
<td>William Labov, “Resolving the neo-grammatical controversy” Cash Bar</td>
<td>Los Feliz Room</td>
<td>Emerald Bay Room</td>
</tr>
</tbody>
</table>

EVENING SESSIONS

Thursday, 27 December

SYMPOSIUM: EXCEPTIONAL LANGUAGE AND LINGUISTIC THEORY

Room: 1, Emerald Bay Room

7:30 Introduction: Victoria A. Fromkin (UCLA)
7:40 Lorentz Ohler (Boston U & Boston VA Med Ctr): Language in Senile Dementia
7:55 Shelley Blumenthal (Brown U & Boston VA Med Ctr): Dissolution of Language in Aphasia: Evidence for Linguistic Theory
8:10 Discussion
8:20 Gitan Sankoff (U Penn): Pidgin-creole Studies & Linguistic Change
8:35 Nancy Dorian (Bryn Mawr C): Language Death & Linguistic Theory
8:50 Discussion
9:00 Lisa Mann (Boston U & Boston VA Med Ctr): Child Language as a Source of Constraints for Linguistic Theory
9:30 Discussion
9:40 Comment by William Labor (U Penn)
9:55 Comment by Jean Berko Gleason (Boston U)
10:10 Comment by James McCawley (U Chicago)
10:25 General Discussion

Friday, 28 December

SYMPOSIUM: THE RELATIONSHIP BETWEEN PIDGINIZATION, CREOLIZATION AND LANGUAGE ACQUISITION

Room: 1, Emerald Bay Room

SESSION II

8:05 Introduction: Roger Andersen (UCLA)
8:35 Discussant: Derek Bickerton (U Hawaii)
8:45 Discussant: Gitan Sankoff (U Penn)
8:55 Discussant: Dan Slobin (U California, Berkeley)
9:05 Discussant: Elizabeth Traugott (Stanford U)
9:15 Open Discussion
9:35 Break
9:45 Introduction: Roger Andersen (UCLA)
10:20 Open Discussion

THURSDAY, 27 DECEMBER, MORNING

SYNTHESIS CHAIR: William O. Bright, Chair: Robert Longacre

<table>
<thead>
<tr>
<th>Room</th>
<th>Room</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Thursday, 27 December, MORNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 Nancy S. Levin (Ohio SU): The Listing Function</td>
</tr>
<tr>
<td>9:20 Eric J. Reuland (SU Groningen): Dutch Subordinate Clause Types &amp; The Syntax of Logical Form</td>
</tr>
<tr>
<td>9:40 Harmen S. Boertien (U Houston): Interdependence of Linguistic Constraints: Evidence from Double Modal Diacritics</td>
</tr>
<tr>
<td>10:00 Arnold M. Twicky (Ohio SU): Stranded to</td>
</tr>
<tr>
<td>10:20 Frank Henry (Groningen): Representing Significant Generalizations in Lexical Grammar</td>
</tr>
<tr>
<td>11:00 Randall Hendrick (U North Carolina): On Restricting the Power of Strict Subcategorization</td>
</tr>
<tr>
<td>11:20 Wayne E. Herbert (Cornell U): In Defense of Tense</td>
</tr>
</tbody>
</table>

SYMPOSIUM: MORPHOLOGY/HISTORY OF LINGUISTICS

Chair: Eugene Nida

<table>
<thead>
<tr>
<th>Room</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Thursday, 27 December, MORNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 Rochelle Lieber (MIT): On Morphological Convergr</td>
</tr>
<tr>
<td>9:20 Steven L. Strauss (Arizona SU): Stress Assignment as Morphological Adjustment in English</td>
</tr>
<tr>
<td>9:40 James W. Harris (MIT): Explorations in Spanish Word-Structure: An X-bar Theory</td>
</tr>
<tr>
<td>10:00 Reesam Kim (Grad Ctr CUNY): Compound Verbs in Languages</td>
</tr>
<tr>
<td>10:20 Mark Aronoff &amp; Frank Anshen (SUNY Stony Brook): Morphological Productivity &amp; Phonological Transparency</td>
</tr>
<tr>
<td>10:40 Craig Hoffman (U Conn): A Non-transformational Analysis of Verbal Compounds</td>
</tr>
<tr>
<td>11:00 E. F. Konneru (U Ottawa): Kraszewski As A Syntactician</td>
</tr>
<tr>
<td>11:20 Michael A. Covington (Yale U): A Medieval Dependency Grammar</td>
</tr>
<tr>
<td>11:40 Gordon M. Messing (Cornell U): Did Homeric Heroes Speak in Different Styles? A Negative View</td>
</tr>
</tbody>
</table>

SYMPOSIUM: AMERICAN ASSOCIATION FOR APPLIED LINGUISTICS

Chair: Eugene Nida

<table>
<thead>
<tr>
<th>Room</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Thursday, 27 December, MORNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 Robert M. Ingram (Madonna C): Linguistic Contributions to the Teaching of Sign Languages</td>
</tr>
<tr>
<td>9:30 Anne V. Martin: Deleted-Sentence Preferences: A Reflection of Psycholinguistic Processing of Information Relationships</td>
</tr>
<tr>
<td>10:00 Muriel Saville-Troike (George-town U): The Be Creative: Stages in the Acquisition of English Be by Navajo Children</td>
</tr>
<tr>
<td>10:20 Russell T. Downing</td>
</tr>
<tr>
<td>10:40 Douglas C. Fairlie (Colorado SU): Analyzing the Categorial Properties of Tests</td>
</tr>
<tr>
<td>11:00 Robert C. Williamson &amp; John A. Van Erden (Lehigh U): Language Maintenance &amp; Shift in a Breton and Welsh Sample</td>
</tr>
<tr>
<td>11:30 Andrew Schiller (U Illinois Chicago C): The Language of Accidental Death &amp; Disembowelment: A Case of Forensic Linguistics</td>
</tr>
<tr>
<td>Room</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>5</td>
</tr>
</tbody>
</table>

**Total Speakers:** 15

**Total Topics:** 15

**Total Papers:** 15
3. Procedure regarding resolutions. 3.a. Resolutions may be introduced at the annual BUSINESS MEETING. LSA members are urged to follow these ground rules in order to have their motions and resolutions considered at the Business Meeting.

RULES FOR MOTIONS & RESOLUTIONS

1. Definitions. A motion is any proposition calling for action whether by an officer of the Society, the Executive Committee or the membership. A resolution expresses to a feeling of a group. Resolutions are of two kinds: a) resolutions expressing the "sense of the majority of the meeting," and b) resolutions expressing the "sense of the majority of the membership." In the latter case, they are referred to as "Committee motions." A resolution is the eventual result of a majority vote of members voting at the meeting. The resolution requires a majority vote of those voting to be adopted.

2. Procedure regarding motions. 2a. Motions are in order only at the duly constituted annual business meeting. Voting is restricted to members of the Society. Motions may be initiated by the Executive Committee or from the floor. 2b. Motions initiated by the Executive Committee require for their passage a majority vote of members voting at the meeting. 2c. Motions initiated from the floor, if they receive affirmative vote of a majority of members voting at the meeting are then to be submitted by the Executive Committee to a mail ballot of the membership of the Society in the next issue of the LSA BULLETIN. Passage requires: a) majority of those voting; and b) that the total of affirmative votes exceeded 50% of the membership responding.

3. Procedure regarding resolutions. 3.a. Resolutions may be introduced at the annual BUSINESS MEETING or at any special meeting of the Society, such as the summer meeting. 3b. A Resolutions Committee consisting of three members will be appointed by the president in advance of each regular or special meeting. Any member wishing to introduce a resolution must submit it in advance to the Resolutions Committee, which, in addition to its traditional duty of formulating resolutions of thanks and the like, will have the duty to make sure that the language is clear, and that duplication is avoided. The Resolutions Committee may meet in advance for this purpose or with a request from a member. Any resolution approved by the Resolutions Committee may be introduced at the business meeting as a motion initiated by the Executive Committee (see 2c) above.

4.45-5:45 p.m. Presidential Address: "Resolving the Neo-grammatical Controversy" by William Labov. Room: Emerald Bay.

8:00-11:00 p.m. SYMPOSIUM: THE RELATIONSHIP BETWEEN PIGGODIZATION, CREOLIZATION AND LANGUAGE ACQUISITION SESSION II (See page 4)
abstracts
of regular papers
The abstracts which appear in this Meeting Handbook are photocopies of the originals submitted to the LSA Program Committee. Infelicities of style, grammar, punctuation and spelling are the responsibility of the authors.
One of the major battlegrounds in recent years between proponents and opponents of abstract phonology has been the vowel harmony pattern found in the Manchu language. Both sides in this dispute have relied on methodologically-sound and empirically-supported evidence: 1) Incorrect sound values for certain orthographic symbols (e.g., [e] for [a]) have been assumed, leading to a confusion of vowel alternations. 2) Systematic front-back harmony has been incorrectly superimposed on Manchu, a tungusic language, where the Tungus high/low type. 3) Modern spoken varieties of the language have not been considered at all. When these factors are considered a different analysis of Manchu vowel harmony emerges. A high/low type of vowel harmony in an advanced state of decay was found in literature, which only recently reemerged a different variety. Finally, I will draw implications for future research of theoretical and methodological nature which will be on the ground becoming further attention to phonological description to rule out spurious analysis, and on those hand make it possible to provide descriptions for such dynamic problems as the decay of a vowel harmony system.

JOSIE ARD, University of Michigan

A Closer Look at Manchu Phonology

Jenean (1975) and Haver (1971) have argued that the distribution of relative clause (RC) types could be predicted on the basis of the orderings of the Accessibility Hierarchy (AH) (Jenean and Comrie: 1972 and 1977). The AH is a psychological reality of the A's in the basis of data from second language acquisition. The other hand, Rosenbaum (1978) found that in an analysis of free speech from Carterette and Jones (1974) the lexical feature [-human] of the head noun was relevant in the distribution of RC types. In this paper we will demonstrate that there is a basis for both positions, but that there are shortcomings in the manner the problem has been posed. In order to investigate the interaction between the AH and lexical semantic features, we computed the phonological relations of [-human] NP's and compared these percentages with the ratings obtained from the distribution of RC types. We further elicited data from second language learners, in which the features [-human] were controlled for and the learners were instructed as to the type of RC to produce. There was no statistical difference in the results of those sentences with [-human] and those with [-human] heads. The orderings of the AH were followed in both cases. These results indicate that any successful model for predicting the distribution of RC types must be based on both of these factors.

JOSIE ARD & SUE GASS, University of Michigan

Predicting Relative Clause Types in Discourse

MARK AROHOF & FRANK ANHEIM, State University of New York, Stony Brook

Morphological Productivity and Phonological Transparency

In this paper we report on a study which tested the relation between the transparency of an affix and its productivity in English. The general method used was the Lexical Decision Task. Presented with items of the general forms Xibility and Xibleness, subjects were asked to judge whether each item was an English word or not. The items were of three types: real (possibility), nonsense (permanability), and possible, formed by adding -ness or -ity to existing Xible words (effectability). When productivity is measured provisionally as the ratio of existing to potential Xible words (a/ax ratio), Xibility is found to be more productive. If our task is sensitive to productivity, then we predict that subjects will more readily accept possible words of the form Xibility. If, on the other hand, the task is sensitive to orthographic or phonological transparency, then subjects should prefer Xibleness. We found that subjects showed a significant preference for Xibleness, thus demonstrating conclusively that the Lexical Decision Task is a good measure of nonproductive orthographic or phonological transparency. Affix may nonetheless be more productive, contrary to common opinion.

FLORENCE BARKIN, Arizona State University & Alberto M. Rivas, University of Massachusetts

A Theoretical Approach to Code Switching: The Underlying Structure of Bilingual Sentences

The pitch of bilingual interaction between each other under certain sociocultural circumstances is characterized by the alternation of the two languages in a seemingly random fashion. However, research in this area, called Code Switching, has begun to demonstrate that it is a rule-governed process. To show C.S. is a manifestation of certain principles that these rules in bilingual speech, we propose the following model.

1. Each language has a set of monolingual Phrase Structure Rules. Each element in a rule is marked with a symbol that represents the language to which the rule belongs.
2. In any given language, there are Phrase Structure Rules (PSRs) for each of the words, phrases, and clauses that belong to that language. Each lexical insertion occurs, terminal nodes in one language must be related to the phrase.
3. In the language, each language has a set of monolingual transformations. A transformation that belongs to one language can apply only if its domain of application is a node in the respective language.
Evidence for Preschoolers’ Analysis of Clusters

This study used various experimental tasks to examine English-speaking children’s treatment of clusters as phonological units, examining (1) what aspects of clusters children can identify; (2) what other phonetic/phonological units these clusters are related to; and (3) what factors account for difficulties in the acquisition of these clusters. In a segmentation task (similar to Zhurova 1964) children were taught to give the first sound in words beginning with singleton consonants and stop consonants the children were tested on their segmentation of stops. In a grouping task (similar to that used by Read 1975) children were given an array of pictures representing words and were asked to group together those that began with the same sound as a test word in vocabulary tasks the children were taught to spell words using colored blocks to segment the words. Measures were also taken of speech production, knowledge of reading and writing, and perceptual performance. The results showed that 24 children aged 4;0 to 5;0 performed identification and discrimination tasks on each of the various tasks is evaluated and correlated with reading knowledge, age, and development. Second, individual child results are evaluated for consistency across tasks.

ED BARTIGIELLA, the Graduate Center, City University of New York & Drew University

Reflexives and Pronouns in NP

Chomsky has argued that a significant generalization can be captured about the possibility of referential overlap between nonanaphoric NPs (local pronouns and pronouns) and the possibility of bound anaphors (reflexives and reciprocals) as follows: bound anaphors will be well-formed in only those positions where referential overlap between nonanaphors is not allowed. In (1978) he formulates an algorithm that achieves this result for S’s and (a) assigning referential and anaphoric indices to 1 and (b) deleting “designated” indices under general “binding” conditions (the Noninformative Island and the Subject Con.s). As noted by Fiengo and this paper presents a variant of Chomsky’s proposal positing two rules operating on the referential and anaphoric indices of pronouns and anaphors and employing the cycle rather than the binding conditions. It is demonstrated that the NP in NP data will follow from the rules posited and the independently needed assumption that the head of an NP adopts the index of its containing NP.

JOHN BAUGH, University of Texas, Austin

Situational Variation of Suffix -s in Black English

This paper examines the nature of suffix -s variation among adult black English speakers under a variety of social circumstances. The data have been gathered over a four year period in Los Angeles and have been analyzed with the Cedergren/Sankoff computer program for multivariate linguistic calculation. In the final analysis suffix -s is significantly affected by social circumstances: in more formal settings -s appears with greater frequency, while less formal situations reveal an increasing probability of -s absence. This kind of analysis is not only new to black English research, but enriches existing sociolinguistic methodologies in that the present variation is attributable to speakers’ sensitivity to the relative formality of speech events.

THURSDAY-APR: 3

JOSEPH C. BEAVER, Northeastern Illinois University

Spectra of Adjacent Vowels

Previous research suggests that [2] and [3] might be distinguished perceptually in any general ways. Phonological theory, to the extent that the concept of distinctive features implies perceptual cue, has suggested a few possibilities: at various times the two magnitudes have been assigned opposite values for the features grave, strident, and nasality. Phonetic studies by Stevens (1960) and others have revealed different acoustic properties within the respective fricatives. Harris ([1969] in a study of the subject of vowels, the spectrograms show that while formant behavior appears to be uniform enough to serve as the means of distinguishing [2] and [3] in the environment of some vowels, the behavior is apparently too similar across speakers to supply the distinguishing cue for others. With yet a third group of vowels, the spectrograms show that formant behavior from speaker to speaker which might supply idiosyncratic cues for listeners.

RACHEL SPEECHER BEDOR, University of Minnesota

Perception of the Oral-Nasal Distinction in Consonants and Vowels

Previous experimentation with the perception of synthetic speech continua reveals that although the consonantal portion of a synthetic syllable is varied categorically perceived, series in which the vowel is modified tend to be continuously perceived. It is uncertain whether such results are to be attributed to perceptual differences involving the consonantal or vocalic properties under variation in each series or to perceptual differences involving other, non-varying properties of the consonants and vowels. To investigate this issue, the perception of consonant and vowel series which incorporate the same variation was studied experimentally. The oral-nasal distinction was chosen.

Two synthetic continua, /ba-nga/ and /ba-ba/, were generated by lowering the velum in equal increments on an articulatory synthesizer. A second /ba-ba/ continuum was produced by adding lip and hyoid bone movement to velum lowering. 16 native French speakers performed identification and discrimination tasks on each continuum. The results of these tests for all three series reveal the correlation between identification and discrimination functions characteristic of categorical perception. These results are consistent with certain previous explanations proposed to account for differences in performance on perceptual tasks involving consonants and vowels.

WILLIAM BERGAN & JAMES COOTS, S. W. S. R. E. Research & Development

The Comprehensibility of Discourse Paraphrases

In a discourse comprehension experiment third through sixth grade children read short expository paragraphs presented in three syntactically controlled paraphrases: (1) complex sentences with elaboration between the head of the subject and the verb, (2) syntactic elaboration elsewhere in the sentence, and (3) simple sentences. Third and fourth grade children recalled paraphrases (2) and (3) significantly better than the parallel series in which there are sharp developmental trends with the effect disappearing among older children. The experiment shows that the familiar comprehension difficulty with center embeddings generalizes in part to a wide range of nominalizing and relativizing structures that make lexical information between subject and verb. Posthoc analysis revealed that the effect for young children is greatest in nominalized structures. The results also indicate that conventional measures of readability, length, or even more sophisticated measures accounting for number of embeddings, are inadequate to account for the effects of syntactic form on discourse comprehension.
A Discourse Domain Identified by Intonation Contours

A number of linguists, including Liberman and Pop, have noted the special intonation patterns of sentence adverbs, expletives, vocatives, certain tag questions, quotative verbs, epistemic verbs and polité expressions. In this paper arguments will be made that these special intonation patterns mark a special discourse domain. Utterances within the discourse domain do not contribute to the truth value of the sentence, but are related to speaker-listener relationships. Consider the following sentences:

1. This is my sister, Bunice.
2. This is my sister, Bunice.

The contour on Bunice in (2) identifies the word as part of the discourse domain and signals to the listener that the term does not contribute to the truth value of the sentence; if the listener is not named Bunice, the sentence is still true. This is in contrast to (1) where if the sister is not named Bunice, the sentence is false. The identification of the discourse domain makes it possible to identify two clear domains for intonation contours which have different, but predictable, characteristics.

Berber Participles: Subject Extraction, and VSO Languages

Kabyle, a VSO Berber-language of northern Algeria, has several constructions that make use of a special verb form called the participle in reference grammar. The Kabyle participle appears in clefts, relative clauses, and VV questions. These constructions consist of a head NP followed by the participle, which has a prefixed complementizer and a suffix which marks extraction of its subject. The syntax of these constructions, which has not previously been well studied, is typologically interesting in that taken in conjunction with recent work on other unrelated VSO languages, it suggests a typological peculiarity of verb-initial languages not previously noted.

The Morphological Character of German Final Devoicing

Vennemann (1972) sketched a theory of German final devoicing which holds that devoicing is syllable-final; that syllable boundaries are placed in accordance with a phonological strength hierarchy; and that clusters may be resyllabified according to a "Law of Initials." When considered in detail, the theory runs into certain difficulties. There are cases where the principles would not be expected to place a syllable boundary after an obstruent, but where there is devoicing (nägeltich, etc.), and cases where there is no devoicing although the principles ought to place a syllable boundary after the obstruent (Segenent, etc.). Especially difficult is the contrast, in some dialects, between eg. grublein (with h-stop) but Knäblein (without devoicing).

We show that (1) the devoicing principles must involve morphological boundaries; (2) devoicing in certain derived forms must be made somehow dependent on devoicing in non-derived form; and (3) a separate late phonetic rule, distinct from final devoicing, is required of voicing assimilation in obstruent clusters.

The Acquisition of a Morphological Category

Studies of the variable rule which deletes final stops from consonant clusters in English have found that this rule exhibits an interesting combination of constraints: some are phonologically predictable and regular for all speakers, while others are highly dependent on extralinguistic factors. An example of the latter is the treatment of the "strong/weak" verbs as loss-lee, keep-kept, etc., which have in the past tense both a vowel change and a dental stop suffix. In the present study, the rate of deletion of the final stops in words of this type is shown to change dramatically with age. This indicates a gradual reanalysis of the morphological structure of such verbs which continues throughout a speaker's lifetime. In contrast, the deletion rates for final stops in monomorphemic words, and in ordinary past tense verbs, remain relatively stable with age. The morphological reanalysis seems to involve a progression from an underlying form with no final stop (e.g. /kept/), to one without a boundary (/kept/), and finally to the creation of a special category for these verbs with a derivational boundary before the suffix (/kept/). The various words of this type do not follow this progression at different rates. The data to be presented are drawn from a study of over 30 speakers ranging in age from 3½ to 65.

Causative Serial Constructions and Word Order Change in Papua New Guinea

Much of the debate about serial verb constructions has centered around the question of whether they constitute one clause or more than one. This structural ambiguity, however, may serve a useful purpose. In SVOV causative serial constructions, the first verb denotes a causing action and the second the result of that action. The Object NP follows the verb specifying the manner in which its referent is acted upon and precedes the verb describing the result of the interaction. Such constructions have displaced the inherited morphological causative in many Austronesian languages on the New Guinea mainland. These languages have inherited a variety of features associated with OV word order (often with OV word order as well), presumably in response to the overwhelming OV Papuan substrate languages. Austronesian languages other than the New Guinea mainland are quite consistently VO in their word order and associated typological traits. Many of the Papua New Guinea Austronesian languages show evidence of an SVOV stage on the way from the SVO to SOV. By decomposing verbal notions previously rendered by a single causativized verb into separate cause and result verbs, and arranging those verbs in an order matching the unfolding of the real world events being described, Austronesian speakers could achieve structurally ambiguous—yet quite natural—syntax.
A Sociolinguistic Survey of English in Cornwall

On the basis of historical descriptions of the Celtic language Cornwall and the development of the English language and its different pronunciation in West and East Cornwall throughout the past 900 years it was possible to state two main hypotheses before any interviews were conducted in Cornwall: 1. Among the present population of Cornwall there is a social stratification concerning the pronunciation of English. 2. There is less variation in the pronunciation of English in West Cornwall than in East Cornwall. For this project three phonetic variables were investigated: the postvocalic /r/, and the unvoiced initial th- ("thimble"). The results of the survey are based upon 14 individual tape-recorded interviews which were conducted in St.Ives/West Cornwall and Bodmin/East Cornwall in 1978 and 1979. On the basis of education and profession informants were assigned to three different socioeconomic classes (MMG, IMC, WO). The analysis of the interviews leads to the following results: 1. The pronunciation of the upper social classes show less variation from the prestige variant "Received Pronunciation" than the pronunciation of the lower groups. 2. The population of West Cornwall pronounces less variation from "RP" than the population of East Cornwall.

Catherine P. Brown, New York University

Word-internal Order: Evidence From Language Errors

Word processing involves specifying both the items (e.g., phonemes, syllables, etc.) comprising the word, and the correct order of those items. The order information is generally assumed to be an inherent part of the item. Analysis of language errors shows that this is not the case; order and information are separable. Lexical and sentence processing information is more easily lost than item information in lexical retrieval. Production errors also exhibit a breakdown in order information of a different sort, whereas perceptual errors involve a greater failure in item as opposed to order information. Moreover, order information is not easily lost in lexical retrieval and perceptual processing. Experiments exhibit complementary behavior: where one system is relatively weak, the other system compensates.

Pamela Bunte & Robert Franklin, New Mexico State University

Southern Paiute: A Case of Syntactic Ergativity?

In this paper, we examine ergativity and accusativity in Kalah Southern Paiute, emphasizing the imperative which appears to display both morphological and syntactic ergativity, in imperatives, second person transitive subjects are deleted while the direct object appears sentence-initially and accusativity are put in softening the form of the verb (cf. J.R. Searle 69 Speech Acts). Also examined are the extension of characteristics of normal grammatical subjects to direct objects and intransitive subjects of imperatives, and the idiomatic use of imperatives where interpretation of a second person as subject is semantically implausible. The and, in general, the systematic prescription on implying control over others, lead us to conclude that the imperative has been reanalyzed as a passive-like construction with softened directive force since an ergative imperative subject animality is deemphasized.

Veda Charrow & Jarice Redish, American Institutes for Research

Linguistics and the Study of Legal and Bureaucratic Language

With the growth of discourse analysis, pragmatics, and studies of the effects of world context on language, there has been a concomitant growth of interest on the part of linguists and psycholinguists in the study of language usage in the real world. At the same time, the field of linguistic theory has been useful in this area, in that it has shed some light on the complex syntactic and semantic complexity, and has demonstrated the need for "simplicity" to match the complexity in semantics and discourse structure.

The present paper describes the initial research of a project in which linguists and psychologists are jointly studying the issues involved in the comprehension of bureaucratic and legal language. We will report on the results of a series of psycholinguistic experiments investigating the factors influencing the comprehension of complex conditionals, the misunderstanding of novel terms, and readers' misinterpretations of writers' context cues, as these features occur in bureaucratic and legal language. The research from this project provides a link between linguistic and real-world language processing problems, and the results serve to expand linguistic theories of discourse structure and pragmatics.

Robert Franklim, New York University
Naturalness of Explanation and the Problem of Central Embeddings

The question of whether central embeddings can occur to an unrestricted depth, which has received considerable attention in the literature, has been focused mainly on two theoretical issues: 1) Is a finite state model (which does not allow unrestricted embedding) weakly adequate for the description of a natural language? 2) Which particular model can handle the observed phenomena most naturally? It has been claimed by Christie (1976) and by Reich and Dell (1977) that at the depth of one, that a finite state model may therefore be adequate, that the normal depth limit is one, and that a relational network model provides the most natural explanation because it has a built-in depth limit of one that can be overridden only with difficulty. All data have heretofore come from English. But if the limit is built into the grammar, no language should show deeper embeddings. Afrikaans allows central embeddings to a depth of two. Therefore while a finite state model may still be adequate (Afrikaans does not allow deeper embeddings), the naturalness claimed for the relational network model fails for the Afrikaans data, and hence cannot be claimed as an inherent advantage for the model.

PATRICIA M. CLANCY, University of California, Berkeley

Referential Choice in English and Japanese Discourse

The purpose of this paper is to explore the factors governing selection of nominal, pronominal and elliptical forms of reference in the narratives told by 20 Americans and 20 Japanese based on the same short film. In both language speakers tended to use nominal reference for a particular character when a certain number of clauses, sentence boundaries or mentions of other characters had occurred since the last mention of that character in their story; this suggests the existence of shared cognitive limitations on referential possibilities. Nominal reference occurred primarily when introducing new characters into discourse, and when switching subject reference. Changing subject reference without an overt noun phrase was much more common in Japanese, but various referential strategies were used, such as relating subjects or adding postposed subjects, were also common. In both languages the presence of episode boundaries triggered a switch to nominal reference. "Narrative strategies" involving the selection of a particular character as the "hero," from whose point of view events were related, also influenced referential choice. Speakers tended to use inconsistent forms of reference (pronomes and ellipsis in English and ellipsis in Japanese) for the "hero" and nominal reference for peripheral figures. This referential choice is seen as the outcome of cognitive universals, language-specific formal possibilities, and discourse factors such as the need to mark boundaries in discourse and to create a point of view for narration.

I.D. CONWAY & GEOFFREY S. NATHAN, University of Hawaii

It Sounds Like Some Kind of "R": Who?

Although they share virtually no articulatory features in common, there is a set of sounds that linguists classify as 'kinds of r'. Also, languages borrow sounds from each other; if these sounds were in some way equivalent, and historical changes often occur within the set of sounds we call r's. We propose that all the sounds that can be called 'r-like' share the acoustic correlates of having F2 dip below 2 kHz, F3 dip and F4 between 1 kHz and 2 kHz, and lower amplitude in F2 and above than in adjacent vowels. These r-type sounds also have well-defined formant structures, without the abrupt discontinuities with adjacent vowels characteristic of another liquid, l.

In Cases of putative r's which do not have these characteristics we prepared a perceptual test, which administered to a panel of phonetically trained linguists, produced near-unanimous agreement that the questionable sounds were not r's. Thus we were able to conclude that the reason certain sounds 'sound like r' is that they share a set of common acoustic features.

MAYNE COMART, Queens College & the Graduate Center, City University of New York

A Defense of an Autonomy of Syntactic Processing Thesis

The autonomy of syntactic processing thesis may be taken to assert that 1) there are psychological operations uniquely concerned with the form of utterances, and that 2) there exist internally determinate syntactic operations whose output is never contingent upon the semantic interpretation or pragmatic function of the utterance. Two recent papers by Tyler and Marslen-Wilson [Journal of Verbal Learning and Verbal Behavior, 16:683-692] and Townsend and Bever [Journal of Verbal Learning and Verbal Behavior, 17:509-521] present evidence which appears to undermine the autonomy thesis. Tyler and Marslen-Wilson purport to show that the interpretation attributed to ambiguous phrases such as landing planes is controlled by the semantic properties of a preceding clause. Reanalysis of the data and additional evidence show that the relevant properties of the prior clause are syntactic (e.g., whether the last pronoun is plural) and that these syntactic effects are operative even when the resulting semantic interpretation is bizarre. Townsend and Bever purport to show that the "causal-temporal" properties of certain subordinating conjunctions can affect the "immediate processing" of adjacent clauses. The argument turns on the assumption that the class of subordinating conjunctions used is syntactically homogeneous. The assumption is shown to be false.

VIDA P. DE GUZMAN, University of Calgary

Morphological Evidence for Primacy of Patient as Subject in Tagalog

There have been studies in Tagalog that present syntactic and psychological evidence in support of the primacy of patient, not agent, as subject. This paper will show morphological evidence that adds strength to the claim. A re-analysis of the verb structure reveals that classes of verb stems with a basic and/or simpler morphological form inflect for the objective voice or patient-as-subject but not for the agentive, for the related verb forms to inflect for the agentive, if this is at all permissible, the stem has to assume a more complex derived form.
SCOTT DE LANCEY, Indiana University

Viewpoint, Attention Flow, and Subject Coding Properties

This paper will discuss several "split ergative" and other morphosyntactic patterns and their relevance to the notion "subject," and argue that subject is not a linguistic prime, but derivative. In the split ergative pattern (Vpt) and attention flow (AF), Su coding properties are distributed between Vpt and AF - vb. agreement with Vpt, and leftmost position with either Vpt or the starting point of AF. Natural Vpt with NP higher on empathy hierarchy; natural (iconic) AF is assigned to Patient. Thus ASs are natural Vpts in some lgs., either natural Vpt if AF is obligatory. In Navajo, Vpt determines all Su properties; passive is obligatory if FPA on empathy hierarchy, blocked if AF is. Su must be the more natural Vpt if that entails less natural AF, the verb is marked this is the converse of the direct/inverse pattern of Algonquian and some Tibeto-Burman lgs. where the verb is marked when Vpt is sacrificed to AF. In the typical person-split ergative pattern natural Vpt NP governs agreement and lacks case marking (regardless of case role) but word order is ordinarily A+P, reflecting natural AF. Often (e.g. Tangut) there is no 3rd person agreement; agreement reflects only Vpt. In many lgs. aspect constraints Vpt assignment (Delancy 1979) so person and aspect split patterns are congruent. In these lgs. Su coding properties don’t necessarily converge on one NP the two components of subjecthood are coded independently, and the notion "subject" is irrelevant.

KATHERINE DEMPSEY & JENNIFER YARNO, Indiana University

The Imperative: A Study Based on African Languages

Aside from studies based on English data, little theoretical work has been done on the imperative. This paper examines strategies used in forming imperative constructions in a sample taken from the population of African languages and thus provides a broader base for theoretical claims about the imperative. The imperative as defined, is limited to the syntactic expression of a command as distinct from requests and other quasi-imperatives and is expanded to include prohibitives. The aim of this study is to explore the formal realizations of the imperative over the range of human languages and to arrive at a statement of the syntactic correlates of the semantic notions of the imperative. Although we find a variety of syntactic constructions employed in the imperative it is striking that there are significant patterns which provide evidence upon which to base a number of tentative universals: 1) the imperative is used rather than the pro-form 2) plurality is marked in the imperative and prohibitive if number is also marked. These tentative universalities must now be tested against more diversified language populations. This paper then provides a systematic typological framework for future study of the imperative.

ANTHONY DILLON, Australian National University

The Fate of Standard Zhuang

In a condition of stable diglossia, what are the prospects for a promoted version of the low variety to survive and become a new second-tier literary norm? Such a promoted low is Standard Zhuang, designed in 1957 to be a literary medium for some ten million Tai speakers living in China north of the Vietnamese border. Its survival prospects are presently poor, but it lingers on. The paper traces the promulgation and decline of this literary norm and argues that its demise is due to the internal sociolinguistic character of the speech community and partly from other external factors.

Materials published in Zhuang orthography can be useful for linguistic analysis, but caution is required. In particular, technical decisions made when the script was devised need to be interpreted in terms of Zhuang dialectal and sociolinguistic factors. The paper concludes with a relevant example: Standard Zhuang's four problematic palatal-cluster graphemes are interpreted and contrasted with aspirated stops and -r- and -ıl- clusters in representative local Zhuang varieties.

DOROTHY DITTERSHEFT, University of South Carolina

The Spread of Dative Verbal Noun Complementation in Irish

The earliest type of nonfinite subordination after subject and object-equal verbs in Old Irish is with accusative verbal nouns which have genitive objects. In the glosses, subject-equal clauses only to a very limited extent admit dative verbal noun with accusative object; in Middle Irish the list is expanded. Indirect object-equal verbs have only accusative complements in the early glosses, but in the later ones (e.g. Liber Hymnorum), dative verbal noun/accusative object structures appear with one verb (as-beltr 'sell'). This is a study of the shift from the dative accusative complementation to that with dative verbal nouns in Old and Middle Irish. The gradual adittance of new lexical items to the main clause as well as changes in the structures themselves will be emphasized. Furthermore, the data indicate that new verbal nouns are admitted into the subordinate clauses only gradually, as in the main clauses. In the early glosses only do denum 'to do' regularly appears as a dative complement; by Middle Irish all such constraints have been dropped.

THOMAS S. DOWAHLE, San Diego State University

Tolkien and the Elvish Languages

Protes of Tolkien's Lord of the Rings have exercised considerable ingenuity both in their efforts to establish the phonological laws between the Elvish languages Quenya and Sindarin, and in their attempts to reconstruct Proto-Eldarin, the parent language. These enthusiasts, however, have not made a trained and dispassionate examination of Tolkien's linguistic ingenuity, and a respectful but academically skeptical scrutiny of his methods. In this paper, I examine Tolkien's love of philological sport: the name of the first-speaking creature on earth (Quendi) is the same as the IP root for 'women'; he toyed with inelastic endings and with varying dialect spellings from Middle English (the word for 'make' is 'meca' in Quenery and 'lig' in Sindarian); and the vocabulary, without borrowing from Western European languages, duplicates the syllable structure of Pinnish, Welsh, and at times English and Irish. The sound laws relating Proto-Eldarin, Quenya, and Sindarin are quite sophisticated, and change according to laws of phonological naturalness, with metathesis and rule recoding as well; but at the same time some of the results burlesque Grimm's and Werhner's Laws. In all, Tolkien fanatics should be alerted that the phonology of these languages lends credence to Edmund Wilson's charge that Tolkien was engaging in "dominant whistle."

MORA DRAITZ, Baptist Hospital of Miami

Temporal Processing and the Development of Pragmatic/Syntax in Aphasia

Recent works in neuro- and psycholinguistics have emphasized the importance of an underlying knowledge of temporal relations in the development of communicative skills. The purpose of this paper is to provide evidence for the importance of temporal processing skills to the retraining of communicative behavior in fluent aphasia. Givon (1979) has described a continuum of language change in which a basic, pragmatic node of form.

HELEN DRY, University of Texas, San Antonio

Sentence Aspect and the Movement of Narrative Time

Although competent readers know which sentences within a narrative suggest that represented time is moving forward, and which do not, the linguistic phenomena triggering this perception have not been identified. Analysis of two narrative texts, however—N. Marsh’s Vintage Murder and M. L’Engle’s A Wrinkle in Time—suggests that perception of time movement reflects either the aspectual category of the sentence or the relationship between situations represented in adjacent sentences. Only when change of state is either incorporated into the semantics of an individual sentence or implicated through sentence relationships does narrative time seem to move forward in these texts.

GEORGE DUNKEL, Princeton University

The Original Syntax of Conjunctive *-k'e

Based on exhaustive analysis (collecting every example, counterexample, and alternative) of the RV, Ts, Avesta, Grk. historians, Hycnenean, Iliad, and Plautus, we find that single *-k'e predominates in the oldest stages everywhere. Further, the direction of the RV is the predominant one in the RV itself, whereas *-k'e was already predominant in IE. Also, "complementary unity" (marked meaning) is expressed by dbl. *-k'e only (marked syntax). But simple statistical predominance is not always enough to make a language more "natural" than another. Instead, it is the constructional difficulties: whereas no model exists for Ak'k'e > A k'e, one does for the reverse development: preverb repetition (RV, V, P, Np). Because *-k'e increases in frequency thru time (1.Xr, Grk); wherever P rep. is lost (Lat, Gothic), double *-k'e does not spread. Finally, P rep. conjoning being endogamous; the evidence of RV 10 and the Iliad show that a *-k'e begins its spread in conjunctive use. Conjunction in earliest IE was limited to sgl. *-k'e and ayxndeton; P rep., dbl. *-k'e, and dvandvas developed from these.

ALESSANDRO DURANDI, University of Southern California

Laugs and Talanoagas: Two Styles in Samoan Oratory

In the highly structured and ritualistic fono, the meeting of chiefs and orators in a Samoan community, the language used is characterized differently from everyday talk. Such a difference is found at almost any level of the grammar: lexicon, morphology, syntax, intonation, turn-taking. However, within this "register" or "speech level", native speakers make an important distinction between two kinds of fono speeches: (1) the laugs and (2) the talanoagas. The former term refers to a ceremonial speech and the latter to a "talk or conversation". Their use, however, in this context, is different.

In this paper, I describe some of the features that characterize the "register" of Samoan spoken in the fono with respect to the Samoan spoken by the same individual outside the fono, and I describe also the features that make some speeches laugs and others talanoagas. In so doing, I will take the perspective of the partecipants, much in the fashion of the Ethnography of Speaking (cf. Bauman & Sherzer 1975; Frake 1972). Both the TOPIC CHOICE and a SEQUENTIAL ORDERING principle account for the native distinction.

GERALD ENGDAHL, University of Massachusetts

Grammatical Extractions Out of Complex Noun Phrases

In English extractions out of Relative clauses and Noun complement clauses have both been explained as Violations of Ross' (1967) Complex NP Constraint. I argue that it is possible to account for the facts in languages like Swedish in which extraction out of a Rel clause is ungrammatical but extraction out of a Noun clause is allowed, as shown in (1):

(1) a. Vilken bok, som jag gav henne, lade honom till {bok}.
   b. Vilken bok, honom {gav henne} att {ta}.

I propose that this fact should be accounted for in terms of the contrast in processing complexity between one gap structure and two gap structures, since only the excluded extraction out of a Rel clause will create a structure with two gaps. By attributing the contrast in grammaticality to processing factors we can also account for the noticeable difference in the degree of acceptability between Rel clause extraction and Noun clause extraction in English.

ALICE FABER, University of Texas, Austin

Semantic Word Order

This paper is an attempt to determine the word order of earlier stages of the Semitic languages independently of predictions derived from the relative order of verb stems and agreement suffixes. 500 sentences from Aramaic, Hebrew, Ugritic, Akkadian and Aramaic were used. Each sentence was coded for word order; presence and location of gap, agreement marks, neutral markers, conjunctions, demonstratives, adjectives, numbers and possessives; voice, external time reference, verb form, mood and clause type. Computer tabulations were run to determine all word orders found in a set of languages, and possible conditioning factors. The earliest word order found was SO, in Old Akkadian (c. 2200 BC) and Ugritic (c. 1500 BC). No evidence for VSO, commonly assumed to be the "primitive Semitic" type was found earlier than later West Semitic (Hebrew, Aramaic, Ethiopic). It is impossible to determine at this stage of Investigation whether VSO was a common innovation in later West Semitic or whether it occurred independently in the various languages. In any case, when taken in the context of a larger Investigation of word order and pronoun forms in Afro-Asiatic, this work provides no support for the hypothesis (Givon 1971) that one can reconstruct word order in earlier stages of a language from morpheme order in current stages of that language.

SUZAN FALKAS, University of Chicago

Subjunctive Relative Clauses in Romanian

The aim of this paper is to account for the distribution of subjunctive relatives in Romanian and to examine the relationship between subjunctive relatives and the referential (specific)/attributive (non-specific) ambiguity of definite and indefinite NPs. The first part of the paper gives a semantic characterization of referential and attributive NPs in terms of possible world semantics. The crucial difference between the two types of NPs is that the former refer to individual objects whereas the latter refer to intensional ones. The second part compares the distribution of subjunctive relatives with the distribution of Spanish subjunctive NPs, according to Rivero (1974). Spanish referential NPs do not accept subjunctive relatives while attributive relatives do. In R. subjunctive relatives can appear both in attributive and in referential NPs. The cases when subjunctive relatives can appear in referential NPs are a subset of the cases where subjunctive relatives are allowed in R. attributive relatives. In R. subjects refer to a virtual property, i.e., a property which is supposed to be realized in a set of possible worlds which do not include the actual world. The peculiarities of the distribution of R. subjunctive relatives follow from this characterization of subjunctive relatives and the intensional vs. extensional character of the referents of attributive and referential NPs.
In the acquisition of phonology all children confront difficulties in the production of certain sounds and sound sequences. The production of word-final voiced obstruents is especially difficult for many English-speaking children. This paper presents one child's solution to the problem of word-final voiced obstruents as an example of the interdependence between the cognitive and articulatory learning of phonological systems. The data consists of 3000+ utterances taken from a young child, Lasan, between the ages of 21 and 24 months. Throughout this period, Lasan produced word-final voiced stops and affricates with homorganic nasal plosion (without the nasal release of voiced stops, Lasan's use of the nasal release device seems to be motivated by phonological as well as phonetic considerations. With the nasal release of voiced stops, Lasan was able to produce the voiced stops and preserve the contrast between words which would otherwise become homophones under the operation of other phonological rules. This nasal plosion rule was regular and productive, as evidenced by Lasan's imitative productions of nonsense words. By opting for nasal plosion, Lasan was able to (1) maintain a phonetic sequential constraint which requires all word-final voiced noncontinuants to be nasal and (2) preserve the phonological distinction between word-final voiced-voiceless stops by means of stop segments (oral stop + nasal stop).

David Pilbeck, Lincoln Christian Seminary & Pioneer Bible Translators

Preservation of Text and Story Grammar in An Acoustic Syndrome (Korsakoff)

A case of Korsakoff's syndrome (a diagnostically recognizable amnesic syndrome) and a matched control were studied with memory tests derived from story grammar research and by an analysis of cohesion in spontaneous speech. The purpose was to explore the relation between neuropsychological and linguistic models in order to expand theories of neural representation of language functions. The Korsakoff subject has poor unaided recall for narrative material, but answers well-posed questions which have some reference to the target narrative. She recalls information in a sort of a sorted order with apparent consistency into the predicted order. In sorting, she also makes errors in the categories of story grammar recalled poorly by other subjects. In spontaneous conversation, the subject's textual system (Halliday & Hasan) was generally intact.

The results suggest a specific deficit in some aspect of the organized retrieval of narrative material although the cognitive scaffolding suggested by story grammar theory is intact and appropriate prompts markedly aid recall. The demonstration of significant amnesia suggests a lesion of some chalamic structures and mammillary bodies; the retention of the story grammar component of the textual organization in spontaneous speech suggests that these linguistic functions are not mediated by the above neural systems.

David M. Fischer & Joan D. Forman, MIT/MBT

Variation and Invariance in the Use of Classifiers in ASL

In looking at the phenomenon of classifiers in American Sign Language (ASL), we have observed that their use, in the place of full noun phrases, is a reliable indicator of the child's emerging grammatical knowledge. Further, we find that classifiers in ASL (rather than in English or Chinese) usage are intrinsically motivated according to a criterion which we can call abstract vs. concrete. This distinction refers to the classifier, not to the thing classified. The abstract classifiers are invariant within and across signers; they are abstracted enough away from the object that they do not change according to size and shape. The concrete classifiers do seem to be more closely tied to the physical world, they are still conventional; they are merely less abstracted. We hypothesize that the abstract set of classifiers have become grammaticalized, and that as the concrete classifiers become less abstract, they will lose their variability.

Joan D. Forman & Susan D. Fischer, MIT/MBT

Middle-Class Sensitive Classifiers in American Sign Language

Many studies have discussed the phenomenon of classifiers in American Sign Language (ASL). We have found syntactic restrictions on the use of classifiers in ASL. The syntax has been defined by different classifiers depending on the grammatical feature being repeated. Thus a verbal classifier will be different from a nominal classifier, both of which refer to the same real world object. Evidence will be presented that different physical features are represented in the nominal vs. verbal classifiers. For example, there is a set of verbal classifiers in ASL which represent the murderer in which an object is handled. Verbal classifiers will be used even in situations in which nominal classifiers would suffice. Verbal classifiers may not be used after nominal classifiers in nominal vs. verbal constructions. The phenomenon of classifier doubling (Example: the classifiers for tape, spoons, or boxes). Although the abstract classifiers have become grammaticalized, and that as the concrete classifiers become grammaticized over time, they will lose their variability.

Susan H. Foster, Lancaster University

The Development of Topic Type During the First Two Years

Topic, defined as the object of joint-attention to which at least one relevant turn by each participant is directed, was examined in a detailed study of the development of discourse skills in a group of children 0;1-2;6 in interaction with mother. It was found that the earliest topics initiated by the child are those that are concerned with the child's own well-being. As early as 0;5, there is growing interest in the immediate physical environment, reflected in the emergence of topic initiated with story classifiers in which the child draws attention to the real world. The proportion of topics focusing on the child decreases as that dealing with thins increases. At around 1;70, with the emergence of language, the first topics concerned with other than the here and now. Abstract topics begin to appear. The topic types documented can be seen to be related to Halliday's early communicative functional categories (Halliday 1973).

The categorization of topics into the three types is reflected in the following by which they are initiated.

11
JAMES A. FOX, Stanford University

Statistical Evaluation of Mayan Morpheme Structure Constraints

Mayan languages exhibit pervasive constraints on consonants co-occurring in CVC-morphemes. On the basis of lexical gaps in dictionaries of many Mayan languages, I first evaluate the constraints of individual languages, then turn to a more standardized statistical comparison. This work provides a foundation for an historical analysis of variation, and for psycholinguistic experiments in the field. It is pertinent to the problem of the psychological reality and nature of morpheme structure constraints.

STEVEN L. FRANKS, Cornell University

Surface Case and Numerals in Slavic

A formal theory of surface case is developed in an X-bar syntax framework. The case of a complement EP is uniquely determined by what lexical category, or combination of categories, commands it on a given EP. Numerals in Russian are treated as head nouns with NP complements to explain Subject-Verb agreement phenomena and the occurrence of the quantified NP in the genitive. They lose their nominal properties as the "grammatical definite" (GD) nature of the number increases, and this is accounted for by rules motivated in the general properties of GRs. The problem of case-switching in oblique quantified phrases in Russian is solved using a rule of restructuring, based on the premise that GRs or may have complements. Lastly, the principle that case features percolate first down to the leftmost daughter and are then sent back to percolate further only if change has been effected is proposed. I conclude that it is necessary neither 1) to treat numerals as special parts of speech "squeezed" between Adjectives and Nouns, nor 2) to extend transformational theory to permit underspecification of surface case features.

NANCY FRISCHBERG, Deafness Center, New York University

Dominance Constraint and Dominance Reversals in ASL

In American Sign Language (ASL) the Dominance Constraint (DC), a word formation principle, limits the possible actions in signs involving the simultaneous use of two different handshapes, in such signs, the non-dominant hand acts as BASE, not moving, while the dominant hand takes the ACTIVE role. For righthanders, the right hand will be ACTIVE and the left BASE, for lefthanders the reverse is true, Dominance Reversals (DRs), the exchange of ACTIVE and BASE roles by the two hands, may occur in a single lexical item or a string of signs, DRs often signal syntactic shifts or discourse structure breaks (e.g. non-restrictive relatives, emphatic lexical stress, etc.). Investigation of ASL varieties used in Puerto Rico points to differences in dominance reversal patterns. This paper reports the results of a study designed to test this hypothesis.

Jack Gardner, Purdue University

In Language in the Larynx?

We must continue to seek external evidence to help establish the psychological reality of phonological descriptions. This paper brings data from phonological speech to bear on a phonological rule found in most descriptions of American English. The durations of vowels preceding voiced-voiceless stops in utterances produced by three aphasic speakers and three normal speakers were measured. Vowels were significantly longer before voiced stops than before voiceless stops for both aphasic and normal speakers. For either postvocalic consonant environment, the average absolute durations of the vowels produced by the aphasic speakers were longer than those produced by the normal speakers. Speaker-group comparisons revealed no significant differences in vowel duration preceding voiceless stops, however, the average absolute duration of vowels preceding voiced stops was significantly longer for the aphasic group. Speaker-group comparisons revealed no significant differences in the relative durations of vowels preceding voiced-voiceless stops. Thus, our results support a phonological rule of vowel length variation in a language-specific behavior governed by a phonological rule of vowel length variation, rather than simply a language-universal behavior governed by inherent physiological characteristics of the speech production mechanism. Moreover, these data suggest that this phonological rule is a lengthening rule, which lengthens vowels before voiced consonants. (Research supported by NIH grant NS15371)
In Inuktitut, agents of verbs prefixed with 'uncontrolled action' can be expressed in the oblique case, as in the following example:

Ha - ited-kun kaq i Juan iit u u rta dagitik birk wq. 
Pst unc-give-adv obl Det Det money Det thief
'The thieves were given the money by John.' (unintentional)

In Ilokano, agents of verbs prefixed with 'uncontrolled action' can be expressed in the oblique case, as in the following example:

Ha - ited-kun kaq i Juan iit u u rta dagitik birk wq. 
Pst unc-give-adv obl Det Det money Det thief
'The thieves were given the money by John.' (unintentional)

Here, arguments are given that the agent in such sentences is initial subject (based on Reflexivation and Word Order) and final indirect object to subject indirect object is called Inversion in Relational Grammar.

The initial indirect object ('the thieves') is final subject (as shown by Case and Relativization); it is assumed that this is a direct advancement of indirect object to subject (Gerdts, 1979, Out of hierarchy: underlying syntactic and various idiosyncrasies of indirect object is called Inversion in Relational Grammar.

This paper describes factors influencing the lexical form and order of conjoined English personal pronouns. We assume the traditional roles of surface syntactic case and of level of formality and focus on data beyond the predictions of those parameters. We are concerned, for example, with mixed-case conjunction, non-traditional word order in object position, conjunction-initial 2, and various idiosyncrasies of indirect object. Significant factors include phonological, deeper syntactic, discourse, and individual influences. These participate in a dependable and partly indeterminate hierarchic interplay, converging in the negation of actual lexical and syntactic choices by speakers. Conjunction and focus dependence are responsible for the choices made between conjunction and simple plural pronouns.

**The Form of English Pronominal Conjunction**

This paper describes factors influencing the lexical form and order of conjoined English personal pronouns. We assume the traditional roles of surface syntactic case and of level of formality and focus on data beyond the predictions of those parameters. We are concerned, for example, with mixed-case conjunction, non-traditional word order in object position, conjunction-initial 2, and various idiosyncrasies of indirect object. Significant factors include phonological, deeper syntactic, discourse, and individual influences. These participate in a dependable and partly indeterminate hierarchic interplay, converging in the negation of actual lexical and syntactic choices by speakers. Conjunction and focus dependence are responsible for the choices made between conjunction and simple plural pronouns.

**Differential Opacity**

Paul Kiparsky claims '... the different subrules of a rule may differ in their degree of opacity' without offering any evidence in support of this claim. I offer support for his claim in the form of evidence from linguistic change in Rumanian. The phonology of Old Rumanian contained a rule of Diphthongization which transformed the vowels /ei/ into the diphthongs [i] /i/ before a syllable containing the vowels /e/ /e/. The subjunctive k--g--k, e) is inoperative in New Rumanian. I argue that the loss of this subrule is due to differential opacity resulting from the absorption by Rumanian of Old Slavic words in which there was a lexical distinction between the segments /k/ and /e/. These had the reflexes /e/ and /e/, resp., in Old. Both segments occurred in the environment /-e/. The attempt to preserve the distinctiveness between lexical items of Old Slavic by means of the phonetic repertoire of Rumanian introduced into the phonetic forms of Rumanian strings like [me]-[e], formerly non-occurring in Rumanian: an acceptable variation of the operation of the quoted subrule. When such forms became current, the relevant subrule was rendered opaque and lost from the grammar. I also supply an argument against the standard analysis according to which this phenomenon is accounted for by addition of the rule /k--g--k, e) to the phonology, using Hogg's argument against an unacceptable variation of the Duke of York Gambit.
An Unrecognized Greek Lautgesetz

In 1978/9 we celebrated the centenary of Saussure's spectacular Filiation. It is fitting then that we illustrate the continuing validity and heuristic of the Ausnahmelehre der Lautgesetz, in Brugmann's 1878 sense, and of the "laryngeal" entities which Saussure disclosed.

So far as we know, the traditional and orthodox Greek to reflect IE tenses with tenses; therefore for "he we expect T. However we shift a) our phonetic expectations, and b) our semantic focus (remembering that the Greeks fitted so to entities which Saussure disclosed.

The theory must be modified in other tactic categories. A similar but distinct formal apparatus for an alternative to disjunctive ordering, proposed by Hale and Vergnaud, holds that stress rules must construct the largest possible foot, subject to a maximum foot size (three syllables in English), to the extent that the weak nodes of the foot may dominate. In English these are that the first weak node must dominate a light syllable and the second a lax vowel, with feet such as cinnamon, agenda, and attire resulting.

The paper therefore presents a non-transformational model of Greek laryngeal accent, a feature that the stress pattern of Akan, a Philippine language, can be described in a simple unified way using the principle, but not with disjunctive ordering.

Eric P. Hamp, University of Chicago

The principle of disjunctive ordering states that in rules expressed by parentheses, longer expansions apply before shorter ones, and that once a rule has applied, later expansions are omitted. Stress rules often employ this principle to extract stress as far as possible, subject to regroupings on the syllables that may be skipped over. The notion of metric ordering offers an alternative to disjunctive ordering, proposed by Hale and Vergnaud, in which rules must construct the largest possible foot, subject to a maximum foot size (three syllables in English), to the extent that the weak nodes of the foot may dominate. In English these are that the first weak node must dominate a light syllable and the second a lax vowel, with feet such as cinnamon, agenda, and attire resulting.

Eric P. Wex, Massachusetts Institute of Technology

This principle is too strong. Study of a wide range of data suggests that inflectional, but not derivational, rules have X-bar properties, and that the theory must be modified in other ways to accommodate forms like medis(e) himi medis(e) Adjective; medis Adverb; medis, medis, medos, ... Verb.

Wayne E. Harbert, Cornell University

In Defense of Tense

This paper examines the status of tense (or finiteness) in systems of constraints on binding. Chomsky (1973 and later work) proposed two constraints, the Tense-S Condition (TSC) and the Specified Tense Condition (STC), which refer to the configuration $\phi(X,...,X)$. The TSC blocks binding of an anaphor X to an antecedent Y if the tense of $\phi$ c-commands X, ruling out: *They believe that each other, and *This blocks such binding from the subject of $\phi$ c-commands X, ruling out: *Mum, wants Mary to shave himself.*

Recently, Chomsky (1978) has replaced this system with one not referring to tense. The new system retains a version of the TSC, but adds a Nominative Island Constraint (NIC) which blocks binding of X to an anaphor if X is nominative. This constraint is then specified as a c-command, like the first, in which the governing anaphor is the subject of $\phi$. NIC duplicates all other effects of the TSC. In *John, expects Mary will shave himself.*, the PIC is thus superfluous, and may be dropped, eliminating undesirable duplication.

In this paper, however, I argue for the existence of the PIC in Gothic, Icelandic, German, and Hindi. In each case, anaphors in finite clauses cannot be bound to clause-external antecedents, even where the NIC and TSC cannot block such binding. The need for a PIC is illustrated in cases like *John has developed a non-transformational model of grammatical description claimed to possess formal properties appropriate to a theory of natural language. Although the proposals of Gazdar are interesting in many ways, they is not yet amount to a linguistic theory. Gazdar grammars contain numerous vacuous subroutines, e.g., a context free FS rule indexed to lexical items in such a way as to permit context-sensitive-type type restrictions. It is possible to define these on rules to derive yet more arguably context free rules. The meta-rules capture many generalizations beyond the power of phrase-structure grammars, but only because the basic properties of the grammars remain unused and simple generalizations captured by those grammars are ignored. More generally, Gazdar grammars are subject to no methodological constraint requiring the extraction of all significant generalizations using permitted abbreviation devices. A similar but distinct formal apparatus is defined in this paper. Like a Gazdar grammar, this is capable of capturing many typical transformations in the lexicon, but avoids both transformations and PS rules. Devices proposed by Chomsky in 1975 for abbreviating parts of the transformations are used instead, in this paper to analyse the English AUX
The French Presentative as a Base-Generated Structure

This paper argues that the French presentative construction (1)-(3), attributes by Kayne (1975) to the transformation NP Extrap ReEnglish There Mention), is base-generated.

(1) Il est arrivé beaucoup d'Américains. 'There arrived many Americans.'

(2) Il se construit des bâtiments. 'There are buildings being constructed.'

(3) Il a été mangé. 'It was eaten.'

I argue against NP Extrap and for base-generated structures in the following four reasons.

First, Bickerton's (1979) non-transformational analysis of verbal nexus compounds is inadequate to explain the French presentative. NP Extrap eliminates the need for specifying lexical items as part of the SD of the compound, and correctly predicts the class of verbs which allow the presentative. Second, Bickerton's approach makes no sense in the Greek data-base. Third, Bickerton accounts for the grammaticality of the presentative in causative sentences (4) which, under the transformational hypothesis, should be prohibited by the middle verb NP 's move (2) is allowed in presentatives. Fourth, Bickerton's (1979) preference for a definitively ungrammatical clause 'The movement made a cry escape him.' If cry is generated as an oblique, not a subject, the SBC is not violated and the grammaticality of (4) is predicted. Presentative, Bickerton provides a unified and much simpler treatment of the presentative: NP Extrap arbitrarily requires that middle as (2) and passive (3) NP's be moved twice (oblique to subject, subject to oblique); Bickerton requires no double movement. This analysis points out a further need to study the functional role and stylistic limitations of the presentative.

JAMES J. HESSINGER, Temple University

A Statistical Data-Base for the Study of Greek and Latin Syntax

This paper will show how the statistical analysis of a properly conceived data-base significantly alleviates empirical problems in studying languages without native speakers. I describe the Latin and Greek data-bases I am using in developing the statistical analysis for which they are intended and the adequacy of the statistics to three types of empirical problems in the Greek data-base are illustrated in machine-readable code, (2) being the code for (1), which is from Xenophon, Conophage: IV.11.19. I will use a handout to explain the code used in such analyses.

(1) (2) O2569 H X AGGEL X 35IAI ZINPSXX 22AAPPX

The grammatical problems considered as examples of the pertinence of the statistics are: (a) the source of the Genitive; (b) the syntax and semantics of preposition-preverbs; (c) the syntax and semantics of verbs... For example, Bickerton's (1979) proposed a non-transformational analysis of verbal nexus compounds such as 'papa' or 'mother' to be used by animal and human. In addition, Bickerton's (1979) proposal is based on the premise that syntactic change, which occurs during the process of decreolization, is strongly 'first'.

LORRAINE BINTON, University of California, Berkeley

Mothers, Mommies and Moms: How People Address Their Parents

Choice among lexical variants is delicately linked with social and attitudinal variables. A survey of terms used by college students and staff in direct address to their parents as children and as adults shows regional, sex and age differences in choice of terms, and reflects social and personal change in progress. Boys of all ages are more likely to use "Mom" while girls are more likely to use "Mommy" and "Daddy". Boys using "Mom" and "Daddy" switch to "Moms" and "Daddies" switch to "Moms" about age 10, while girls do not switch until about age 20. Adult females often employ non-parallel address terms for their parents, often using "Daddy" throughout. This paper compares the formal "Mom" for illness and the more non-parallel address terms for their parents, often using "Daddy" throughout. This paper compares the formal "Mom" for illness and the more non-parallel address terms for their parents, often using "Daddy" throughout. This paper compares the formal "Mom" for illness and the more non-parallel address terms for their parents, often using "Daddy" throughout. This paper compares the formal "Mom" for illness and the more non-parallel address terms for their parents, often using "Daddy" throughout. This paper compares the formal "Mom" for illness and the more non-parallel address terms for their parents, often using "Daddy" throughout. This paper compares the formal "Mom" for illness and the more non-parallel address terms for their parents, often using "Daddy" throughout.

JASMIN HILLARD, American Institutes for Research
Even, Only, and Conventional Implicature

The Karttunen/Peters (1979) notion of conventional implicature, a non-truth-conditional, non-discourse aspect of meaning with the projection properties ascribed to presuppositions in Karttunen's earlier papers, is argued to be inadequate for dealing with sentences involving even and only. First, the implicatures assigned to Bill likes even Mary (he likes even Mary) by the least likely one under consideration for him to like the K/P model are too weak, since they don't disappear as they should under eventual negation (cf. "Bill doesn't like even Mary—she's the only one he likes").

Secondly, the interpretations of even are different from those of the base assumptions for him to like the K/P construction; that is, fall to predict the non-syntactically of Not even Bill likes Mary (that is, even Bill doesn't like Mary, the former differing radically in implicatures from Not even Bill likes Mary); even Bill in the non even phrase must be assigned wide scope with respect to negation. Finally, the implicatures associated with only, while intuitively not quite falling properly with negation (Not only Bill likes Mary shares the implicature of Only Bill likes Mary—i.e. that Bill likes Mary—and is non-synonymous with Only Bill doesn't like Mary), are weaker than well-behaved Greek or K/P conventional implicatures, especially defined by the context. In this case, the notion of cancellable presupposition defined in (Gasbar 1968) seems preferable, but it too has problems with the even facts.

LAURENCE R. NORM, University of Wisconsin

SUSAN N. HOUSTON, VA Hospital, Pittsburgh

NANCY ZUCKER, Cornell College

SUSAN N. HOUSTON, University of Iowa & KEATHEN HOULIHAN, University of Minnesota

MEL JACOBS, Columbia University & MAX WEINREICH CENTER OF YIVO
A Notation for Structural Sound Change

A fundamental factor in the categorization of sound change as it affects linguistic structures concerns changes in the number of contrasting units that occur in different environments. This paper presents a notation that will show this kind of structural status of individual sound changes. This allows any number of these to be represented one by one in their chronological order. Developing this notation forces decisions as to a typology of changes and the essential information to be shown.

The approach is applied to a category of changes (negative inserts) where the present merger, however, the interaction with different environments (marked under *special* conditions of length and interaction) is taken as partial justification for positive insertions in non-fronted position in the underlying structure of the language. The typology of sound change that emerges by this approach is very general.

The more generalized typology of sound change that emerges by this approach seems to show up certain inconsistencies in the established uses of terms such as split and merger, and in the distinction between primary and secondary changes.

JERI J. JAEDER, University of California, Berkeley

Vowel Shift Rule versus Spelling Rules: Which is Psychologically Real?

Of experiments designed to test the psychological reality of the vowel shift alteration in English, Myerson (1975) and Ceras (1978) got positive results while O'Hara (1974) and Starlinger (1975) got negative results in a spelling experiment that is implicating vowel shift. Myerson (1975) interpreted her results as implicating the PK of spelling rules (long/short vowels) rather than VR. I performed a category formation experiment in which Vo behavior according to SR could be differentiated from VR. All Vo followed SR and rejected VR. Further, it appeared that the abstract characteristic alternations between most verb themes. I proposed that these be grouped as Vo factors. The claim is that Vo behavior is the Ceras and Myerson experiments was guided by SR rather than VR; SR, on the other hand, can only explain the general behavior but also can explain an anoma (data: Vo response to [w-a] pairs.

JERI J. JAEDER & ROBERT D. VAN VALIN, JR., University of California, Berkeley

Initial Consonant Clusters in Yateé Zapotec

The Sierra Zapotec spoken in Yateé has a complex initial consonant cluster system which partly due to its interaction with verbal morphology (aspirated prefixes [w, l, ñ, i] - J obtains a number of Greenberg's (1978) universals. 1) Voiced semivowels are regularly followed by obstruents (eg. so? 'run', we?2 'he will write'). 2) Voiced/voiceless initial sequences are common (eg. n?l 'last night', wts? 'I slept'). 3) Voiced obstruent + nasal/semivowel combinations are unmarked while unvoiced obstruent + nasal/semivowel are marked. 4) The initial combinations [gs] and [gs], in which [s] and [g] are very similar retroglossal fricatives (eg. k?l? 'throw', g?l? 'counsel'). 5) All final consonant clusters in the voiceless uvular fricative (eg. ?louk 'black').

JAMES M. KARI, University of Alaska

Sound and Derivation in Athabaskan: Altna Motion Themes

Through the course of dictionary work on three Alaskan Athabaskan languages, several concepts relating to the lexical structure and the derivational morphology in the Athabaskan verb have been developed. An underlying root can appear in any one of three categories of derived forms in Athabaskan. A verb topic is the underlying lexical specification of a verb. Most Athabaskan verb stems can be assigned to verb theme categories which have recognizable semantic content and common structure in the simplest (least stable) form. The topic is the phonetic realization of the most stable form, which is the phonological structure of the verb. The topic is a verb theme with no aspectual prefixes or aspect suffixes in underlying form. Heirarchically layered derivations can be added to verb themes to create a great number of derived verb bases. One obligatory transformation is an aspectual derivation which adds to the base the topic prefixes and aspect suffixes plus one or more derivational prefixes of adverbial or directional meaning.

In this paper I will illustrate some of these concepts with data from two Altna motion themes of the same root. Many features of the motion system where five prefixes plus zero occur in ten imperfective-mode patterns) and the aspect system (where six suffixes and zero form 28 distinct aspects) are clarified by this approach.

HERMIA KERTING, Massachusetts Institute of Technology

Cross-Language Difference in the Perception of Voicing

It has been proposed that voicing contrasts, described in terms of voice onset time (VOT), derive from basic auditory constraints on the discrimination of timing relations. However, in Polish, among other languages, the category boundary between voiced and voiceless stops is displaced from the psychoacoustic one. Is there any advantage in keeping the linguistic category aligned with the psychoacoustic one, as English does? Results of a perceptual experiment suggest that there is, in that the English boundary one or more verb themes as well as in other word classes. A verb is the underlying lexical specification of a verb. Most Athabaskan verb stems can be assigned to verb theme categories which have recognizable semantic content and common structure in the simplest (least stable) form. The topic is the phonetic realization of the most stable form, which is the phonological structure of the verb. The topic is a verb theme with no aspectual prefixes or aspect suffixes in underlying form. Heirarchically layered derivations can be added to verb themes to create a great number of derived verb bases. One obligatory transformation is an aspectual derivation which adds to the base the topic prefixes and aspect suffixes plus one or more derivational prefixes of adverbial or directional meaning.

In this paper I will illustrate some of these concepts with data from two Altna motion themes of the same root. Many features of the motion system where five prefixes plus zero occur in ten imperfective-mode patterns) and the aspect system (where six suffixes and zero form 28 distinct aspects) are clarified by this approach.
WORK ON SYNTACTIC VARIATION IN MONTREAL FRENCH HAS REVEALED SEVERAL INSTANCES OF TWO DISTINCT VARIABLES INTERSECTING WITHIN A GIVEN CONSTRUCTION. THE MULTIPLE VARIABLES OF SUCH VARIABLE COMPLEXES REPRESENT THE SUM OF THE POSSIBLE CROSS-VARIABLE COMBINATIONS. FOR INSTANCE, THE SUBORDINATE CLAUSE IN SUPERLATIVES IS MARKED EITHER BY THE INDICATIVE OR THE SUBJUNCTIVE MOOD, BUT IN ADDITION A MARKER OF PLEONASTIC VARIABLE COMPLEXES LEADS TO THE ESTABLISHMENT OF PARTICULARLY SUBTLE SOCIAL DISTINCTIONS. I WILL PRESENT THREE CASES: (1) THE INTERSECTION OF MOOD AND PLEONASTIC NEGATION IN SUPERLATIVES AS JUST MENTIONED; (2) THE COMBINATION OF HEADLESS RELATIVE CLAUSE MARKING ('QUE', 'QUIST-ES QUE AND 'QUESQUE') AND THE USE OF QUE AS OPPOSED TO DANS TO MARK OBLIGUES INVOLVING AN UNDERLYING DE 'OF'; (3) PARENTHESES BASED ON APPELLE 'BE KNOWN'. 'CALL' MAY EITHER FOLLOW THE CONSTRUCT SO DESCRIBED, APPEARING AS QU'ON APPELLE; OR IT MAY PRECEDE IT, TAKING THE FORM O'QU'ON APPELLE; THE LATTER FORM INTERSECTS WITH 'QUE/QUIST-ES QUE VARIATION.

MICHAIL KHEMTONIC, University of Illinois

ON METATHEsis IN PALESTINIAN ARABIC

At first blush alternations such as á-húrIk 'I burn', á-húrIk-ha 'I, ber', but á-húrIk-ak 'I, you' and á-húrIk-ak guard', á-brus-ka, but á-brus-ak appear to evidence a rule metatheisising the strings CCl/Cc before a vowel. It is argued that this is the wrong analysis and that the correct description results from independently needed rules syncopating unretracted high short vowels in Cvc syllables (to give CCC-V from /CC/Cc-V/) and eponthesis of Ы or й in C 0 Ы (to give CI/CcC-V). The problem is to determine whether the eponthetic vowel is Ы or й. The article is in the observation that in this dialect of Arabic there is a limited but quite regular vowel harmony in which all high vowels in the stem (sp caught root) must agree in rounding: cf. tf-tf-ha 'she understands', tf-tf-hik 'she burns', but tf-tf-ha 'she guards'. If the harmony is analy­sed in autosegmental terms, with a (round) prosody associated with the root, /á-húrIk-ak/ and /á-húrIk-ak/ may be syncopated to /á-húrIk-ak/ and /á-húrIk-ak/ and the choice between eponthetic Ы versus й will be determined by the presence or absence of the (round) autosegment. Only an autosegmental analysis permits the otherwise unmotivated metathesis rule to be dispensed with.

S.J. KEYSER & W. O'NEIL, Massachusetts Institute of Technology

THE EVOLUTION OF THE ENGLISH PLURAL RULE

ONE OF THE MOSTFAMOUS OF ALL PHONOLOGICAL RULES IS THE ENGLISH PLURAL RULE. IN THIS PAPER WE OVERRIDE THE DIFFICULTIES TRADITIONALLY ASSOCIATED WITH FORMULATING THIS RULE IN A MAXIMALLY GENERAL WAY TO INCLUDE NOT ONLY THE PLURAL BUT THE PAST TENSE AND PAST PARTICIPIAL FORMS AS WELL. WE DO SO BY MAKING USE OF AN AUTOSEGMNENTAL ACCOUNT OF THE FEATURE CONTINUOUS.

IN THIS PAPER, HOWEVER, OUR CHIEF INTEREST LIES IN GIVING AN HISTORICAL ACCOUNT OF THE RULE LEADING UP TO THE SYNTHETIC FORMULATION GIVEN IN THE FIRST PART OF THE PAPER. ILLUSTRATIONS DRAWN FROM THE 12TH THROUGH THE 18TH CENTURY WILL BE USED TO MAKE SEVERAL CLAIMS ABOUT THE PLURAL RULE IN ITS MOST GENERAL FORM. AMONG THESE CLAIMS ARE (1) THE RULE WAS BORROWED INTO ENGLISH FROM OLD FRENCH; (2) THE RULE WAS EXTENDED THROUGHOUT MOST OF MIDDLE ENGLISH BECAUSE IT VARIED FORMAL DEVICE FOR SIMPLIFYING A STATE OF AFFAIRS WHICH HAD BEEN DRastically COMPROMISED BY THE MERGER OF ENGLISH AND FRENCH VOCABULARIES; (3) THE DEVELOPMENT OF THE RULE IN MIDDLE ENGLISH CONSTITUTED A SERIES OF SIMPLIFICATIONS UNTIL IT REACHED ITS PRESENT STATE; (4) THE VARIATION IN APPLICATION OF THE RULE IN THE 17TH CENTURY AROSE AS A RESULT OF THE CONSERVATION OF ORTHOEPISTS TRYING TO PERSIST THE PAST IN THE FACE OF A CHANGING LANGUAGE.

WILLIAM KEMP, Université de Montréal

VARIABLE COMPLEXES

Work on syntactic variation in Montreal French has revealed several instances of two distinct variables intersecting within a given construction. The multiple variables of such variable complexes represent the sum of the possible cross-variable combinations. For instance, the subordinate clause in superlatives is marked either by the indicative or the subjunctive mood, but in addition a marker of pleonastic negation may also appear, thus giving a total of four possible bi-variable variants. Besides their grammatical interest, in Montreal French such variable complexes lead to the establishment of particularly subtle social distinctions. I will present three cases: (1) the intersection of mood and pleonastic negation in superlatives as just mentioned; (2) the combination of headless relative clause marking ('que', 'quist-es que and 'quesque') and the use of que as opposed to dans to mark obligues involving an underlying de 'of'; (3) parentheticals based on appeller 'be known', 'call' may either follow the construct so described, appearing as qu'on appelle; or it may precede it, taking the form o'qu'on appelle; the latter form intersects with 'que/quist-es que variation.

M. RECKSTET, F. R. W. O'NEIL, Massachusetts Institute of Technology

THE EVOLUTION OF THE ENGLISH PLURAL RULE

One of the most famous of all phonological rules is the English plural rule. In this paper we overcome the difficulties traditionally associated with formulating this rule in a maximally general way to include not only the plural but the past tense and past participial forms as well. We do so by making use of an autosegmental account of the feature continuous.

In this paper, however, our chief interest lies in giving an historical account of the rule leading up to the synthetic formulation given in the first part of the paper. Illustrations drawn from the 12th through the 18th centuries will be used to make several claims about the plural rule in its most general form. Among these claims are (1) the rule was borrowed into English from Old French; (2) the rule was extended throughout most of Middle English because it varied formal device for simplifying a state of affairs which had been drastically complicated by the merger of English and French vocabularies; (3) the development of the rule in Middle English constituted a series of simplifications until it reached its present state; (4) the variation in application of the rule in the 17th century arose as a result of the conservatism of orthoepists trying to preserve the past in the face of a changing language.

WILLIAM KEMP, Université de Montréal

VARIABLE COMPLEXES

Work on syntactic variation in Montreal French has revealed several instances of two distinct variables intersecting within a given construction. The multiple variables of such variable complexes represent the sum of the possible cross-variable combinations. For instance, the subordinate clause in superlatives is marked either by the indicative or the subjunctive mood, but in addition a marker of pleonastic negation may also appear, thus giving a total of four possible bi-variable variants. Besides their grammatical interest, in Montreal French such variable complexes lead to the establishment of particularly subtle social distinctions. I will present three cases: (1) the intersection of mood and pleonastic negation in superlatives as just mentioned; (2) the combination of headless relative clause marking ('que', 'quist-es que and 'quesque') and the use of que as opposed to dans to mark obligues involving an underlying de 'of'; (3) parentheticals based on appeler 'be known', 'call' may either follow the construct so described, appearing as qu'on appelle; or it may precede it, taking the form o'qu'on appelle; the latter form intersects with 'que/quist-es que variation.

M. RECKSTET, F. R. W. O'NEIL, Massachusetts Institute of Technology

THE EVOLUTION OF THE ENGLISH PLURAL RULE

One of the most famous of all phonological rules is the English plural rule. In this paper we overcome the difficulties traditionally associated with formulating this rule in a maximally general way to include not only the plural but the past tense and past participial forms as well. We do so by making use of an autosegmental account of the feature continuous.

In this paper, however, our chief interest lies in giving an historical account of the rule leading up to the synthetic formulation given in the first part of the paper. Illustrations drawn from the 12th through the 18th centuries will be used to make several claims about the plural rule in its most general form. Among these claims are (1) the rule was borrowed into English from Old French; (2) the rule was extended throughout most of Middle English because it varied formal device for simplifying a state of affairs which had been drastically complicated by the merger of English and French vocabularies; (3) the development of the rule in Middle English constituted a series of simplifications until it reached its present state; (4) the variation in application of the rule in the 17th century arose as a result of the conservatism of orthoepists trying to preserve the past in the face of a changing language.

WILLIAM KEMP, Université de Montréal

VARIABLE COMPLEXES

Work on syntactic variation in Montreal French has revealed several instances of two distinct variables intersecting within a given construction. The multiple variables of such variable complexes represent the sum of the possible cross-variable combinations. For instance, the subordinate clause in superlatives is marked either by the indicative or the subjunctive mood, but in addition a marker of pleonastic negation may also appear, thus giving a total of four possible bi-variable variants. Besides their grammatical interest, in Montreal French such variable complexes lead to the establishment of particularly subtle social distinctions. I will present three cases: (1) the intersection of mood and pleonastic negation in superlatives as just mentioned; (2) the combination of headless relative clause marking ('que', 'quist-es que and 'quesque') and the use of que as opposed to dans to mark obligues involving an underlying de 'of'; (3) parentheticals based on appeler 'be known', 'call' may either follow the construct so described, appearing as qu'on appelle; or it may precede it, taking the form o'qu'on appelle; the latter form intersects with 'que/quist-es que variation.

M. RECKSTET, F. R. W. O'NEIL, Massachusetts Institute of Technology

THE EVOLUTION OF THE ENGLISH PLURAL RULE

One of the most famous of all phonological rules is the English plural rule. In this paper we overcome the difficulties traditionally associated with formulating this rule in a maximally general way to include not only the plural but the past tense and past participial forms as well. We do so by making use of an autosegmental account of the feature continuous.

In this paper, however, our chief interest lies in giving an historical account of the rule leading up to the synthetic formulation given in the first part of the paper. Illustrations drawn from the 12th through the 18th centuries will be used to make several claims about the plural rule in its most general form. Among these claims are (1) the rule was borrowed into English from Old French; (2) the rule was extended throughout most of Middle English because it varied formal device for simplifying a state of affairs which had been drastically complicated by the merger of English and French vocabularies; (3) the development of the rule in Middle English constituted a series of simplifications until it reached its present state; (4) the variation in application of the rule in the 17th century arose as a result of the conservatism of orthoepists trying to preserve the past in the face of a changing language.
The negative in Arizona Towa—a dialect of Towa, one of the Kiowa-Tanoan languages—displays a structural affinity to the syntactic phenomenon of subordination. The verb-final, or second of the two elements of the discontinuous negative morpheme is segmentally and suprasegmentally identical with the subordinating postposition (-/4). Example 1 illustrates a simple negative sentence and example 2 provides a complex sentence which illustrates the subordinating postposition.

1) sen k'loo wo-man-mun-di (man woman NGO-2)/~SEE-SUB) The man didn’t see the man.

2) hei sen k'oo-ge na-oo-de-men-di na -yooh'ko (that man house 3-enter-go-SUB I be asleep) When that man was entering the house, I was asleep.

Comparative data from the related Tlapan languages both confirm this analysis (as opposed to the alternative analysis of homophonous [-/4]) and suggest the importance of scope considerations in the approximation of an historical explanation for the formal resemblance of negation and subordination in Arizona Towa. I argue for an historical understanding of this construction which posits an earlier historical stage in which negative clauses (possessing indeterminate scope of the negative) are obligatorily followed by clarifying affectives—a position which is independently supported by a consideration of comparable Australian phenomena.

The Phonetic Inadequacy of Phonological Specifications of Clicks

Phonological features are needed to describe clicks made at up to five places of articulation, each of which may have up to 16 different types of accompaniment ("efflux"). The 90 (i.e. 5 x 16) clicks in 1865, a Bushman language, may be represented phonologically in terms of 6 binary features: Voiced, Aspirated, Fricative, Glottal, Nasal, Voice Release. Each of them must also be specified as [+ click] as well as for place of articulation. The clicks in the Tswana language such as Nama, can be specified in terms of a subset of these phonological features. It is possible to use these features to state phonological rules, such as the nasalization of [+ glottal] clicks in Nama, and morphosyntactic constraints, such as the exclusion of [+ glottal] vowels after [+ glottal] clicks in 1865. But it is not possible to use them to fully characterize phonetic details of these languages. There are many points that are phonetically characteristic of one language in comparison with another, but are not phonologically relevant in any one language. Thus sounds that are [+ click, + voice, + glottal, + uvular] have fricative releases in one dialect but differently timed uvular ejective releases in another. As will be demonstrated by instrumental data and tape recordings these complex clicks (like many other sounds), are best described in terms of about 16 physiological or 16 acoustic parameters, which are in many to many relation with phonological features.

On the Notion "Affectiv" in the Analysis of Polarity Sensitivity

Accounts of the negative-polarity sensitivity of lexical items like any, ever, and will limit the distribution of these negative-polarity items (NP1's) by requiring that they always occur in some relation to a member of a class of items and constructions which Klima 1964 called "Affectives". This paper provides a definition of "Affective" within the semantics of English. The affectives are the semantic theory of polarity sensitivity. Informally, affectives license entailments from supersets to subsets, while non-affectives usually license entailments from subsets to supersets. Within a semantic theory of English like that of Montague's PTO, "Affective" becomes a property of the functions. The denotations of the affectives are that of the form punned on. Furthermore, segment alterations are most often used in the middle of a word and less so at the beginning, suggesting that initial segments are important to the recoverability of the underlying form (without which, of course, the pun is lost).

Yet some puns diverge drastically from their norm forms. In general, however, the context creates an expectation for the underlying form (as well as the pun), or the pun appears in a phrase which is familiar and hence recoverable by reason of being a clique or formula.

On an Analogical Explanation of the Modern Irish Plural in -acha(I)

The Modern Irish plural marker -acha(1), one of the two markers still productive, is not inherited from Old Irish. The form -acha prevails in the Munster dialect (e.g. cathair 'city' pl. cathracha) can be derived, however, by assuming that morphological simplification in the declension of guttural-stem nouns led to their reanalysis as containing this marker, by analogy with the more common -k and -u stems plurals. The Connemara hyperplural -achal (cathair pl. cathrachal) with double marking can be shown to result from contamination with the very productive adjective declension in -ach, which is often used nominally (e.g. Bassenach 'English(many)' pl. Bassenacha). Examples illustrating these analogical processes will be discussed.

Effect of Discourse Structure on the Comprehension of Troubleshooting Instructions

This paper reports on a series of empirical observations of the effect of varying discourse structure in material in which vocabulary, sentence level syntax, and picture cues are all controlled in such a way as to make the reader's job as simple as possible. The material is a set of six troubleshooting manuals for a moderately complex electronic control system on railroad freight carriages. Participants are approximately 50 paid owner-operators of trucks who have some knowledge of the system (frequently erroneous) of the operating characteristics of the system, but no familiarity with the more technical electrical properties. In almost all cases the participants had no knowledge of electronic theory or practice. Thus the participants had to depend on the information in the manuals to complete the task.

The task was to use the manuals to locate problems introduced on a demonstration board which contains actual truck hardware except for some relatively trivial internal wiring. Preliminary analyses show that (1) interruptions that impose little or no memory load (f. ex. forward skips) cause no comprehension difficulties, (2) interruptions that impose some additional memory load (e.g. back references that must be read to complete the task) cause considerable difficulty in comprehension, and (3) doubly embedded back references cause almost total inability to follow the message. These findings appear to be analogous to similar facts about variations in the form of complex sentences.
Simple and powerful models of linguistic performance are needed in a variety of applications. One such application is speech recognition by computer. This paper identifies certain syntactic constraints which are motivated by performance considerations in both a stochastic and a deterministic system. The system to be discussed uses a deterministic transition network (ATN) as its syntactic component (see Woods 1970). The ATN was originally designed as a text parser. In speech recognition, because input is acoustic, positive identification is available of the input segment being scanned. Instead, the machine assigns acoustic likelihood of both correct and incorrect segment's acoustic parameters and of the segment name on the ATN arc being traversed.

The task of the recognition machine is to find the path through the network giving rise to the lowest total acoustic likelihood. By doing so, the machine determines the syntactically well-formed string of segment names having the best acoustic fit to the string of input segments. This is achieved in real time by exploring many paths in parallel. Even in a syntax of modest complexity, ambiguity associated with the generation of acoustic segments results in the generation of many analysis paths. Lacking memory and processing capacity it makes it necessary to eliminate incorrect paths as early as possible. By imposing appropriate constraints on the ATN, we can efficiently eliminate a large number of paths without risk of missing the best fit analysis.

The Listing Function

'List' sentences constitute a major locale for putative violations of various types of constraint. If the logical properties of list sentences are properly taken into account, apparent counterexamples may disappear. Thus Rando and Napoli 1978 provide a useful model of the distribution of indefinite and definite NPs in thence-sentences by separating existential from list occurrences (where syntactically definite NPs are allowed) and arguing that the list itself meets a non-anaphoricity condition, although the items within that list need not.

List sentences have discourse and grammatical, as well as logical, correlates. For example, lists whose members are coordinated pairs constitute one of the more natural environments for Gapping (e.g., Uta, their canines teeth large, and their other teeth primitive in many respects). This suggests that the listing function provides motivation for using the gapping strategy. Other types of lists serve as input to different anaphoric processes (e.g., lists with single arguments: Conjunction Reduction).

For the notion 'list sentence' to be useful in grammatical analysis, the phenomena classified as such must be permitted to depart from a strictly intuitive notion of a list. Included are lists containing only one item. Excluded are rote, memorized large, and their preferences. This is achieved in real time by exploring many paths in parallel. Even in a syntax of modest complexity, ambiguity associated with the generation of acoustic segments results in the generation of many analysis paths. Lacking memory and processing capacity it makes it necessary to eliminate incorrect paths as early as possible. By imposing appropriate constraints on the ATN, we can efficiently eliminate a large number of paths without risk of missing the best fit analysis.
The Judeo-Spanish verbal system contains two compound tenses, the present perfect indicative and the pluperfect indicative. These tenses are formed by means of a past participle combined with one of two possible auxiliary verbs, aver or tener. A discussion of the distribution of these auxiliaries, and the function of the tenses themselves, forms the object of this paper.

Previous research in the field has attempted no sustained analysis of this particular aspect of Judeo-Spanish syntax. Treatment of the topic amounts to no more than a few facts that fasten attention to the present perfect tense. For instance, (1) the present perfect is the primary formative of compound tenses (Wagner, Baruch, Agard, Hirsch, Renard) or (2) both tener and aver function as auxiliaries in free variation (Crews, Kahane and Saporta). This study attempts a more extensive investigation of the problem.

The analysis is based on the data provided by 125 recent editions of a Judeo-Spanish newspaper published in Tel Aviv, La Luz de Israel, and 50 taped interviews collected during three months of fieldwork in Israel during the summer 1977. A clear-cut pattern of distribution of the auxiliaries tener and aver does emerge from an analysis of the data. Moreover, a significant functional distinction between the two auxiliaries can be discerned. A discussion of the historical development of the compound tenses in Hebrew assists in clarifying and explaining the observed patterns.

JOHN MALONEY, Harvard University

The Function of the Perfect in Old Babylonian Letters

In the standard analysis, the so-called " parfait" of Akkadian is thought to be a distinct tense-form approximating the meaning of the English perfect, i.e., a form showing that the verbal event is a present state produced by past action. This standard view is inadequate, however, because the parfait possesses a well-defined discourse function in Old Babylonian prose syntax (royal letters). It has an assertive, focusing nuance which serves to identify the verb in the t-form as the main statement of the narrative. Two lines of evidence, one provided by the anumma construction and the other based on the facts of coordination, will be developed to prove this contention. Moreover, two implications of this analysis have for Akkadian grammar: (1) from now on the t-form has to be discussed in terms of its functioning in discourse, not just as an isolated tense-form; (2) any study of the historical development of the Semitic medio-passive t-system must take this revised Akkadian situation into account; (3) clear parallels between the use of the parfait and Biblical Hebrew hinnah clauses (e.g., both tend to precede injunctives) point to a drift-like syntactic development where different formal means were used for a single Semitic clause-type.

EVAELINE S. MARLOS, University of Pennsylvania

A Topical Subject: Word Order in Modern Greek

Despite the fact that Modern Greek (MG) is an Indo-European language, it has not achieved the full SVO status assumed for other modern IE languages. Lakoff (1972) enumerates many features which should be present in such languages. However, MG does not evidence many of these, e.g., an obligatory use of anaphoric, non-emphatic pronouns, or the use of prepositions in general instead of case endings. Furthermore, MG allows many syntactic phenomena not permissible in a strict SVO language. However, neither is MG still an OV language, since, though all permutations of subject, verb, and object are possible in the syntax of contemporary MG, the language is not one which permits the look at a sentence in a single sentence.

Lehmann (1976) notes an analogy between the OV to VO shift and the shift from topical to subject-prominence in IE languages. Li and Thompson (1976) list many features contrasting topic- and subject-prominent languages, but speak in terms of a topic-comment to subject/predicate continua, rather than in terms of discrete categories. MG again behaves differently from other IE languages, as topic/comment constructions are not infrequent and not greatly marked. Furthermore, MG is not involved in many of the grammatical processes thought to be characteristic of subject-prominent languages. Therefore, the best way to treat MG is not in the discrete terms of Lakoff but rather as a language still in transition from its topic/comment, SOV forbear, not yet having fully reached VO, subject/predicate status as other modern IE languages have.
Free Variables and Rules of Semantic Interpretation

In "On Binding," Chomsky rejects sentences as semantically incoherent if their logical form (LF) contains free variables. The same assumption that variables are bound in LF leads Dowty (1978) to propose a syntactically and semantically unnatural analysis of the by-phrase in full passives. But if we modify his analysis by translating derived passive VPs into trace theory and then modify Joan's (1980) and (1b) as adverbal modifiers of the short passive (1c); we can also represent the preferred interpretation of (1c) as implying multiple agents. Indeed, unless Chomsky's index rule is interpreted as the mark of a free variable rather than a binder, PRO will incorrectly be predicted as completely "uncontrolled" in (2).

(1) a. Trace theory has been misunderstood by Joan.
   b. Trace theory has been widely misunderstood.
   c. Trace theory has been misunderstood.

(2) a. It is unclear to Mary what [PRO to do t]
   b. John was asked to [what PRO to do]

Free variables must be allowed in LF, evaluated contextually like indexicals, but then the incoherence of (3) requires a different sort of explanation than Chomsky provides.

(3) *They asked Mary to visit each other.

This paper challenges the article of P. Friedrich and J. Redfield, Indeed, unless...

David Michaels
University of Connecticut

Length in English Vowel Alternations

In the analysis of English Vowel Alternations (e.g. same-sanity, manager-managerial), there is a traditional ambiguity in the use of the features of tenseness and length. Adopting a mora analysis of length in place of tenseness resolves this ambiguity by giving a strict quantity interpretation to "tense" = "lax" alternations. This analysis, furthermore, is consistent with a relatively concrete analysis of the related quality alternations governed by the vowel shifting rules and diphthongisation.

The mora analysis requires that long (tense) vowels be represented underlyingly as sequences of two moras (e.g. VV), that the Shortening (Laxing) Rule delete the second mora, and that the Longening (Tensing) Rule add a mora, and that liphthongization raise and devoice the second mora in a two mora sequence. This analysis taken together with the restriction that neutralization rules (e.g. Vowel Shift, Backness Adjustments) apply only to morphologically derived forms results in a general, but concrete account of the alternations in question and also provides an account of why [ay], [aw], and [oy] never occur as outputs of Tensing.

Michael Noonan & Felix Quezada, State University of New York, Buffalo

The Rise of Sentence-like Complements in Quechua

Prior to contact with Spanish, sentential complements in quechua were rendered almost exclusively by nominalized forms. In the modern quechua dialects, this situation has changed, many dialects exhibiting, alongside their nominalized complement-types, sentence-like complement-types, i.e. complement-types whose predicates are verbs and exhibit the same sort of morphology as verbs in main clauses. This development is doubtless due to influences from Spanish, operating through sandhi rules, stress retraction, found in another variety of italian. Finally, since individual varieties of the language do not all make use of all the degrees, we propose that one of the ways in which specific varieties of italian differ from each other can be characterized in terms of the range of distinctions they make in the application of a given rule.
The Phonetics of Dissimilation: A Hypothesis

Consider syllables of C1V C2 shape where C1, C2, or both have a distinctive feature whose acoustic cues are realized primarily in the transitions to the adjacent vowel, e.g., place of articulation, labialization, glottalization, etc. Although in careful speech these three cases could be acoustically differentiated, if there were extensively assimilating all three syllable types could be realised phonetically in a very similar way, i.e., the medial vowel would have the distinctive feature in question spread all the way through it. How is the listener supposed to tell whether such utterances point to C1, C2, or both 'owning' the distinctive feature? The point is, in some cases, can't and he therefore makes an incorrect analysis. In the cases labeled dissimilation it is attributed to either C1 or C2 (usually the latter) a distinctive feature that used to belong to both. In his own careful pronunciations, the listener-turned-speaker will manifest the distinctive feature on only one of the consonants, not both. Thus: dissimilation without the necessity of assuming the speaker decided to alter his pronunciation in order to eliminate like sounds. This model also accounts for the apparent lack of cases of dissimilation involving the features [stop] or [affricate] since such features cannot spread over to adjacent vowels.

W.A. O'NEIL & S.J. KESSER, Massachusetts Institute of Technology

A Metrical Rule in Early English

The purpose of this paper is to show how metrical structure plays a role in the early history of English. In particular, two hitherto unconnected and unexplained phenomena in the Old English of the Vespasian Psalter and the Corpus Glossary and in the Middle English of the dialect known as AS will be shown to follow from the same metrical rule and its interaction with independently motivated rules of the respective periods of Old and Middle English.

CHARLES E. OSGOOD & S.N. SRIDHAR, University of Illinois

Cognitive Bases of Structural Equivalents: A 10-Language Comparative Study

Our basic hypothesis is that many crucial properties of language derive from the structure of human perception and cognition. This hypothesis was tested by presenting a number of perceptual/cognitive distinctions on a color film involving 70 scenes and having native speakers of 10 languages "Simply Describe" each scene in a simple sentence. The languages are: Chinese, English, Finnish, Hebrew, Hungarian, Japanese, Kannada, Serbo-Croatian, Spanish and Turkish. The film showed a man and some familiar objects (blocks, balls, etc.) in action and static relations; the sequence induced cognitive presuppositions and contrasts (given-new info, object vs. actor salience, unfilled expectations, etc.) each scene was expected to result in a certain type of syntactic/semantic structure (def./indefinite articles, adjectives, passive and other movement transformations, embeddings, negation, etc.). The data reveal several universal patterns including (1) increasing "givenness" of entities; (2) use of passive and topicalized structures to express object salience; (3) strong preference for egocentric perspective; reference as a function of available alternatives; and many others. This study thus demonstrates existence of cognition-based substantive universals; tests functional explanations of universal/language-specific phenomena; and contributes to an explanatory theory of language performance.
Phonological Reduction of Grammatical Markers

Caribbean dialects of Spanish are characterized by the variable weakening and complete deletion of syllable-final segments, even when these are morphological markers. Studies treating this process as phonological variation have failed to adequately account for its interaction with the grammatical system. We report on a large-scale statistical study of phonological and grammatical variation in three word-final phonemes: /s#/, 'nominal plural marker' and 'second person singular verbal marker', /n#/, 'third person plural verbal marker', and /r/, 'infinite marker'. We distinguish, through analysis of an array of phonetic variants, phonological variation from what is in fact grammatical variation. Lack of consistent functional effects on /s#/, /n#/ reduction within the NP is traced partly to interdependence with verbal /s#/. Infinitives are marked by distinctive stress placement, explaining the conditioning of /r/ retention by phonological and not functional factors. A distinction between /s#/ and /n#/ on the one hand, and /r/ on the other, is reflected in co-occurrence patterns of variant usage among speakers. The variants of /s#/ and /n#/ are distributed across a preserved/reduced dichotomy according to functional criteria - information-bearing variants are opposed to those with none, while the variants of /r/ are disposed according to phonological criteria - the conserved variant versus the reduced ones.

ELLEN F. PRINCE, University of Pennsylvania

Hedging in Physicians' Discourse

This work is part of a larger project studying ethical decision-making in the daily staff meetings of the pediatric intensive-care unit of a major Philadelphia hospital. An analysis of the hedges in the corpus, identified on intuitive grounds (as in G. Lakoff 1972 and R. Lakoff 1972), shows that (1) the notion of hedge pertains not to a unitary class but to two distinct classes of phenomena, and (2) different subclasses of hedges differ in their distribution and function. APPROXIMATORS implicate 'fuzziness' within the propositional content of the NP. One subclass corresponds to G. Lakoff's hedges in that they indicate nonprototypic membership in some class; it occurs most frequently in the description of symptoms. Another subclass occurs most commonly with measurements: here a nominal hedge is either neutral or available. The hedges indicate that the relationship between the propositional content and the speaker is marked in some way. One subclass implies varying types and degrees of uncertainty; usually the hedged proposition is presented as a plausible inference. This type corresponds to R. Lakoff's hedges. It is especially common in diagnoses and planning. A second subclass implies that the proposition is to be attributed to another individual and, secondarily, that the speaker does not speak from personal knowledge. The actual degree of speaker-commitment can be determined only from knowledge of the assumed credibility of the attributee. This type has the widest distribution.

APRIL KOMENAKA PURCELL, University of Hawaii, Hilo

A Sociolinguistic Continuum in Micronoon

A sociolinguistic continuum is described, analogous to the continua described recently in reports of large-scale studies of adult speakers in creolizing and decolizing communities. The subjects of the present investigation are fourteen Hawaii children, aged five through twelve, of different ethnic and socioeconomic backgrounds, living in a single neighborhood, and interacting with each other with varying degrees of intimacy and frequency. The group may be considered to some extent a microcosm of the larger community of Hawaii. The data are drawn from the children's spontaneous conversations expressed in terms of variety of English (as opposed to General English) phonological, intonational, and lexicogrammatical variants. Rank correlation is measured for pairs of variants and for individual speech community members. The study demonstrates that individual speech performance can be effectively characterized, not as static 'codes' but as dynamic 'ranges'; that interaction among members works both to preserve speech differences and to foster uniformity. What this implies is that the children appear to have good grounds within the group for associating certain speech features with certain individuals and with groups of children who share other, social and physical characteristics.

APRIL KOMENAKA PURCELL, University of Hawaii, Hilo & RODERICK A. JACOBS, University of Hawaii, Manoa

Variation in the Linguistic Realization of Speech Acts

reported here is an attempt to characterize variation in the linguistic realization of speech acts. The acts considered here are directives, introspections, and evaluations, all of which share the property of being intended to regulate the behavior of others. The sentences realizing these acts are analyzed into structural components, called here 'interactive variables.' The subjects are three eight-year-old residents of Hawaii, of different ethnic and socioeconomic backgrounds, who were shown in an earlier study to command different ranges along a Hawaiian-English vs. General-English continuum. The data come from a number of spontaneous peer conversations that include similar social conditions. Differences in linguistic choice can be observed across a hierarchically organized set of rubrics. The feasibility of methodological approaches to the investigation of variation in the linguistic realization of speech acts can be explained by the fact that variation is likely to come from simple macrosociological considerations.

CILBERT RAPFAPORT, University of Texas, Austin

A Hierarchy Governing Verbal Aspect in Russian

Verbs in Russian typically have two aspectual forms. When a verb is used as the subject of a sentence, it is said to have a perfective aspectual form, while the imperfective aspectual form is usually expressed by the verb in the infinitive form. The perfective aspectual form is used to express actions that are completed, while the imperfective aspectual form is used to express actions that are ongoing or repeated.

APRIL KOMENAKA PURCELL, University of Hawaii, Hilo

Semantic Theory and Scripts

One of the important though often ignored questions in semantics has always been the amount of information to be stored in the lexicon or, in other words, the boundary between our lexical competence and extralinguistic knowledge of the world. It is suggested that a finite repertoire of formally represented cognitive structures, the scripts (or 'frames', or 'schemas') be incorporated in the lexicon in the framework of a script-oriented semantic theory. It is argued that no semantic theory without scripts can explain the comprehensibility of ordinary sentences (e.g., (1)) as opposed to the incomprehensibility of other ordinary sentences (e.g., (2)).

(1) John was a dime short and had to do without milk.
(2) John was a dime short and had to do without a family.

The script which is involved here and which renders (1) comprehensible (and in it appropriate as opposed to (2)), is the basic 'commodities-money-commodities' formula internalized by most English speakers.

The rest of the semantic material of the scripts is justified on the basis of the demonstrated non-well-formedness of those sentences which violate at least one rubric of a script. The feasibility and operational fineness of the approach are discussed against the background of the claim that having scripts in a semantic theory does not necessarily lead to a stronger ontological commitment than not having them.
Nonreferential Noun Phrases as Foci

This note links with predicatives and existentials other nonreferential noun phrases; the movie lasted six hours; Max came in with a loud crash; Tom made some headway. The underscored phrases cannot be pronouns or definites: "We had six hours and the movie lasted three hours." To claim that this is a semantic restriction determined by the function of the sentence: it asserts that the predicate noun phrase is a property of the subject (this is a common characterization of predicatives, existentials, and amount phrases like six hours and three hours). I feel that e.g. the movie lasted six hours, but they were well-spent supports this explanation: once the predicate noun phrases have been linked to the subject, they are identifiable and possible for closed topics (e.g. ask for the relative clause to which they refer). The fact that e.g. the movie lasted six hours, but they were well-spent supports this explanation: once the predicate noun phrases have been linked to the subject, they are identifiable and possible for closed topics (e.g. ask for the relative clause to which they refer). This explanation has further import for analyses (Carlson 77) which propose an idiosyncratic syntactic derivation for definite relatives like the

Tanya Reinhart, Tel-Aviv University

Linguistic Evidence for Processing Units Smaller Than Clauses

A prevailing assumption in studies of speech perception (e.g., Fodor Bever and Garrett, 1974) is that the minimal unit of processing is the clause. This has correlated in linguistic theory with the assumption that restrictions on linguistic rules are stated in terms of a command, i.e., that their domains are clauses. However, recently there is increasing evidence that such rules obey stricter restrictions: they may only be obeyed if their clauses include only one of them (constituent)-demands the other (Reinhart, 1976; Chomsky, 1978), i.e., their domains consist of the full range of constituents in S, not just clauses. This linguistic evidence is consistent with an alternative account of constituent and processing analysis which assumes that constituents are the minimal processing units (e.g., Kimball, 1973). More direct support for this account is the examination of the paradigmatic treatment of unidentifiable predicative, existentials, and amount phrases like

Eric J. Reuland, State University of Groningen

Dutch Subordinate Clause Types and the Syntax of Logical Form

There are in Dutch three main types of subordinate clausessubjunctive, infinitival and participial. All of the category ?Finite subordinate clauses may be introduced by bare complementizers (dat 'that'), relativatives, WH-phrases, prepositional conjunctions (saadat 'after', domaat 'because'), and adverbial conjunctions (optem 'when', indien 'if').(Nicolwell "although"). Adverbial conjunctions are analyzed as adverbs moved into Comp by wh-movement, and the prepositional ones as [Pre[comp dag]]. Infinitival clauses take only +subject +control, and prepositional conjunctions without control will be marked by movement. It is investigated how these restrictions can be stated in the framework of EST where there is optional expansion of Comp and free wh-movement and their success is determined by the verb. The evidence is independently motivated considerations as to the function the clause introductor and the clause it heads perform in the clause they are embedded in. This function is reflected in the type they are assigned on the level of logical form: an infinitival clause will be assigned Type 2, a participial one Type 3, and so will WH-phrases as a consequence they will have environments in common. A participle clause will be assigned a Type for modifiers which will share with the adverbial conjunction it is headed by; this is therefore an admissible combination. A participle clause will have no environments in which an expression with the Type of a WH-phrase may appear, yielding ungrammaticality in this case.

Ann M. Reed, College of William & Mary

[FRD NORM: 5]

Stylistic Variation and Syntactic Diffusion in Historical Change

Few historical sociolinguistic studies have investigated the relationship between syntactic variation and syntactic diffusion in the process of language change. I approach this problem here through the examination of the history of the relative clause system in Scottish English and English in general. The findings of this paper suggest that the use of the WH relative system (i.e., that or if) is more frequent in the written and spoken language. I have looked specifically at variation in the ordering of relative clauses (i.e. WH forms, that or if) in a stylistically stratified sample of Scots from the 16th century and the modern period in terms of an index of syntactic complexity. My index of syntactic complexity is based on the frequency with which WHPs are in certain syntactic positions. The results reveal that the WH relativization strategy appears to have entered the language at a time when the most complex syntax and least frequently relativized syntactic positions until it eventually spread or diffused throughout the system. The process of diffusion can be seen as completed in standard English, but not in modern Scots where the native strategy of marking clauses prevails.

Suzanne Donatie, University of Birmingham

[THURS NORM: 1]

Irony as Discourse Strategy

The primary goal of speaking in conversation—underlying such apparent goals as information-exchange, story-telling or problem-solving—is for each speaker to maximize her or his speech without alienating the conversational partner by taking all the available floor space. Speakers need strategies to accomplish this goal in socially acceptable ways.

The structure of discourse is affected by the strategies speakers select to get and keep the floor. Narrative is itself a kind of structuring process of maintaining hearers' attention, though speakers may have specialized means to achieve this goal. Non-narrative discourse does not have such a built-in mechanism for the management of the floor. Irony as discourse strategy disrupts the flow of information-exchange or task-oriented discourse and can thus gain for the speaker temporary control of the conversation.

Alice Myers MoY, California State University, Los Angeles

[SAT NORM: 4]

Latvian and Transitive in Ungariny

The Ungariny language of northwestern Australia (on which I have done fieldwork) shows grammatical case relations by verbal cross-reference and local ones by nominal postpositions. In general, these two methods are mutually exclusive; case relations do not normally cross-reference NPs.

An interesting exception to this cross-referencing rule is the -yuw-ju, which can occur on a transitive object or intransitive subject NP when the referent it is purportedly undergoes a change of state as a result of the action described by the verb. The transitive subject NP can also occur on a transitive subject NP when becomes the subject of a transitive verb, e.g. have a new topic. Drawing on Kurylowicz's zigzag distinction between primary and secondary case functions, I argue that -yuw-ju is a local case with secondary functions at the grammatical and discourse levels. Some of its "local" semantic content is relevant at the other two levels as well. To this I adduce evidence against Kurylowicz's notion (shared in a different form by Chomsky and the interpretatives) of syntax as autonomous and semantic.

Alan Roney, University of Sydney

[FRK NORM: 5]
ANURADHA SARKAR, University of California, Los Angeles [SAT MORNING: 3]
The Affected Agent

This paper discusses rules that distinguish between two agent types—the affected versus the non-affected. These rules group the forms of agent type with the affected roles such as dative patients, patients, and experiencers. The notion of affected agent challenges the Case Grammar claim that case categories are unified, mutually distinct semantic primitives. (i) Case categories are not mutually distinct because semantic categories are not mutually exclusive. (ii) Case categories are not mutually exclusive because case agents classify into the affected vs non-affected type. (iii) Case categories are either affected (patients, dative patients, dative experiencers, and non-affected agents) or non-affected (non-affected agents) so that the affected vs non-affected contrast is more primitive than that of case categories.

DAVID SANOFF, Centre de Recherches Mathématiques [THURS MORNING: 2]
Ordering Variable Rules

Quantitative studies of linguistic variation must account for data on the relative frequencies of occurrence of two or more variants of a word in a large set of contexts differentiated by phonological, syntactic and extralinguistic features. Within a paradigm in which these variants are generated from an underlying form by a series of reduction, insertion or substitution rules, linguistic considerations do not always determine which forms are derived from which, nor the order in which the derivation rules apply. Inherent in the statistical methods used to characterize the conditioning of each rule, however, is a measure of how well the probabilistic rule model fits the data. These measures, one for each rule in a rule ordering schema, may be combined to evaluate the overall fit of the schema to the data set. We discuss the combinatorial problem of establishing the set of all possible rule orderings for a given variable, the statistical procedures necessary to assess each one, and a series of examples concerning syllable-final consonant reduction in Caribbean Spanish and syntactic variation in Montreal French.

DAVID SANOFF, Centre de Recherches Mathématiques & SHANA POPLACK, [SAT MORNING: 2] Center for Puerto Rican Studies, City University of New York

A Formal Grammar for Code-switching

It has recently been shown that the only syntactic constraint which holds up in a range of code-switching situations is an equivalence constraint, which requires only that the sentence surface structure around the switch point be grammatical, in a formally well-characterized sense, by standards of both L1 and L2. Illustrating with a large data set on Puerto Rican Spanish-English bilinguals, we demonstrate in this paper how the equivalence constraint, which may be formally considered a condition on the specific grammars of two (or more) languages, logically determines a single grammar for the set of permissible sentences containing code-switches. Furthermore, by making the grammar of L1 and L2 probabilistic in order to account for frequencies of occurrence of sentence constituents and syntactic boundary types, we succeed in imposing a probabilistic structure on the code-switching grammar itself, providing a well-determined formal framework within which we may carry out quantitative studies of the details of syntactic boundary susceptibility to code-switching, and comparative studies of bilingual performance in other speech communities. The theoretical implications of this work stem from its consideration of code-switching behavior as not only rule-governed, but syntactically predictable, within a coherent and integrated grammatical framework.
ELLEN SCHAUBER, Northwestern University

Adverbial Clauses: The Interaction of Syntax, Semantics and Pragmatics

Delineating the domains of syntax, semantics, and pragmatics is an issue being seriously debated within generative grammar. Navajo temporal, conditional, and purposeful clauses are not distinguished by specific lexical items (e.g., if, when, because) provide important data bearing on this issue because these Navajo constructions, in contrast to those of more commonly studied languages, leave much more information unspecified. I will demonstrate that because of an idiosyncratic temporal constraint a small amount of pragmatic information goes a long way. These data suggest a novel perspective with respect to the relationship between syntax and semantics because the interpretation of these sentences is calculated as a function of the syntactic markers of tense and aspect and the semantics of the complementizers.

I have argued elsewhere (That /-1/ is a non-past referential complementizer and /-go/ is a semantically empty connective. Referential includes both discourse anaphora and reference to truth (i.e., facticity). The /-1/ complementizer thus helps specify the time frame and presuppositional information for its clause; in contrast, the same information for antecedent /-go/ clauses must be determined from the syntax and semantics of the consequent clause and from pragmatic considerations.

BETTY JANE SCHULERMAN, University of Massachusetts

The Acquisition of -er Compounds

A recent development in linguistic theory has been the formalization within the lexicon of relations and operations that had previously been considered syntactic (eg., passivization, derivational) (Beeman 1976, Wason 1977). In particular, extensive theoretical work has been done on a class of lexical rules that propose a word in first-sister position to the verb (Vergnaud 1973, Aronoff 1976, Haeger and Siegel 1978). This class includes passivization, derivational, and verbal compounds. Data on the acquisition of -er compounds (eg., dog-chaser) support several hypotheses regarding the existence of fixed temporal relations in the order in which children acquire lexical rules. The -er compound rule is the last of the object-preposing rules to be acquired. Evidence exists that acquisition of one rule in a lexical class facilitates the acquisition of other rules in that class. Whereas other rules in the object-preposing class are acquired by the age of 6, however, mastery of the -er rule is not widely attained until after age 11 because of that rule's interaction with unrelated morphological and pronominal rules. The complex and frequently ambiguous role of stress in the acquisition of verbal compounds is a major factor in any explanation of this extraordinarily late acquisition. In the interim, auxiliary semantic strategies help determine meaning nonformally and also trigger appropriate formal analysis.

SUSAN P. SCHMELLING, University of Texas, Austin

Imperative and Speech-Act Theory

Because of the variety of explicit-performative paraphrases, speech-act theorists have held that the English imperative construction is used in a variety of speech acts, characterized by different clusters of "felicity conditions". This paper argues that all uses of the imperative are governed by one "essential condition"—that the uttering of an imperative counts as an attempt thereby to influence the world—and that other putative felicity conditions for what we call orders, requests, pleas, etc. follow from Gricean considerations; there is thus no motivation independent of paraphrases for recognizing distinct act-types performed with imperatives. Very general "essential conditions" can be posited for declarative and interrogative sentences as well, suggesting that such "conditions" are an aspect of "linguistic meaning" and qualitatively different from those isolated by Austin for his paradigmatic performatives, which belong to specific social rituals.

BETTY D. SHEEPARDSON, Indiana University/Alf University

The Semantics of Dibili Augmentatives and Diminutives

Dibili augmentatives and diminutives are so intimately tied up with Noun Class that their semantic content is a variable determined by the class to which a given noun belongs. When the appropriate augmentative or diminutive prefix happens to be identical to the Noun Class prefix of a noun, constraints on haplology create the necessity to shift either up or down one level on the augmentative-diminutive scale. Thus kõ-ta.ru, 'book', cannot take the first level diminutive, kõ-, but must shift to the second level, kõ-m-, to form its diminutive ka-rõ. Closely related to this fact is the hypothesis that kõ has only one level of diminution whereas ka long- ing to other classes would have two, e.g., kõ-ndõku, 'a suitcase'; kõ-ndõku, 'a small suitcase'; kõ-õ-rõ.dõku, 'a very small suitcase'. Ashton (1944, pp. 295-99) recognizes the additional diminutive idea provided by -õ- (after kõ-), but makes no mention of these additional diminutives. Similarly the first level of augmentation is marked by a null prefix, but for those nouns which are members of the zero prefix Noun Class a shift must be made to the level of augmentation taking a kõ- prefix. Hence, kõõ-õ.tiõ, 'big cupboard'. However, for other nouns the semantic content of kõ is 'big' while that of kõ- is 'very big'. The study illustrates the problem of assigning a limited number of morphemes and the need for interaction between semantic and phonological components in a formal grammar.
Evidence From Negation for an Interpretive Rule of Gapping

In this paper, I argue from the behavior of negated sentences that an interpretive theory of Gapping is superior to a deletion theory. Contrary to many linguists' claims, negative sentences can be gapped. A sentence like (1) 'Hard can't eat caviar, and Sue can't eat beans' is ambiguous between (2) 'Hard can't eat caviar, and Sue can't eat beans' and (3) 'It is not possible for Ward to eat caviar and for Sue to eat (only) beans.' Although Gapping by either deletion or interpretation can easily account for the (2) reading, a rule of interpretation offers a better account of the (3) reading. This is because a deletion analysis would require that Gapping apply to a DS like

\[ \neg G \text{ can} \neg G \text{ ward eat caviar} \text{ and } \neg G \text{ sue eat beans} \]

Then, a syntactic rule, constrained not to interfere with sentences having their own ANV's, would have to lower the NEG and CAN into S. That is, a deletion analysis requires that operators be generated freely in S, but that sentences with such operators be filtered out except in Gapping contexts. In contrast, an interpretation analysis involves operator-raising, a rule which has the advantage of merely interpreting operators as having S scope just in case they are in Gapping contexts.

ROYAL SKOUSEN, Brigham Young University

English Spelling and Phonological Representation

In this paper I will discuss the effects of English spelling on phonology. I will argue that children's phonological representations are frequently different than those of adults (even when there is no difference in pronunciation) and that orthography is responsible for many of the differences. I identify three different ways that spelling can affect phonological representation: (1) spelling pronunciations, (2) resolution of phonemic overlap, and (3) pre-interpretation of general phonetic sequences. This last case has important consequences for phonological theory, since many linguistic arguments are based on adult perceptions of phonological representations — representations which have been influenced by the orthography.

NICHOLAS SOBIN, Pan American University

Gapping: the Subject Condition

Since the proposal by Kuno (1976) that Gapping is strongly constrained by the Requirement for Simplex-Sentential Relationship (RSSR), others (e.g., Jake 1977) have found exceptions to this proposal, but no real pattern to the exceptions. This paper will argue that Gapping, or more accurately, sentential-internal gapping (IG) is constrained less broadly by RSSR than by a condition which requires that IG apply only so that an N in which is remaindered to the left of the gap is a subject. Given such a condition, IG appears to be a relation-related process.

MUFFY E.A. SIEGEL, Temple University

SAT MORN: 5

E.A. Speak, University of California, Santa Cruz

SAT MORN: 2

Common Nouns and Term Phrases in a Fragment of Thai

The paper examines the common noun/term phrase distinction in Thai. It is argued that Thai has no such distinction. That lack does not prevent sentence structure from being constrained. The presence of cumulative NPs makes the distinction superfluous in unquantified NPs. There is one environment where the distinction seems to appear, and this will be discussed in some detail: after the two copular verbs, pen and khia. Pen appears to take CNs, and khia to take all other phrases. On closer observation, however, sentences that are said to be ungrammatical are, under proper circumstances, grammatical. Thus 1) khia phuchay he' be' boy is often starred, suggesting the idea that only a term phrase may follow khia. However, pen phuchay is used deictically, the sentence is grammatical. All CNs may act as terms. Conversely, all terms may act as CNs. Environments—notably counter-factual conditionals—are created in which supposed hard core term phrases (e.g., proper names) act as CNs and thus do follow pen.

The work is carried on within the framework of Montague grammar and sheds light on the diactic use of NPs as well as the CN/T and mass/count distinction in languages.

MARK J. STEIN, University of Massachusetts

PRE MORN: 3

The Cumulative Effects of Sound Change

As sound changes accumulate in time, the phonetic similarity of cognates decreases. Since the decrease is not uniform across forms, time-dependent frequency distributions of cognates according to a phonetic distance metric result. Little quantitative documentation and less linguistic interpretation have been accorded this process. This paper provides a large number of data points well distributed over real and lexical replacement time drawn from Austronesian, IE, and Mayan languages. It demonstrates that the result of sound change may assume a quantitatively stable form cross-linguistically. It evaluates a range of stochastic process models and discusses the significance for the theory of linguistic change of the models' structures, parameters, and assumptions (including the characterization of the rate of sound change). Methods for estimating separation time (and confidence intervals) are derived and tested. The relation of sound change rates to lexical replacement rates is explicitly formulated. The models account both for the seemingly anomalous relationships between lexical replacement and phonetic similarity of cognate and non-cognate forms found by G. Fairbanks (A note on glottochronology. JML 21 [1955], 116-20) and the temporal behavior of the Justeson/Stephens 1-kelihood function for chance cognates (Chance cognition. Papers from the University of California at San Diego, ed. E. Traugott, et al. 1979. Amsterdam: Benjamins).

L.R. STEPHENS, Stanford University & J.S. JUSTEISON, University of North Carolina

PRE MORN: 4

Gapping: the Subject Condition

Since the proposal by Kuno (1976) that Gapping is strongly constrained by the Requirement for Simplex-Sentential Relationship (RSSR), others (e.g., Jake 1977) have found exceptions to this proposal, but no real pattern to the exceptions. This paper will argue that Gapping, or more accurately, sentential-internal gapping (IG) is constrained less broadly by RSSR than by a condition which requires that IG apply only so that an N in which is remaindered to the left of the gap is a subject. Given such a condition, IG appears to be a relation-related process.
STEFFEN L. STRAUSS, Arizona State University

Stress Assignment as Morphological Adjustment in English

In Arens's (1974; 1976) and Siegel's (1974) theory of English derivational morphology, a strict ordering of stress-determining affixation, cyclic stress assignment, and stress-neutral affixation holds (e.g., electric + electricity → electricity). This ordering does not permit stress-determining affixes to exist which contain stress contour conditions on their base. However, stress-determining -ic (German-Germanic) can attach to an X-syllabic base, X bisyllabic, only if X has penultimate stress: ideal-ist-ic, common-ist-ic versus half-ist-ic (cf. almanac, almanac-ist). It is only if the rapid rate of utterance is associated with one style or the other, along various continua. The present paper focuses on one such device: the machine-gun question, characterized by repeated syntax, and by a high speed of utterance, usually associated with one style or the other. The present paper discusses the high-involvement styles use machine-gun questions to establish rapport, but "high-involvement" speakers find them rude. The effect in cross-stylistic interaction is a rhythmically uneven and mutually unsatisfying interchange. The device is analyzed in a number of contexts among speakers of similar and disparate styles. Implications of cross-stylistic differences are discussed.

Applications of Catastrophe Theory to Linguistic Analysis

By now, the French topologist, has published a number of papers in the past ten years applying his topological theory of catastrophes to the problems of modeling linguistic phenomena. However, there seems to have been linguistic work on this subject, and catastrophe theory has not taken its rightful place as a useful analytic device in contemporary linguistic theory.

I seek to remedy this situation in my paper by applying catastrophe models to two areas of active interest in present linguistic theory: language typology and realization processes in phonology. I draw up a dichotomous model which subsumes the change of Chinese language typology from SOV to SOY, and I show how additional variables may be incorporated into a model by use of more complex catastrophe models. I show two instances where the catastrophe approach cleans up problems in genetic phonology models of French and of Klamath, a language of Oregon.

This paper can provide a mathematically rigorous model of variable cases such as functional load. At the least, catastrophe theory can provide a formal framework for theoretical language models in general, since only a finite number of catastrophes are possible for situations affected by four or fewer variables.

LEONARD TAOLY, University of California, San Diego

Linguistic Determinants of Perspective-Point and Attention

Languages have grammatical and lexical devices for indicating the points from which a scene is to be "looked at" and the aspects of a scene to be most attended to. Fillmore showed how different forms like come/go indicate different locations of perspective-point, and ones like buy/sell indicate different locations of attentional focus. But languages mark further distinctions. A perspective-point can be stationary--with a perspective-center, a scene. Thus, while a plurality is referred to in both All the members raised their hands and Each member raised his hand, the full complement is attended to in one, and a representative exemplar in the other. Distinctions like these seem to fit into a system that, among other properties, allows embedding.


DAVID SUDECK, University of Colorado, Boulder

FRI MORN: 2

Applications of Catastrophe Theory to Linguistic Analysis

This paper suggests a solution to the old problem of why the two readings of sentences containing a negated constituent should be disambiguated in the version with the negated element frontal, depending upon whether or not "Subject/Aux Inversion" has taken place:

1) John would be happy with no job. (Two readings)
2) With no job, John would be happy. (Only: (+3) (W & H) + H)

It is suggested that the constituents are frontalized into "W" (under $\exists$) and into "H", respectively, and that otherwise motivated rules for interpreting elements in these constituents in fact yield the readings required, as well as accounting for the curious association of the readings with the presence or absence of subject/aux inversion.


FRI MORN: 3

LINGUISTIC DETERMINANTS OF PERSPECTIVE-POINT AND ATTENTION

Languages have grammatical and lexical devices for indicating the points from which a scene is to be "looked at" and the aspects of a scene to be most attended to. Fillmore showed how different forms like come/go indicate different locations of perspective-point, and ones like buy/sell indicate different locations of attentional focus. But languages mark further distinctions. A perspective-point can be stationary--with a perspective-center, a scene. Thus, while a plurality is referred to in both All the members raised their hands and Each member raised his hand, the full complement is attended to in one, and a representative exemplar in the other. Distinctions like these seem to fit into a system that, among other properties, allows embedding.


SAT MORN: 3

LINGUISTIC DETERMINANTS OF PERSPECTIVE-POINT AND ATTENTION

Languages have grammatical and lexical devices for indicating the points from which a scene is to be "looked at" and the aspects of a scene to be most attended to. Fillmore showed how different forms like come/go indicate different locations of perspective-point, and ones like buy/sell indicate different locations of attentional focus. But languages mark further distinctions. A perspective-point can be stationary--with a perspective-center, a scene. Thus, while a plurality is referred to in both All the members raised their hands and Each member raised his hand, the full complement is attended to in one, and a representative exemplar in the other. Distinctions like these seem to fit into a system that, among other properties, allows embedding.


SAT MORN: 3

LINGUISTIC DETERMINANTS OF PERSPECTIVE-POINT AND ATTENTION

Languages have grammatical and lexical devices for indicating the points from which a scene is to be "looked at" and the aspects of a scene to be most attended to. Fillmore showed how different forms like come/go indicate different locations of perspective-point, and ones like buy/sell indicate different locations of attentional focus. But languages mark further distinctions. A perspective-point can be stationary--with a perspective-center, a scene. Thus, while a plurality is referred to in both All the members raised their hands and Each member raised his hand, the full complement is attended to in one, and a representative exemplar in the other. Distinctions like these seem to fit into a system that, among other properties, allows embedding.


SAT MORN: 3

LINGUISTIC DETERMINANTS OF PERSPECTIVE-POINT AND ATTENTION

Languages have grammatical and lexical devices for indicating the points from which a scene is to be "looked at" and the aspects of a scene to be most attended to. Fillmore showed how different forms like come/go indicate different locations of perspective-point, and ones like buy/sell indicate different locations of attentional focus. But languages mark further distinctions. A perspective-point can be stationary--with a perspective-center, a scene. Thus, while a plurality is referred to in both All the members raised their hands and Each member raised his hand, the full complement is attended to in one, and a representative exemplar in the other. Distinctions like these seem to fit into a system that, among other properties, allows embedding.


SAT MORN: 3

LINGUISTIC DETERMINANTS OF PERSPECTIVE-POINT AND ATTENTION

Languages have grammatical and lexical devices for indicating the points from which a scene is to be "looked at" and the aspects of a scene to be most attended to. Fillmore showed how different forms like come/go indicate different locations of perspective-point, and ones like buy/sell indicate different locations of attentional focus. But languages mark further distinctions. A perspective-point can be stationary--with a perspective-center, a scene. Thus, while a plurality is referred to in both All the members raised their hands and Each member raised his hand, the full complement is attended to in one, and a representative exemplar in the other. Distinctions like these seem to fit into a system that, among other properties, allows embedding.


SAT MORN: 3

LINGUISTIC DETERMINANTS OF PERSPECTIVE-POINT AND ATTENTION

Languages have grammatical and lexical devices for indicating the points from which a scene is to be "looked at" and the aspects of a scene to be most attended to. Fillmore showed how different forms like come/go indicate different locations of perspective-point, and ones like buy/sell indicate different locations of attentional focus. But languages mark further distinctions. A perspective-point can be stationary--with a perspective-center, a scene. Thus, while a plurality is referred to in both All the members raised their hands and Each member raised his hand, the full complement is attended to in one, and a representative exemplar in the other. Distinctions like these seem to fit into a system that, among other properties, allows embedding.


SAT MORN: 3

LINGUISTIC DETERMINANTS OF PERSPECTIVE-POINT AND ATTENTION

Languages have grammatical and lexical devices for indicating the points from which a scene is to be "looked at" and the aspects of a scene to be most attended to. Fillmore showed how different forms like come/go indicate different locations of perspective-point, and ones like buy/sell indicate different locations of attentional focus. But languages mark further distinctions. A perspective-point can be stationary--with a perspective-center, a scene. Thus, while a plurality is referred to in both All the members raised their hands and Each member raised his hand, the full complement is attended to in one, and a representative exemplar in the other. Distinctions like these seem to fit into a system that, among other properties, allows embedding.

BREAKING IN WESTERN INDIANS: A STUDY OF THE BREAKING OF UNBROKEN DIPTHONGS

The Nature of Lexical Representation: A Study of Breaking in Friian

PETER TIERSHA, University of California, San Diego

The treatment of interpretive rules such as VP-anaphora (and presumably coordination reduction) in Jackendoff (1972) depends crucially on the base generation of appropriate empty nodes in the reduced clause. However, a sentence like Did John go to Japan by boat or by plane is falsely predicted to be ambiguous as to whether Japan is semantically present in the second clause, because the base rules may or may not generate an empty PP node there. I propose, therefore, that the semantic representation of the second clause is filled out by carrying across all pronouns from the first clause (following Jackendoff's (1972) treatment of focus and presupposition). This rule works much like Jackendoff's (1972) rule of happen-pro-sententialization, except that it adds semantic material where there is no anaphoric presupposition, and in fact, not even an empty node of an appropriate category. This rule is shown to render the rules of VP-anaphora and coordination reduction redundant for all cases of alternative questions, thus raising the question of their status in the theory as a whole. Jackendoff (1972). Semantic Interpretation in Generative Grammar. MIT

RUDOLPH C. TROJKE, National Clearinghouse for Bilingual Education

Center Embedding in Chichewa

Kuno (1974) has suggested, as a functional explanation for Greenberg's (1963) Universal 17 that nominal modifiers usually precede nouns in SOV languages, that having postnominal relative clauses would increase the likelihood of center embedding. Chichewa, an extinct East African language, provides an example of this in that a relative clause may follow the subject of the 3-3 rule. In addition to the function of marking clause boundaries and clause-mativeness, subject concord may also serve as an indicator of switch of subject reference within a discourse sequence.

PATRICIA TARINOR, University of Toronto

A Rule of Presupposition Carrying in Alternative Questions

This paper reanalyzes the definition Y.T. Chao (1968) gives to the "tentative" aspect (V (yi)w) in Mandarin Chinese. Chao claims that this aspect expresses the semantic properties of "just" and "making a try." However, a) "just," as a temporal adverb describing the short durational temporal profile of a situation, is not the aspect in question. b) The aspect in question is not the aspect to which the action in question refers. c) The aspect in question is not the aspect associated with the task at hand. d) The aspect in question is not the aspect which is cognitively and behaviorally associated with the subject as a whole or, indeed, with any aspect of the subject.

In this paper, the "tentative aspect" is reanalyzed as having the referential function of describing the short durational temporal profile of a situation. According to this analysis, it is proposed that the name of the aspect be changed to "making a try." In addition, the aspect has the socio-stylistic meaning of deference when occurring in requests. It is argued that the semantic characteristics of the referential meaning of the aspect lend itself to the socio-stylistic extension. The time involved in carrying out an act like e.g. reading is usually rather long, the appearance of the aspect in the command gives the pressure that the bearer has the option of choice towards the commitment he makes in reading of the book. Thus, the meaning of deference.

YANG W., Queens College & the Graduate Center, City University of New York

PRESIDENTIAL VOWEL DELETION: CONCLUSIONS FOR RULE APPLICATION

This paper discusses a non-cyclic account of the vowel deletion process in Klamath and draws conclusions for two theories of rule application: 1. The Directional Theory of Rule Application, and 2. The Universally Determined Theory of Rule Application. Within 1, it is shown that if the subrules of a directional rule schema are expanded locally, then they must apply leftward in some derivations and rightward in others, to prevent ad hoc directional marking. It is suggested that the subrules are expanded linearly, in the order determined by the formalism. Within 2, several derivations are considered. The final section of a single rule, as well as the interaction of several rules, cannot be predicted correctly by universal principles.

VAND ALLEN, McGill University

IN THE NEUROLINGUISTIC PROCESSING OF RHYME

This study sought to compare the performance of unilinguals and bilinguals neurobehaviorally on a task involving different types of processing of linguistic material. Stimuli consisted of word pairs presented briefer to left or right visual fields. Subjects were to decide whether or not the words rhymed. Rhyming items were visually and phonetically similar, while nonrhyming pairs were neither, being semantically related instead. Results revealed that both bilinguals and unilinguals were faster at making judgments of rhyme than of meaning. Moreover, bilinguals responded faster to words shown in the left visual field (right hemisphere) in a second experiment, both the rhyming and nonrhyming items were visually similarly. When subjects were thereby obliged to analyze the words phonetically, a significant right visual field (left hemisphere) superiority emerged for the bilinguals. The findings are discussed in terms of group differences in preferred information processing mode, with bilinguals favoring a right hemisphere-based visual matching strategy, and the unilinguals a left hemisphere-based phonetic processing strategy.

THE LIN TANG, Stanford University

The Lexical Aspect of Chinese: Its Referential and Socio-Stylistic Meanings

This paper reanalyses the definition Y.T. Chao (1968:232) gives to the "tentative" aspect (V (yi)w) in Mandarin Chinese. Chao claims that this aspect expresses the semantic properties of "just" and "making a try." However, a) "just," as a temporal adverb describing the short durational temporal profile of a situation, is not the aspect in question. b) The aspect in question is not the aspect to which the action in question refers. c) The aspect in question is not the aspect associated with the task at hand. d) The aspect in question is not the aspect which is cognitively and behaviorally associated with the subject as a whole or, indeed, with any aspect of the subject.

In this paper, the "tentative aspect" is reanalyzed as having the referential function of describing the short durational temporal profile of a situation. According to this analysis, it is proposed that the name of the aspect be changed to "making a try." In addition, the aspect has the socio-stylistic meaning of deference when occurring in requests. It is argued that the semantic characteristics of the referential meaning of the aspect lend itself to the socio-stylistic extension. The time involved in carrying out an act like e.g. reading is usually rather long, the appearance of the aspect in the command gives the pressure that the bearer has the option of choice towards the commitment he makes in reading of the book. Thus, the meaning of deference.

For this text, the reader is asked to look at this book and read a particular chapter.

YANG W. VON KOGG, Queens College & the Graduate Center, City University of New York

LAMINATEN DELETION: CONCLUSIONS FOR RULE APPLICATION

This paper discusses a non-cyclic account of the vowel deletion process in Klamath and draws conclusions for two theories of rule application: 1. The Directional Theory of Rule Application, and 2. The Universally Determined Theory of Rule Application. Within 1, it is shown that if the subrules of a directional rule schema are expanded locally, then they must apply leftward in some derivations and rightward in others, to prevent ad hoc directional marking. It is suggested that the subrules are expanded linearly, in the order determined by the formalism. Within 2, several derivations are considered. The final section of a single rule, as well as the interaction of several rules, cannot be predicted correctly by universal principles.

VAND ALLEN, McGill University

IN THE NEUROLINGUISTIC PROCESSING OF RHYME

This study sought to compare the performance of unilinguals and bilinguals neurobehaviorally on a task involving different types of processing of linguistic material. Stimuli consisted of word pairs presented briefer to left or right visual fields. Subjects were to decide whether or not the words rhymed. Rhyming items were visually and phonetically similar, while nonrhyming pairs were neither, being semantically related instead. Results revealed that both bilinguals and unilinguals were faster at making judgments of rhyme than of meaning. Moreover, bilinguals responded faster to words shown in the left visual field (right hemisphere) in a second experiment, both the rhyming and nonrhyming items were visually similarly. When subjects were thereby obliged to analyze the words phonetically, a significant right visual field (left hemisphere) superiority emerged for the bilinguals. The findings are discussed in terms of group differences in preferred information processing mode, with bilinguals favoring a right hemisphere-based visual matching strategy, and the unilinguals a left hemisphere-based phonetic processing strategy.
IDIOMATICALLY ambigious sentences (each having both a literal and an idiomatic possible meaning) were prepared for listeners' discrimination judgments by having four research workers rewrite 150 such sentences in disambiguating paragraphs. The sentences were taken out of the paragraphs and presented to 26 subjects. Listeners were unable to discriminate the literal from the idiomatic versions under these task conditions, subjects showed a bias toward interpreting the sentences as idioms. Next, silent readers were asked to rank the same sentences on an "idiomaticity" scale. The strong bias toward hearing ditropic sentences as "idiomatic" correlated with the rankings of each sentence by the likelihood that the linear sentence would hear an idiomatically opposed to a literal meaning in natural language situations. In a further experiment, the same fifteen ditropic sentences were recorded in pairs by speakers seeking to convey unequivocally the contrasting meanings. Under these conditions, listeners were easily able to discriminate the literal from the idiomatic versions in each pair. These discriminations were apparently based on prosodic cues.

In this paper, we investigate the developmental ability of children's ability to use intonation to disambiguate the following type of structurally ambiguous who-questions in Dutch:

(1) Wie betaalt de man? 'Who is the man paying?' (intonation I)
(2) Wie betaalt de man? 'Who is paying the man?' (intonation II)

The only difference in the Dutch questions is that the main accent which is irrelevant to the processes. These facts suggest that tone, at least as children are capable of, plays a role in the disambiguation of the following type of structurally ambiguous who-questions in Dutch:

(1) Wie betaalt de man? 'Who is the man paying?' (intonation I)
(2) Wie betaalt de man? 'Who is paying the man?' (intonation II)

The subjects, 67 middle class Dutch children, ranging in age from 4-12, and 6 adults, heard 26 questions on a tape and answered by indicating 1 or 2. The questions were presented in 2 drawings corresponding to the 2 possible meanings of the ambiguous sentence. The results show not only that this use of intonation is developed gradually and relatively late, but also that this development follows a U-shaped pattern along a linear course. That is, there is a first period of apparently advanced behavior marked by different responses to the two intonations. At this point, however, it seems more likely that the children are responding to individual cases rather than using rules. They then cease to make a distinction, overgeneralizing the use of a single rule according to which 'wie' is interpreted as subject, regardless of intonation. Finally, the children modify this rule, allowing them to make a consistent distinction between the meanings of the 2 intonation patterns.

With an attempt to characterize some of the facts concerning assimilation, Schachter (1970) and Schache (1972) have proposed several metatheoretical constraints on assimilation. These constraints account for many assimilations, neither of the proposals suggests constraints on consonant cluster assimilations.

The purpose of this paper will be to provide a brief survey of the types of assimilation rules which occur and to examine in particular detail the nature of assimilation rules which occur in natural language situations. A systematic survey reveals the following asymmetries: 1) a few examples were found of progressive assimilations in which the primary place of articulation changed, and 2) regressive assimilation rules occur far more frequently than progressive assimilation rules. In conclusion, a constraint is proposed: Progressive consonant assimilation rules do not change the primary place of articulation. It is also suggested that if syllable final position is weak and syllable initial position is strong, there should be far more examples of regressive assimilation than progressive.
An examination of the system of personal paradigmatic suffixes and of anomalous "passives" in the Nootkan languages of NW America shows that what has traditionally been regarded as a passive construction in those languages is actually an inverse person marking system, closely analogous to the system of direct and inverse person marking seen in the Algonquian languages. An analysis in terms of predicate perspective and argument focus is presented to show the semantic and pragmatic conditions on Nootkan inverse marking. It is suggested that inverse person marking is a typologically significant grammatical category and that it may be a characteristic feature of languages of Sapir's Algonkin-Nakashan typological superstock, as well as of some "split-ergative" type languages of Asia.

McCawley (1979) has criticized Stampe's natural phonology for failing to clarify the notion of 'rule' (as opposed to 'process'). In fact, Donegan and Stame (1979) (henceforth DS) remark that contraction is a rule in their terminology, but they aren't sure why. Another borderline case is the question of whether the /-a/ allophone of the English plural is related to other allomorphs (/-a/ and /-/) by a rule or a process. The problem is that both rules and processes may involve phonological alternations. A borderline case arises when the operation in question is phonetically conditioned and appears to facilitate articulation. Contraction is even more of a problem because it varies with speech style although DS claim that all rules are obligatory. This paper defends the view that both rules and processes may vary with casual/formal style (but not fast/slow tempo). Borderline cases can also be resolved by studying cases in language acquisition.

Crossing: Towards a Theory of Naturalness in Sign Language Phonology

Psycholinguists studying American Sign Language acquisition propose that crossed handshapes are highly marked, since they are learned latest in child acquisition of American Sign Language. This paper tests this claim of markedness by examining the frequency of occurrence of uncrossed and crossed handshapes across nine sign languages. Data to be collected by simultaneous notations of speech, sign, and gross gesture (Iveney 1976, 1979). Conservation of liquids and tense are the two primary phenomena employed. The data from DS (1979) that rules are conditioned to the left are not tested. The framework of generative grammar is used, but in a non-traditional way. The data consists of a distribution in contexts in which order is apparently free. The data consists of native speaker ratings of 16 target sentences in which sentences are matched by order of nominal constituents, and the order of subject and object were systematically varied, e.g. (1) and (2) with O-S order.

1. Dieses Tor ist nur gefallen, weil der Schnee den Torwart geblendet hat.
2. *Dieses Tor ist nur gefallen, weil der Schnee den Torwart geblendet hat.

The sentences all described events in a soccer game, and were preceded by a sportsman's monologue. The sentences were selected from the literature and were intended to be natural in all respects.

The sentences were selected from the literature and were intended to be natural in all respects.
abstracts of symposium papers
Exceptional types of language, such as aphasic language or the language of children, it is often claimed, may illuminate our understanding of normal adult language. This symposium is convened to examine precisely how they may do so. Recognizing the impossibility of covering the full array of appropriate exceptional language types in one symposium, we have selected six representative areas which speak to linguistic theory in its broader sense, and which will serve to illustrate the general issues. These areas are: aphasia, child language, second language learning, pidgins and creoles, language death, and amnestic dementia.

The papers demonstrate that the extrinsic evidence which is provided by data from these exceptional fields may be relevant to linguistic theory in one of several ways: It may support a linguistic model or construct by providing a converging line of evidence, such as an indication of the psychological reality of a unit, rule, or concept (e.g., Blumstein). It may, on the other hand, distinctly contradict a theoretical formulation or notion in which case it may provide the necessary data to decide between one model and an alternative one (e.g., Keller-Cohen) or to suggest how one might modify the linguistic notion in question so as to resolve the inconsistencies (e.g., Henn). Linguistic theory may not be sufficiently refined to describe the data from exceptional languages, in which case elaboration would be called for (e.g., Obler). Finally, data from exceptional languages may appear orthogonal to linguistic theory, in which case they may serve to enrich it by highlighting other language phenomena which a universal theory of language would be expected to account for (e.g., Dorian, Schaffer).

Individual participants have been asked to treat the areas they represent in some depth rather than attempting a broad overview. Three discussants have been invited to comment on the topic and papers: Berko Gleason who has pioneered a number of exceptional fields, Labov who has expanded linguistic theory by incorporating rich sociolinguistic data from normal adults, and McCawley who has been broadly concerned with the valid construction of linguistic theory. Among the more general questions we anticipate arising in the discussion periods are:

- How research questions and methodology may shape results and interpretation.
- How the performance nature of so much of the data from exceptional language fields influences the findings.
- How far one is justified in going when postulating separate perception and performance grammars.
- How the interaction between language and thought enhances/obscures applicable research on the exceptional language groups.
- Whether the language of the various exceptional populations is, in fact, simpler than that of normal adults and if so, in what ways.
- What the limits to safe/productive analogizing between exceptional and normal language are.
- Why so much more support and enrichment for linguistic notions have been proposed than contradiction of them.
- Why evaluation of linguistic theory has not been a major focus of linguistic work in the exceptional fields.
Language in Senile Dementia

In dementing patients, phonology, morphophonology and syntax are relatively well preserved while lexical, semantic, and pragmatic realms are disturbed. Production and perception may be distinguished in that patients produce complex syntactic forms with empty or deviant lexical selection, while in comprehension they do not completely process syntax but rather respond associatively to lexical items. In the lexical choice of these patients we find evidence confirming the notion of semantic features, and suggesting that lexical selection occurs late in the process of formulating a sentence. Among the normal phenomena for which we may expect linguistic theory to account, which are highlighted by their breakdown in dementing patients are the abilities to code and register-shift, to appropriately initiate, maintain, and stop speaking, and to understand one’s native language when spoken with dialectal or foreign accents.

Dissolution of Language in Aphasia: Evidence for Linguistic Theory

Aphasia, the study of the dissolution of the language system as a direct consequence of localized brain pathology, affords as it were an experiment in nature, in which it is possible to explore the effects of brain-damage on the adult linguistic grammar. Such study can provide important insights into the nature of the linguistic system and the structure and organization of its primitives. Several issues will be addressed in this paper. Each speaks in a particular way to how the study of aphasia can uniquely inform linguistic theory. The first issue concerns the nature of the linguistic levels. Although the components of the linguistic system, i.e. phonology, syntax, semantics, and the lexicon, are semi-autonomous, there is a complex interaction of these levels both in terms of ongoing language processing and in terms of their vulnerability with respect to particular areas of brain-damage. The second issue addresses the nature of the primitives representing linguistic levels. Evidence is presented in support of the notion distinctive feature in phonology, and the dichotomy between lexical and grammatical formative in syntax. The third issue concerns the dissolusion of components of the grammar found in aphasia, but not necessarily clearly compartmentalized by linguistic theory. For example, comparison of right and left brain-damaged patients suggests that the pragmatic system may be an independent system and not necessarily directly elucidated within the structure of the linguistic grammar.

Language Death and Linguistic Theory

Considered are the following questions: (1) What bearing does the successful participation of the "semi-speaker" of a dying language in the speech community which uses that language have on definitions of the speech community? (2) Does the reduced language system of semi-speakers of the dying language show features in line with linguistic theory of simplicity which may be characteristic of reduced linguistic systems in general? (3) Which features reliably critical for semi-speakers as a group? (4) Is the remarkably large amount of change in a dying language's grammatical system promoted by (or for) the fact that the "semi-speakers" of the dying language are successful participants in the system? These questions are answered as follows, using data from a dying Scottish Gaelic speech form: (1) Only Hymes' broad view of the communicative competence which characterizes a speech community is adequate to describe speech communities in which semi-speakers are successful participants. (2) Grammar is found to be controlled better than embedding by semi-speakers generally. (3) In the tense system the simpler of the tenses survive best. (4) The best of the four factors taken to promote change in languages which are substantially the same best for semi-speakers, although the latter is her brother and is only one year older than she.

Second Language Learning and Linguistic Theory

This paper considers the relevance of data from second language learning to an understanding of normal adult language. Attention is paid to the relevance of unique properties such as interference or transfer. Such data have relevance in two general ways: they may provide additional support for a given linguistic description, thereby strengthening its claims; second, these data may point to linguistic generalizations not previously formulated. Finally, the paper considers the implications of divergencies between data from second language learners and linguistic theory. Interference errors, for example, can be used to support a typological distinction such as that between topic-prominent and field-prominent languages, or that between "fact" and "idea" in second language learning. Linguistic theory needs metalinguistic constraints, some of which should derive from the fact that language is a human communicative behavior which is largely learned. The study of language development is obviously crucial to theories concerning rule-learning. Further questions of the relation of adult language to adult language, early child language affords an object for study which we can hope to model adequately, and from constructing such a model we can arrive at more explicit theories about adult language.
The Symposium on "Simplification in Pidginization and Second Language Acquisition" was held on Friday, 26 December, at Room 1, University of California, Los Angeles. It consisted of four parts, each consisting of (1) a brief 5-minute summary of previous research and current issues relevant to the topic of that sub-session, (2) a 30-minute lead paper synthesizing research in an area and/or presenting new research, (3) one to four 10-minute discussion papers, each commenting on the lead paper from the perspective of the discussant's own research, and (4) a 20-minute period for open discussion. The symposium was divided into four parts, each focusing on different aspects of pidginization and language acquisition.

During the past five years an increasing number of researchers in the fields of pidgin and creole studies and first and second language acquisition research have studied the relationship between pidginization/creolization (as well as depidginization/decreolization) and first and especially second language acquisition and the relevance of linguistic universals and universals of language acquisition to this relationship. Although earlier work in pidgin and creole studies often assumed a language acquisition framework for dealing with issues in the field, it has taken recent developments in linguistic theory and new data and theoretical models in pidgin and creole studies and first and second language acquisition to provide an impetus for this valuable new area of socio- and psycholinguistic inquiry. The time is right for a more thorough investigation of this relationship. This symposium has been organized with this purpose.

Each of the participants in the symposium has an approach of the theme of the symposium from a different perspective. They have been invited to participate in the symposium in order to (1) review previous research, (2) discuss current issues, (3) present new research results, and (4) discuss new approaches to previously-researched questions.

The symposium is divided into four parts, each consisting of (1) a brief 5-minute summary of previous research and current issues relevant to the topic of that sub-session, (2) a 30-minute lead paper synthesizing research in an area and/or presenting new research, (3) one to four 10-minute discussion papers, each commenting on the lead paper from the perspective of the discussant's own research, and (4) a 20-minute period for open discussion. The lead papers (and accompanying introduction, papers by discussants, and open discussion) are grouped into two three-hour sessions.

Session I focuses on "Simplification in Pidginization and Second Language Acquisition (SLA)". The two lead papers in Session I approach this topic from two different directions: simplification in the input to SLA (Hatch) and simplification in the learner's output (Meisel). The perspectives from which Hatch's paper will be discussed are (1) Foreigner Talk and "Foreigner Talk" (Ferguson), (2) the importance of input in SLA (Larsen-Freeman), and (3) simplified input and the origins of pidginization (Naro). Meisel's paper will be discussed from the perspectives of (1) language death (Dorian), (2) research on Foreigner Worker's German and a recent longitudinal study of the acquisition of English by Spanish speakers (Gilbert and Mack), and (3) pidginization and linguistic change in emigrant languages (Saltarelli and Gonzo).

Session II focuses on "Creolization and Decreolization as Processes of Language Acquisition." The lead paper by Valdman will deal with creolization and SLA and the paper by Schumann and Stauble with decreolization and SLA. Valdman's paper will be discussed from the following perspectives: (1) processes of creolization and linguistic universals (Robertson), (2) the social context of processes of creolization (Sankoff), (3) relations between structure and function in child language, pidgins and creoles (Slobin), and (4) language change (Traugott).

Second language acquisition researchers have found that there exists an accuracy order of morphemes which English as a second language (ESL) learners follow in their acquisition of English. Although the order is not invariant, researchers can predict with some confidence which morphemes ESL learners will supply in obligatory contexts the most often, the next most often, etc. The morphemes which have been studied have varied somewhat from study to study; nevertheless, the following are the ones usually included: the, an auxiliary and the in of the progressive aspect, the be copula, the articles, the possessive marker, the third person singular present tense marker, the regular past tense marker, the plural marker and some irregular past tense forms. In pursuit of an explanation for why such a common order occurs, the data from the morpheme studies were examined in light of conceivable determinants. Factors considered to account for the order were basically of four types: the nature of the morphemes themselves, characteristics of the learners, acquisition heuristics and characteristics of the input to the learner. Only an input characteristic, the frequency of occurrence of these morphemes in adult native-speaker speech, correlated significantly with the ESL accuracy order. Thus, it is important to consider the input in attempting to explain a learner's output.
'Simplification' denotes modifications made by native speakers under perceived difficulty of communication. The origins of the process consist of two basic components: (1) natural selection and (2) a strategy for use in cases not covered by (1). These components change and interact during the course of contact. For example, it has been shown that at the very beginning stages of the explorations that led to the Portuguese penetration of Africa (i.e., during the period of 'interpreter' in Lisbon, 1500-1650) it is likely that previous systems of simplification contained more than a tendency to put verbs in the infinitival form. Major modifications were determined by the following strategy in these initial small-scale contacts: (1) simplification of structures involving non-regular forms in the infinitival and imperative. Each stage in the elaboration of the internalized system or facilitation of communication due to prior stereotypes was undoubtedly much greater.

This paper argues that structural simplifications in L2 acquisition result from different kinds of strategies. Whereas some prepare the learner's next step towards the target variety, others facilitate the use of the internalized approximations, and others represent modifications that are not necessarily contributing to its further elaboration. The arguments are based on data from cross-sectional and longitudinal studies with immigrants from Romance countries acquiring German in a natural setting. Discussing detection phenomena and word order problems, it is maintained that there exist different kinds of structural change, characterizing different learner types. Socio-psychological factors are said to influence the formation of such learner groups. Thus, the interaction between structural properties of simplification, strategies that serve different purposes (e.g., elaboration of the internalized system or facilitation of the use of this system), and socio-psychological factors influencing the choice of such strategies. The relation between these, however, is not one of cause and effect, although it is far from being arbitrary. This is to say that, for example, integrative orientation does not necessarily entail successful learning but it does help; and simplifying strategies do not automatically yield specific structural changes.

Like natural second language learners, imperfect "semi-speakers" of a dying language speak some other language fluently and are untutored in their less well-controlled language, yet for some of them the imperfect language is the mother tongue, and they have outstanding receptive skills in it. Semi-speakers of East Sutherland Gaelic use certain simplification strategies: (1) reduction in the number of allomorphs and generalization of one high-frequency allomorph in complex morphemes (noun plural, gerund); (2) elimination of unusual or complex synthetic forms in favor of analytic forms (negative imperative; 3) transfer of a complex morphological system largely to a single overused representation of a large class (tense system); (4) elimination of unusual or complex synthetic forms in favor of analytic forms (passive, impersonal). The data suggest that there is no need to posit an additional learning strategy of pidginization. Spanish and English are clearly a poor choice of languages in the attempt to answer the question: Does pidginization exist at all as a strategy of second language acquisition? and, if so, how important is it? And, what kind of evidence is critical in deciding between transfer and pidginization. We intend to carry out further second language acquisition studies similar to Schumann's work with his subject, Alberto, but where the source and target languages were closely related syntactically, where there is a maximally different outcome if pidginization were the learning strategy employed. Thus, for example, with regard to NGE placement, if both the source and target languages had NGE markers and only after the verb or incorporated into the VP, the appearance in early stages of the acquisition of the TL of NGE + V would constitute evidence for pidginization.

While most of the research on the linguistic problems of immigrants has focused on their acquisition of the language of their new country, our research has been concerned with the maintenance of their native language and its acquisition in the first three generations. We have focused on experimental studies of emigrant languages, the type and rate of linguistic change, and social factors which influence this change. Our research to date indicates that the same processes and strategies characterizing natural language change, and the external factors associated with the early stages of second language acquisition. In January, 1979, a six-month longitudinal study began with 2 native speakers of Venezuelan Spanish, learning English as a second language. We studied: negation, the copula, verb auxiliaries, yes-no question inversion, the definite article, and the possessive 's. We conclude from the data that the hypothesis of negative transfer from Spanish to English will account for most of the errors observed in these structures. The data suggest that there is no need to posit an additional learning strategy of pidginization.

The purpose of this paper is to shed more light on recent claims that pidginization is a phenomenon associated with the early stages of second language acquisition. In January, 1979, a six-month longitudinal study was begun with 2 native speakers of Venezuelan Spanish, learning English as a second language. We studied: negation, the copula, verb auxiliaries, yes-no question inversion, the definite article, and the possessive 's. We conclude from the data that the hypothesis of negative transfer from Spanish to English will account for most of the errors observed in these structures. The data suggest that there is no need to posit an additional learning strategy of pidginization. Spanish and English are clearly a poor choice of languages in the attempt to answer the question: Does pidginization exist at all as a strategy of second language acquisition? and, if so, how important is it? And, what kind of evidence is critical in deciding between transfer and pidginization. We intend to carry out further second language acquisition studies similar to Schumann's work with his subject, Alberto, but where the source and target languages were closely related syntactically, where there is a maximally different outcome if pidginization were the learning strategy employed. Thus, for example, with regard to NGE placement, if both the source and target languages had NGE markers and only after the verb or incorporated into the VP, the appearance in early stages of the acquisition of the TL of NGE + V would constitute evidence for pidginization.
Pigdinning, creolization, decreolization, L1 and L2 acquisition and linguistic change are simply different aspects of the innate human language faculty. Human beings are born equipped with a series of hypotheses about the nature of human language. These hypotheses, given by the neural structure of the species and the mode of functioning of its organs of cognition, are hierarchically ordered, i.e., there are first-rank hypotheses whose learners will make and hold until they are disconfirmed by experience. If there is relatively little disconfirmation, the result is a creole language. If there is disconfirmation, the result is one or other of the world's 5,000-odd languages. The question is, when, how, and why when a learner has already mastered one or more languages? Final answers to this depend on natural language acquisition research in areas where it is commonplace to have acquired three or more languages before puberty. Arguments between these two viewpoints—that the L2 learner still relies on innate knowledge or that his hypotheses are primarily determined by the nature of his L1—can almost certainly be reconciled: there are clear areas (such as basic word order) where the change are simply different aspects of the innate human language faculty. Human learners which any learner will make and hold until they are disconfirmed by experience. If there is relatively little disconfirmation, the result is a creole language. If there is disconfirmation, the result is one or other of the world's 5,000-odd languages. The question is, when, how, and why when a learner has already mastered one or more languages? Final answers to this depend on natural language acquisition research in areas where it is commonplace to have acquired three or more languages before puberty. Arguments between these two viewpoints—that the L2 learner still relies on innate knowledge or that his hypotheses are primarily determined by the nature of his L1—can almost certainly be reconciled: there are clear areas (such as basic word order) where the innate mechanism seems to make no hypotheses and where in consequence only the L1 model can be followed, others (such as definite/nondefinite distinctions) where innate hypotheses can override L1 influences. But basically, L1 and L2 learners' positions do not differ—both are correcting pre-existing hypotheses rather than 'learning' a language.

In a series of papers I have dealt with a number of aspects of grammatical change in Tok Pisin, a creolizing language spoken in Papua New Guinea. These changes include the transition from sentence-initial adverb to tense-marking preverbal auxiliary; the citation of subject pronouns, and the evolution of relativization. Aspects of creolization in Tok Pisin studied by other researchers include the evolution of number marking, of complementation, of lexical derivation processes, and of causative constructions. It is possible now to begin evaluating the reasons for and sources of the changes that have occurred. The social bases for grammatical expansion have clearly been (1) massivePidgining and early stages of child language reflect a similar set of solutions to functional pressures on a linguistic communication system: (1) Semantic transparency is maximized in that surface arrangement of morphemes corresponds closely to underlying structure. (2) Sentence processing is facilitated by surface cues to underlying meaning. (3) There is a limited range of devices for carrying out rhetorical functions and for achieving cohesion in discourse. Developmental progressions, both ontogenetic and those of depigidination-creolization, are characterized by reduction in semantic transparency and blurring of surface markings, along with expansion in rhetorical and cohesive devices.
abstracts

of the American Association for Applied Linguistics
This paper concerns generative phonological rules in English and their use in ESL pronunciation classes. The discussion deals with three points. First, the Trisyllabic Lexing Rule (TLR) is part of nearly every major generative treatment of vowel quality in English. I want to show that the TLR is a widely applicable subcase of a much simpler and more general vowel quality rule, the Trisyllabic Lexing Rule (BLR). Second, the BLR is one of numerous examples of the fact that the traditional phonological deep structure of English (especially Chomsky and Halle 1968) contains as given (i.e., unpredictable) a great deal of information which is in fact predictable, particularly in the area of vowel quality. This leads to the suggestion that technical analyses of English begin to move in the direction of vowel quality prediction rules which generate tense and lax vowels instead of continuing exclusively with vowel quality alternation rules which change given tense and lax vowels. Third, I want to highlight the important consequences of the BLR (and other vowel quality prediction rules) for learners of English as a second language. This third point is a report on recent advances in our pronunciation materials for foreign students.

FRED R. ECKMAN, University of Wisconsin-Milwaukee [THURS AFT: 6]

On Predicting Phonological Difficulty in Second Language Acquisition

One of the phenomena which has defied explanation, both within the framework of contrastive analysis and error analysis, is the difficulty that second language learners have in making a phonemic split in the TL between two NL allophones. Thus, for example, Spanish allophonic /b/ and /b/ are phonemes in English, and present problems for Spanish speakers (Stockwell and Bowen 1965); and Japanese /l/ and /l/ are phonemes in English and present problems for Japanese speakers learning English. The purpose of this paper is to propose an explanation for this phenomenon. This explanation makes use of the hypothesis that markedness corresponds to relative degree of difficulty (Eckman 1977); and a principle in Houlihan and Iverson 1979 which states that allographic rules produce relatively more marked segments. Given these tenets, the above-stated difficulty follows from the fact that the learner already has the unmarked phoneme in the NL, but must learn the more marked allophone as a phoneme in the TL. Since this learning involves the acquisition of something which is relatively more marked, the degree of difficulty is correctly predicted. An additional consequence of this theory is that it correctly accounts for the acquisition of a phonemic split when the phoneme to be acquired is relatively less marked than the phoneme in the NL. Thus, relatively little difficulty is predicted, and also borne out experimentally, for speakers of Arabic, who have /b/ and /b/ as allophones of /b/, since the acquisition of /b/ involves learning a phoneme in the TL which is relatively less marked than the NL /b/.

DOUGLAS E. PLAVE, Colorado State University [THURS MORN: 6]

Analyzing the Cohesive Properties of Texts

Educators and researchers have long been attempting to develop objective, reliable, valid criteria to measure linguistic maturity in writing. Unfortunately, much of the work which has been done is highly restricted in scope. Analyses of the linguistic properties of writing have not yet gone beyond the level of the sentence. Recent research by Halliday and Hasan (1976) has resulted in a comprehensive framework for the analysis of the cohesive, beyond-the-sentence properties of texts of all types. The primary purpose of this study is to utilize a slightly modified version of the Halliday-Hasan framework in the analysis of the cohesive properties of writing samples produced by elementary, junior high, senior high, and college students. Twenty-five subjects from each level will be used. All subjects will use the same writing stimulus to insure comparability of results. The analysis will determine both the frequency of cohesive elements relative to text length and appropriateness of cohesive elements relative to inter- and intra-sentence semantic relationships. Results will be analyzed to test for development patterns and trends. In addition, texts will be holistically evaluated to determine the relationship between frequency and appropriateness of cohesive elements and overall quality of writing.
Interest in the variables operative in teaching/learning settings has led in recent years to considerable classroom-centered empirical investigation. In many cases, the traditional process-product paradigm has been abandoned in favor of alternative designs more suitable for descriptive studies. The present study follows this trend; it describes the nature and role of feedback in communicative settings in which the participants do not have equal proficiency in the language in use. Specifically, the present study investigates learner feedback and its effects in teacher/learner interactions.

A total of twelve different dyadic and small group learning settings provided the data base. The activity used to elicit data was in each case a problem-solving task in which a teacher (T) had to describe verbally, without recourse to gesture, a number of different graphic designs such that the learner(s), who had the designs reproduced on a sheet of paper, could determine the order in which the designs were described. Learners were informed that they could request any kind of clarification or re-explanation, if they deemed it necessary. Two tasks of this kind were performed in each of the settings.

In the analysis of the data, strategies of learner feedback are classified and the effects of learner feedback, as reflected by S's post-feedback responses, are examined.

ROBERT N. INGRAM, Madonna College

Linguistic Contributions to the Teaching of Sign Language

Prior to the current decade, the teaching of sign languages to hearing adults consisted almost exclusively of drilling vocabulary items in isolation and then in English-based sentences. With the recognition that American Sign Language (ASL) is not a form of English, but a linguistically distinct language, teachers of ASL have begun to incorporate data from linguistic research and methods from second language teaching into their instructional materials and techniques. This paper chronicles that development, proposes some areas of need for future research and discusses possible limitations of descriptive or explanatory linguistics to the teaching of sign languages as second languages.

ANNE V. MARTIN

Deleted-Sentence Preferences: A Reflection of Psycholinguistic Processing of Information Relationships

This paper defines several information relationships, presents a technique for studying psycholinguistic processes involved in perceiving those relationships, and discusses a recent study of the proficiency of university students in processing relationships in written English. Information relationships defined include "hierarchical" (general-to-specific) and "non-hierarchical" (spatial/temporal) order. Several factor analyses conducted to establish the construct validity of those relationships are summarised.

The "extended close" technique is presented as a tool for understanding how people process information in context. In the extended close approach, complete sentences rather than words are deleted from written discourse, and the student selects an appropriate sentence for the deletion.

The study reported here used an extended close instrument to compare the proficiency of American Freshmen and advanced ESL students in processing information relationships in context. It was found that non-native speakers of English have significantly more difficulty than native speakers of English in processing hierarchical information relationships, controlling for differences in general reading ability. Linguistic and pedagogical implications of the study are discussed.

MURIEL BAVILLE-TROIE, Georgetown University

The Be Creative: Stages in the Acquisition of English Be by Navajo Children

Early stages in the acquisition of be by speakers of a native language which lacks any copular verb construction should provide evidence for second language processes of rule perception/interpretation and generalization with minimal possibilities of interference, yet the findings of this study provide unambiguous evidence for a basic level of native language interference in the acquisition of English grammar. The speech of approximately one hundred six-year-old Navajo children constitutes the data base, recorded at both the beginning and end of first grade. Be forms are initially omitted, and then go through differential development depending on context. Full forms occurring in being constructions are interpreted as aspectual prefixes in a verbal complex similar to Navajo (e.g. boy be-is-play for the boy is playing); contracted forms as an 's' prefix on the next word (e.g. boy splay for the boy's playing); be between NPs as a conjunction (e.g. boy is girl is dog for boy and girl and dog). Locatives involve a change in word order (e.g. boy table under for the boy is under the table), and predicate adjective constructions may be followed by be interpreted as the equivalent of 'at is', optionally used for emphasis in Navajo.
The paper will present the results of a study of /r/ and /l/ by Japanese learners of English. The purpose of this study was to compare the ability of learners to both produce and perceive these sounds. The hypothesis that is being tested is that the production accuracy of some learners is better than their perception accuracy. Also, neither the /r/ and /l/ was unilaterally difficult. The difficulty of the liquid was affected by the position in which it occurred in the word and in different vowel contexts. Each person listened to a tape recording of every other subject and a list of English words with /r/ and /l/ appearing in different positions within the word.