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
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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 Ladefoged, 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 Ladefoged, 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 California at Los Angeles.

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

Exhibit

There will be an LSA Exhibit of linguistic publications and scientific equipment in the Santa Anita Room. The Exhibit is scheduled to be open at the hours listed below:

Thursday, 27 December 10:00 a.m.-2:00 p.m.
3:30 p.m.-6:00 p.m.
Friday, 28 December 10:00 a.m.-2:00 p.m.
3:30 p.m.-6:00 p.m.
Saturday, 29 December 8:30 a.m.-11:30 a.m.

The display copies in the LSA Joint Book Exhibit will be sold beginning at 8:30 a.m. on 29 December, the proceeds to be donated to fellowships for the Linguistic Institute (the display copies having been generously donated by the publishers exhibiting in the LSA Joint Book Exhibit). Advances for previously ordered display copies, at a discount of $5 greater than that given by the publisher, will be taken prior to 29 December if accompanied by payment. The book must be picked up on 29 December between 8:30 and 10:00 a.m. or it will be returned and the advance payment donated to Linguistic Institute fellowships.

Paper Copying Center

As a new service to those attending this meeting, each author on the program is invited to provide the Local Arrangements Committee with a reproducible copy of his or her paper at the Copying Center. Attendees may place orders for reproduced copies during the meeting. All copies will be offered at cost. Originals should be submitted on 8 1/2 X 11 size paper. Authors are urged to minimize the total number of pages by use of single spacing, narrow margins and multiple figures per page. Papers should be delivered to the Copying Center at the earliest possible convenience.

The Copying Center will be located in the San Fernando Room. The Center will be open at the following hours:

Wednesday, 26 December 7:00-9:00 p.m.
Thursday, 27 December 8:00 a.m.-4:00 p.m.
Friday, 28 December 8:00 a.m.-noon

Job Placement

A Job Placement Center will be open in the San Bernardino Room during the Annual Meeting.

On 27 and 28 December, the Service will be open from 8:30 a.m. to 6:00 p.m. It will also be open from 9:00 a.m. until noon on 29 December. Lists of openings will be available and the staff will arrange interviews between the applicants and the employers. Applicants are asked to list openings and check in with the Service so that an interview schedule can be arranged. Applicants should be sure to bring an adequate supply of curricula vitae—enough to submit one copy each to potential interviewers. The Service will have no duplication facilities available.

LSA Business Meeting

This year, the Business Meeting has been scheduled in the Emerald Bay Room on Level 3 on Friday, 28 December from 2:00-4:30 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-Grammarians 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 Domara 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 Feliz 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 December 27-28 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.
Friday, 20 December, Afternoon

2:00-4:30 p.m. LSA Business Meeting
Chair: William Labov
Room: Emerald Bay

Resolutions Committee: Stephen Anderson, John J. Gumperz, Robert E. Longacre

The following rules for motions and resolutions were prepared by William J. Gedney and Ilse Lehiste and approved by the Executive Committee at its June 1973 meeting. LSA members are urged to follow these guidelines 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 or by a member of the membership. A resolution expresses a recommendation or the 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 membership."”

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 votes of a majority of members voting at the meeting, are then submitted to 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 those voting in favor must be at least 2/3 of the personal membership. 2d. If a member introduces a motion, but prefers to avoid the delay involved in 2c. above, he may submit his motion in advance to the Executive Committee (before their regular meeting preceding the Annual Meeting) at which it is to be introduced with a request for the Executive Committee to mail ballot of the membership, approve the introduction of the motion at the business meeting as a motion initiated by the Executive Committee (see 2b. above).

3. Procedure regarding resolutions. 3a. 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 prior to the beginning of each regular or special meeting. Any member wishing to introduce a resolution may 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, that duplication is avoided, and that the resolutions Committee may meet in advance for this purpose. A motion to refer to the Resolutions Committee, which may be amended by the Resolutions Committee, regardless of whether or not it has passed the procedure in 3c. above, by the following steps: the resolution is forwarded to the Executive Committee for submission to the membership by mail ballot (in the next issue of the LSA BULLETIN). Passage of such a "sense of the majority of the membership" resolution requires the affirmative vote (over 50%) of the membership responding.

4:45-5:45 p.m. Presidential Address: "Resolving the Neo-grammarians' Controversy" by William Labov
Room: Emerald Bay

8:00-11:00 p.m. Symposium: The Relationship Between PIDGINIZATION, CREOLIZATION AND LANGUAGE ACQUISITION SESSION II (See page 4)
abstracts
of regular papers
STATEMENT FROM THE PROGRAM COMMITTEE

The abstracts which appear in this Meeting Handbook are photocopies of the originals submitted to the LSA Program Committee. Inefficacies of style, grammar, punctuation and spelling are the responsibility of the authors.
A Closer Look at Manchu Phonology

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 well-motivated, empirically-defined predictions and the products of these rules result from Focus-marking. The following is an example of heavy NP's. In standard accounts of FM and AM, the a's are taken as basic, while the b's are derived by transformations:
(a) Mervin throw the cat
(b) Sue gave the dog the bone
Both FM and AM are subject to rigid restrictions.
(a) Mervin throw the cat out
(b) Sue gave the dog the bone
The analysis holds for DM:
Mervin throw the cat out, Sue gave the dog the bone
Such a process of movement cannot occur when the object is an anaphoric pronoun because those pronouns have no focus potential and must remain with their verbs.

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 form 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 (permanibility), and possible, formed by adding -ness or -ity to existing xible words (affixability). When productivity is measured provisionally as the ratio of existing to unattested xibleness words, then 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 morphological or orthographic 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 morphological productivity and that a less transparent affix may nonetheless be more productive, contrary to common opinion.

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

The speech of bilinguals interacting with each other under certain social 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 how C.S. is a manifestation of certain underlying structures of bilingualism, 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. The transformation can only be expanded using PSMs of that language. 2. When lexical insertion occurs, terminal node references in one language must be replaced with those in the other language. 5. Each language has a set of monolingual transformations. 6. A transformation that belongs to one language can apply only if its domain of applicability is a node in the phrase structure of the other language. This model establishes theoretical grounds for the derivation of bilingual sentences as a process of generation as part of the grammar, instead of a process that belongs to the performance of the bilingual speaker.
Evidence for Pre-schoolers' Analysis of Clusters

This study used various experimental tasks to examine English-speaking children's treatment of clusters as phonological units, examining /sw/ and /tr/ in word-initial position. It involved: (1) whether these clusters constitute a single unit or a sequence of two units; (2) what other phonetic/phonological factors are involved in their perception; and (3) what factors account for difficulties in the acquisition of these clusters. In a segmentation task similar to that used by Zueleva (1984), children were asked to identify the first sound in a spoken word. Second, children were asked to identify words and symbols that were not spoken in the same way as the words that were. Finally, children were asked to identify words that were not spoken in the same way as the words that were. These tasks were repeated in a similar way with different words. In all cases, children were able to identify the words that were not spoken in the same way as the words that were. The results from these experiments suggest that children can discriminate between words that are not spoken in the same way as the words that were.

ED RATTISTELLA, 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 (lexical NPs and pronouns) and the possibility of bound anaphora. The only reflexives that are not allowed are those where the instrumental (or the reflexive) is bound. In 1978, it was formulated that the binding of pronouns in a phrase is not a function of the binding of the pronouns. This result indicates that binding in the binding of pronouns is not a function of the binding of the pronouns. The results in the experiments indicate that binding in the binding of pronouns is not a function of the binding of the pronouns.

JOHN BACH, 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 Credenon/Sankoff computer program for multi-situational linguistic analysis. The final analysis suffix -s is not a complete analysis of all situational factors. The results reveal that the present study is not only new to Black English research, but enriches existing sociolinguistic theory in that the present variation is attributable to speakers' sensitivity to the relative formality of speech events.

DONALD C. BEAVER, Northeastern Illinois University

(1 and 0): Spectra of Adjacent Vowels

Previous research has shown that (0) and (0) might be distinguished perceptually in any of several ways. Phonological, perception theory, to the extent that the concept of distinctive features is useful, would predict that the respective pairs are not. However, (0) and (0) are not perceived as being distinct. Phonetic studies by Stevens (1986) and others have revealed different acoustic characteristics of the respective fricatives. Moreover, Davis (1948) concluded from a perceptual study of English fricatives that formant patterns in adjacent vowels must be provided to explain the perception in distinguishing (0) from (0).

The present study is a close examination of the Davis study, but one that apparently does not appear to have been formally undertaken. Spectrograms of all American English vowels were made with the fricatives in question in both pre-vocalic and post-vocalic positions. A study of the adjacent formants shows that while formant behavior appears to be uniform enough to serve as the means of distinguishing (0) and (0) 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 erratic formant behavior from speaker to speaker which might supply idiosyncratic cues for listeners.

PATRICK SPEETER REDMAN, University of Minnesota

Perception of the Oral-Nasal Distinction in Consoments and Vowels

Previous experimentation with the perception of synthetic speech continua reveals that although series in which the consonantal portion of a synthetic syllable is varied are categorically perceived, series in which the vowel is varied are typically perceived. It is uncertain whether these results are to be attributed to perceptual differences involving the consonantal or vocalic properties that vary in each case. A study of the adjacent consonants shows that while formant behavior appears to be uniform enough to serve as the means of distinguishing (0) and (0) 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 erratic formant behavior from speaker to speaker which might supply idiosyncratic cues for listeners.

ROBERT REDMAN & JAMES COGGS, ORNL Educational Research & Development

The Comprehensibility of Discourse Paraphrase

In a discourse comprehension experiment third through sixth grade children read short expository passages presented in three syntactically controlled paragraphs and were asked to identify the head of the subject to which the other treatment. 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 categorizing and relativizing structures that include lexical information between subject and verb. Posthoc analysis revealed that the effect for young children in unidimensional structures. The results also indicate that conventional measures of readability, as sentence 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 Pope, have noted the special intonation patterns of sentence adverbs, expletives, vocatives, certain tag questions, quotative verbs, epistemic verbs and polite expressions. In this paper arguments will be made that these specific 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 still false. The identification of the discourse domain makes it possible to identify two clear domains for intonatory contours which have different, but predictable, characteristics.

MATTE RUBENSTEIN BLEIER, University of Texas, Austin

Berber Participles, Subject Extraction, and VSO Languages

Kebyle, 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 Kebyle participle appears in clitics, relative clauses, and WH questions. These constructions consist of a head NP followed by the participle, which has a prefix 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 in conjunction with recent work on other unrelated VSO languages, it suggests a typological peculiarity of verb-initial languages not previously noted.

ROBERT BLEY-PROWAN, University of Texas, Austin

The Morphological Character of German Final Devolving

Vennemann (1972) sketched a theory of German final devolving which holds that devolving is syllable-final; that syllable boundaries are placed in accordance with a phonological strength hierarchy; and that clusters may be reallocated according to a 'Law of Initial.'

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 devolving (Englisch, etc.), and cases where there is no devolving although the principles ought to place a syllable boundary after the obstruent (Segments, etc.). Especially difficult is the contrast, in some dialects, between e.g., Grabstein (with h-ep) but Krabstein (without devolving).

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

JOEL BRADSHAW, University of Hawaii

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 SVO 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 Austro-Malayo Melanesian languages. These languages have innovated a variety of features associated with V-O word order (often with O-V word order as well), presumably in response to the overwhelmingly O-V Papuan substrate languages. Austro-Melanesian languages other than those in the New Guinea mainland are quite consistently V-O in their word order and associated typological traits.
A Sociolinguistic Survey of English in Cornwall

Rolf Brown, University of Manitoba

On the basis of historical descriptions of the Celtic language Cornish, 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 mid front back vowel /æ/ and the unrounded front vowel /I/ ("thinnest"). The results of the survey are based upon 14 individual tape-recorded interviews which were conducted in St. Ives/West Cornwall and Bude/East Cornwall in 1978 and 1979. On the basis of education and profession informants were assigned to three different socioeconomic classes (MMC, IMC, WC). 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

An error-prone processing involves specifying both the item (e.g., phonemes, syllable, 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 information is separable. Lexical retrieval errors show that order is inherent only for the stress- and word-initial and -final portions; word-medial segments are stored separately from their order information. Moreover, orders that are easily lost than item information in lexical retrieval. Production errors also exhibit a break-down in order information (of a different sort), whereas perceptual errors involve a greater failure in item as opposed to order information. Thus lexical retrieval and perceptual processing exhibit complementary behavior: where one system is relatively weak, the other system compensates.

Pamela Bunt & Robert Franklin, New Mexico State University

Southern Paiute: A Case of Syntactic Inflexibility?

In this paper, we examine ergativity and accusativity in Kaibah Southern Paiute emphasizing the imperative which appears to display both morphological and syntactic ergativity. In imperatives, second person transitive subjects delete while the direct object appears with the zero case-marking elsewhere functioning as nominative. (e.g. mi yapumima-ak (rock) non-article that mom carry along-is) Take that rock along. Intransitive subjects appear: paiyun- atay (go home-you=you mom now) Go home now. The imperative is interpreted as subject intransitives and intransitives as subjects. The imperative that exhibits agreement in the form of the verb would otherwise be explicitly directive speech act (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 the sentence is determined by the context. The general prescription on implying control over others, lead us to note that the imperative has been reanalyzed as a passive-like construction with softened directive force since as an ergative imperative subject agenticity is de-emphasized.

Robert Chavick Butler, University of Texas, Austin

Dummy Subjects and Verb-Second Order in Old English

In Old English the pronouns hit and gam may occur as dummy subjects in constructs such as extrapositions, e.g. hit is written set... 'it is written that...'. (11455). Hackermann (1974) has argued that these dummy subjects originally functioned as a verb-second function. The data does not have a single verb-second order. If dummy subjects had a verb-second function, they should occur in verb-second clauses and only sentence-initially. The sample shows that in the Old English OE dummy subjects did not have a strict verb-second function. The data is consistent with two modified verb-second hypotheses: 1) dummy subjects satisfy verb-second condition at an earlier stage of OE but had been generalized to other orders by the historical period; 2) dummy subjects function to preserve verb-second order in a specific structure but not in surface structure. But the data is equally consistent with a third hypothesis unrelated to verb-second order: dummy subject seemed to meet the demand that clause subjects rather than a production of a wordorder.

Robert Chavick Butler, University of Chicago

Advancements from Place Phrases

The sentence pairs below exemplify three different syntactic types. This pair discusses them in the framework of Relational Grammar. This model was chosen because it is a natural way of relating these phenomena to other and to other fr syntax (notably other Advancement); any theory of grammatical description will account for the syntactic distinctions which are drawn here.

The relationship of 1a to lb below is different from that of 2a to 2b or 3a to 3b. Wild flowers abound in Siberia in the spring.

1a. Wild flowers abound in Siberia in the spring.
1b. Siberia abounds with wild flowers in the spring.
2a. His brilliant insights penetrated into the innermost recesses of the protoplasm.
2b. The innermost recesses of the protoplasm were penetrated by his brilliant insights.
3a. George Washington slept in this bed.
3b. This bed was slept in by George Washington.

These all seem similar in that the Place argument in the s-sentence becomes the s that in the s-sentence. But in 2b, the verb is passive, while in 1b, the verb is passive, while in 3b not. In 4b, 1b is produced by PLACE ADVANCED and 2b by PLACE ADVANCED TO 2 followed by PASSIVE; 3b is produced by the rule PLACE ADVANCED proposed here. Cross-linguistic comparison also supports this diatopic location, e.g., Russian has both Place Advancements but lacks NON-TERM ADVANCED.

Veda Yoshida & Janice Reisen, American Institute 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-contact on language, there has been a concomitant growth of interest in the linguistic characteristics of legal and bureaucratic language. While the legal and bureaucratic sublanguage is only partially accessible to the non-specialist, the large size and complexity of the language has been the subject of a number of studies. This paper will focus on the nature of the language and its implications for legal and bureaucratic processes. The present paper suggests that the nature of the language and its implications for legal and bureaucratic processes are similar to those of other domains of language and that the language is similar to other domains of language in its implications for legal and bureaucratic processes. The present paper suggests that the nature of the language and its implications for legal and bureaucratic processes are similar to those of other domains of language and that the language is similar to other domains of language in its implications for legal and bureaucratic processes.

The present paper describes the initial research of a project in which linguists are jointly studying the issues involved in the preservation of bureaucratic and legal language. We will report on the results of a series of psycholinguistic experiments designed to investigate the factors that contribute to the production of bureaucratic and legal language. The current work is a preliminary exploration of a number of factors, and we hope to extend our findings to other domains of language and to other domains of language in its implications for legal and bureaucratic processes.
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 consistent with the description of a natural language? 2) Which particular model can handle the observed phenomena most naturally? It has been claimed by Christel (1976) and by Keil and Dell (1977) 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 on what can be overridden only with difficulty. All data we 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 the 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

REFERENCEAL 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 languages speakers tend 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 the story; this suggests the existence of shared cognitive limitations on reference choice. In both languages reference occurrence also follows a strict ordering principle, that is, 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 on what can be overridden only with difficulty. All data we 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 the 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.

I.D. CONIK & GEOFFREY S. KATHAM, University of Hawaii

IT SOUNDS LIKE SOME KIND OF "K". WHY?

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 as 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 dipping down almost meeting F2, narrower bandwidth of F2 and F3 during r, and lower amplitude in F2 and above than in adjacent vowels. These F-type sounds also have well-defined formant structures, without the abrupt discontinuities with adjacent vowels characteristic of anotherliquid.

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.
SCOTT DE LANCIER, Indiana University

[ABSTRACT 3]

Viewpoint, Attention Flow, and Subject Coding Properties

This paper will discuss several "split argument" and other morphosyntactic patterns and their relevance to the notion "subject," and argue that subject is not a linguistic prime, but derivative from viewpoint (Vpt) and attention flow (AF). Su coding properties are distributed between Vpt and AF, and neither have a unique position with either Vpt or the starting point of AF. Natural Vpt is with NP higher on empathy hierarchy; natural (iconic) AF is Agent to Patient. Thus are natural Su. In some lgs, either natural Vpt or AF is obligatory. In Ravanjo, Vpt determines all Su properties; passive is obligatory if P00 on empathy hierarchy, blocked if P01. Su must be the core 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 Tibetan Burmese lgs, where the verb is marked when Vpt is sacrificed to AF. In the typical person-splits-expressive pattern natural Vpt NP governs agreement and lacks case marking (regardless of case role) but word order is ordinarily A-T, reflecting natural AF. Often (e.g., Tangut) there is no 3rd person agreement; agreement reflects only Vpt. In many lgs, aspect constrains Vpt assignment (Delancey 1979) so person and aspectual split patterns are congruent. In these lgs, Su coding properties don't necessarily correlate on one NP; the two components of subjecthood are coded independently, and the notion "subject" is irrelevant.

KATHERINE DEMON & JENNIFER TAKAO, Indiana University

[PREPRINT 3]

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 theories of the imperative. The imperative as defined, logically speaking, is 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 form and function of the imperative over the range of African languages and to arrive at a statement of the syntactic correlates of the semantic notions of the imperative. Although 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 tentatively universal 1) the imperative in general is less marked morphologically than the prohibitive, 2) plurality is more marked than singularity, 3) word order is not used to mark the imperative, 4) the imperative is often strictly limited by social context, 5) if number and gender are marked in indicative constructions, gender will be marked in the imperative and prohibitive if number is also marked. These tentative universals must now be tested against more diversified language populations. This paper then provides a systematic typological framework for future study of the imperative.

ANTHONY DILLER, Australian National University

[PREPRINT 4]

The Fate of Standard Zhuang

In a condition of stable affinities, 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 1992 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 variety, its lack of success is held to result partly from 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 -l- clusters in representative local Zhuang varieties.

DOROTHY DISTERHaupt, University of South Carolina

[FULL TEXT 4]

The Spread of Dative Verbal Noun Complementation in Irish

The earliest type of nonfinite subordinated after subject and object-equival verbs in Old Irish is with accusative verbal nouns which have genitive objects. In the glosses, subject and object noun clauses are to a very limited extent adm mixing dative verbal noun with accusative object; in Middle Irish the list is expanded. Indirect object-verb clauses with only accusative complement is the earliest glosses, but in the later ones (e.g. Liber Hymnorum), dative verbal noun/accusative object structures appear with one verb (asbeall fada). This is a study of the shift from the other accusative complementation to that with dative verbal noun in Old and Middle Irish. The gradual admittance 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 appear as a dative complement; by Middle Irish all such constraints have been dropped.

THOMAS S. DONAHUE, San Diego State University

[PREPRINT 5]

Tokien and the Elvish Languages

Proponents 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 own language, English. These enthusiasts, however, have not made a trained and dispassionate examination of Tolkien's works. Proponents of Tolkien's Elvish languages, with varying dialect spellings from Middle English (the word 'wisket' is 'weske'), and in the Elvish languages, duplicates the syllable structure of Finnish, Welsh, and at times English and Irish. The sound laws relating Quenya, Sindarin, and Sindarin are quite sophisticated, showing change according to laws of phonological naturalness, with metathesis and rule reordering as well, but at the same time some of the results are consistent with the same laws. All, Tolkien fanatics should be alerted that the phonology of these languages lends evidence to Edmond Wilson's charge that Tolkien was engaged in "dominant wishy.

ANNEE DRAZAR, Baptist Hospital of Miami

[PREPRINT 5]

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 in the retraining of communicative behavior in fluent aphasics. Givon (1979) has described a continuum of language change in which the pragmatic mode of communication evolves into a more syntactically controlled mode. Several picture sequence stories require more temporal coherence. Using order of the pictures. After they successfully completed the sequence, repeated with the narrative underlying the story. The process was compared using Givon's pragmatic/syntactic continuum. The results indicated improvement in communicative behavior along the continuum.

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 aspecral 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 DUNNE, Princeton University

The Original Syntax of Conjunctive *-k*e

Based on exhaustive analysis (collecting every example, counterexample, and alternative) of the RV, Tg, Avesta, Grk. historians, Huceneen, Illad, and Plautus, we find that single *-k*e predominates in the oldest stages everywhere. Furthermore, the direction of change, is useful in as much as it does not reverse the reverse. Thus, asl. *-k*e was already predominant in IE. Also, *-complementary unity* (marked meaning) is expressed by dbi. *-k*e only (marked syntax). Much simple statistical predominance does not prove historical priority. Rather, asl. *-k*e is original, because it is the constructible: whereas no model exists for Akk *-k*e > Ak *-k*e, one does for the reverse development: pervarc repetition (P.W., P.N.). Pre. accounts only for the origin of dbl. usage in IE; but also for the spread of dbl. usage in the dialects. For wherever Pre. is preserved, dbl. *-k*e increases in the frequency of time (L-Ir, Grk); wherever Pre. is lost (Lat, Gothic), double *-k*e does not spread. Finally, Pre. conjuring basically nouns; the evidence of RV 10 and the Illad show that dbl. *-k*e began its spread in noun-conjunctive use. Conjunctions in earliest IE was limited to asl. *-k*e and sayedon; dbi. *-k*e, and dandvas developed from these.

ALESSANDRO DURANTI, University of Southern California

Lauga and Talanoaga: 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 different 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 lauga (and 2) the talanoaga. 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 lauga and others talanoaga. In so doing, I will take the perspective of the participants, much in the fashion of the ethnography of Speaking (cf. Bauman & Sherzer 1975; Frake 1972). Both the TOPIC CHIBER and a SEQUENTIAL ORDERING principle account for the native distinction.

ELIZABETH KODNDAK, University of Massachusetts

Grammatical Explanations 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 impossible to give a single account for all facts in languages like Swedish in which extraction out of a Rel clause is grammatical but extraction out of a Noun complement is allowed, as shown in (1)

1. Vilken bekant du på studenterna? sono - mortar -
   (1) Whose book did you like the students, that - read?

2. Skulle du hunnit spela ett studenterna han blivit -
   (2) oh, Vilken bekant, whom did become a student has become -

(1) Which book did you like the students, that - read?
(2) oh, Whose book has become a student has become -

I propose that this fact should be accounted for in terms of the contrast in processing complexity between one gap structures 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 complement extraction in English.

ALICE FABER, University of Texas, Austin

Negligent 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 affixes. 500 sentences from Akkadian, Hebrew, Ugaritic, Akkad, and Aramaic were studied. Each sentence was coded for word order, presence and location of adverbs, pronouns, personal pronouns, negative 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 language and possible conditioning factors. The earliest word order found was SO, in Old Akkadian (c. 2200 BC) and Ugaritic (c. 1500 BC). No evidence for VSO, commonly assumed to be the "primitive Semitic" type was found earlier than later West Semitic (e.g., Ugaritic, Akkadian, Ethiconic). It is impossible to determine at this stage of investigation whether VSO was a common innovation in West Semitic or whether it occurred independently in the various languages. In any case, when taken as the context of a larger investigation of word order and pronoun forms in Afro-Asianic, 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.

DEBRA PARKAS, University of Chicago

Subjunctive Relative Clauses in Homenian

The aim of this paper is to account for the distribution of subjunctive relatives in homenian and to examine the relationship between subjunctive relatives and the referential (specific) / attributive (non-specific) ambiguity of definite and indefinite descriptions. 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 an external object whereas the latter refer to intensional ones. The second part of the paper deals with the distribution of subjunctive relatives and referential NPs. According to Rivero (1979), Spanish referential NPs do not accept subjunctive relatives while attributives do. In Spanish, 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 class of cases where subjunctive relatives are allowed in noun attributive NPs. A subjunctive relative in R always refers 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 regularity 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.
Problem-solving in Phonology Acquisition

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 (e.g., [d] is especially difficult for many English-speaking children. This research presents one child's solution to the problem of word-final voiced obstruents as an example of the interdependence between the phonological and articulatory learning of phonology. The data consists of 3000+ utterances taken from the 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 (word-final voiced stops). Lasan's use of this heretofore unheard 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 contrast which requires all word-final voiced obstruents to be nasal and (2) preserve the phonological distinction between word-final voiced-voiceless stops by means of stop segments (oral stop + nasal stop).

Residential/Nonresidential Deixis for Come and Go in Mal

The verbs come and go have been described respectively in terms of moving toward or away from a center of focus. In English the focus, the Definite Center, may be the speaker, his location at the time of speaking, or a place. In each case it has been suggested that the distinction between come and go is derived from the more basic deictic contrast of ego and non-ego, i.e., the Deictic Center which is ego oriented and designates movements of ego. Mal, a Mon-Khmer minority language of Thailand, however, does not completely follow this pattern. In some situations the Mal verbs go 'come' and go 'go' must be used in relation to where one lives in society and not, for example, according to one's location while speaking. In Mal society one lives either at his village house or field house. In this paper we are primarily concerned with the use of go 'come' and go 'go' used to orient addresser(s) toward or away from the speaker's residence, and how ambiguity is resolved when an addresser is uncertain which of the two residences a speaker is referring to. Finally this paper discusses how Residential/Nonresidential Deixis creates a discourse level interference for the Mal people in their acquisition of Thai as a second language.

Preservation of Text and Story Grammar in an Amnestic Syndrome (Korsakoff)

A case of Korsakoff's syndrome (a diagnostically recognisable amnestic 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 neuropsychology and linguistic models in order to explain theories of neural representation of language functions.

The Korsakoff subject has poor unaided recall for narrative material, but answers well probe questions which have some reference to the target narrative. She recalls information in order consistent with story grammar in which the child draws attention to the real world. The proportion of topics focussing on the child decreases as that dealing with things in the environment increases. Around 7;0, 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 categorisation of topics into the three types is reflected in the means by which they are initiated.

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;4 in interaction with mother. It was found that the earliest topics initiated by the child are exclusively concerned with his own well-(or ill)-being. As early as 0;5, there is growing interest in the immediate physical environment, reflected in the extended topic initiated with story grammar in which the child draws attention to the real world. The proportion of topics focussing on the child decreases as that dealing with things in the environment increases.
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 sophisticated statistical comparison. The 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. Frank, 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 cycle. Numerals in Russian are treated as head nouns with EP 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" (OR) nature of the number increases, and this is accounted for by rules motivated in the general properties of ORs. The problem of case-switching in oblique quantified phrases in Russian is solved using a rule of restructuring, based on the premise that ORs may not 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 either 1) to treat numerals as special parts of speech "equated" between Adjectives and Nouns, or 2) to extend transformational theory to permit underlying specification of surface case features.

Nancy Friesberg, Deafness Center, New York University

Dominance Sign Language 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 often 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 DRs for deaf and hearing signers. Analysis of videotapes of eight signers showed that (1) violations of DC occur only during simultaneous articulation of two lexical items, not in the formation of any single item, (2) lefthanded signers use more DR than righthanders, and (3) hearing signers use a lexically-coded strategy for DR, while deaf signers use discourse-based strategy for DR. Potential contexts for miscommunication are predicted.

These observations are important for differentiating motor constraints on manual behavior from linguistic constraints (DC), and for identifying grammatical, discourse or aesthetic devices which are language-specific, or speaker-based strategies for re-sequencing manual linguistic behavior.

Nancy Friesberg & John Ostma, Deafness Center, New York University

Competing Sign Languages and Language Planning in Puerto Rico

This paper presents a rationale for a language planning effort based on analyses of linguistic competition among sign language varieties in Puerto Rico. Currently, there are at least three (or perhaps four) competing systems of signing in Puerto Rico. Puerto Rican Sign Language (PRSL) and American Sign Language (ASL) are related languages, differing in some lexical items, restricted use of fingerspelling in PRSL, and in some word formation processes. Both systems are learned within their community of origin and are restricted by their respective grammatical relations. These are primarily intra-deaf community linguistic systems. Signed Spanish (and to a lesser extent Signed English) can be found in Puerto Rico, used primarily by hearing persons. Characteristics of SI include initialization as a sign language, neologizing process, free use of fingerspelling, and sequential order of signs to communicate grammatical relations (especially based on spoken language word order). Reports from PRSL or ASL signers indicate decreased intelligibility when the variety preferred is Signed Spanish, and SS users have difficulty understanding deaf varieties as well. Thus we find linguistic competition among linguistic systems used by two well-defined populations. A language planning effort involving PRSL signers' contributions can work to create shared communication systems while acknowledging current differences and promoting awareness of appropriate domains for each variety.

Linda Gallaway & Robert Scarcella, University of California, Los Angeles

Cerebral Organization in Adult Second Language Acquisition

It has been suggested that the right hemisphere may be more active during the initial stages of informal adult second language acquisition than it is after a greater degree of proficiency has been attained (Gallaway & Rasmin in press).

This paper will report on the findings from a Spanish/English dichotic listening study designed to test this hypothesis. Experimental subjects were native speakers of Spanish and were just beginning to acquire English informally off the streets.

No evidence was found in support of the hypothesis. Both first and second languages appeared to be processed to the same extent. Results from the experimental group were indistinguishable from those of Spanish and English monolingual controls.

Although the findings constitute negative evidence with respect to the experimental hypothesis, they also show that ALL languages are processed similarly. In fact, they allow a neat parallel to child second language acquisition in which also no lateralization occurs experimentally between first and second languages. Finally, our results are consistent with the bulk of clinical data from both child and adult brain-damaged bilinguals and second language learners.

Jack Garwood, Purdue University

In Language is the Larynx?

It is not possible to seek external evidence to help establish the psychological reality of phonological descriptions. This paper brings data from esophageal 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 esophageal speakers and three normal speakers were measured. Vowels were significantly longer before voiceless stops than before voiced stops for both esophageal and normal speakers. Yet from the phonemic environment, the average absolute duration of the vowel produced by the esophageal speakers was longer than those produced by the normal speakers. Speaker-group comparisons revealed no significant difference in vowel duration preceding voiced stops, however, the average absolute duration of vowel preceding voiceless stops was significantly longer for the esophageal group. These data suggest the view that the vowel length variation is a language-specific behavior governed by a phonological rule of the English language, rather than simply a language-universal behavior governed by inherent phonological characteristics of the speech production mechanism. Moreover, these data suggest that this phonological rule is a lengthening rule, which lengthens vowels before voiceless consonants. (Research supported by NIH grant NS15371)
In Ilokano, agents or verbs prefixed with *mi- 'unoccupied action' can be expressed in the oblique case, as in the following example:

Ba-i-ted-an ko ni Juan ini kusårë dagiñ bïrlik qué uno-give–adv Oobl Det money Det theier
'The theives were given the money by John.' (intentional)

Here, arguments are given that the agent in such sentences is initial subject (based on Reflexivisation and Word Order) and final indirect object (based on Focus and Topic). Such a deprioritization of a subject to indirect object is called Inversion in Relational Grammar.

The indirect initial object ('the theives') is final subject (as shown by Case and Realisation); it is assumed that this is a direct advancement of indirect object to subject (Gerdes, 1979, Out of Control in Ilokano, BLS 5). However, the co-occurrence of such an advancement and Inversion violates the Chomsky Law (Perlmuter and Postal, 1978, Some Proposed Laws of Basic Clause Structure), suggesting that indirect objects in Ilokano advance first to object then to subject. A brief discussion of indirect object advancement in causatives lends support to this proposal.

LARRY CORBET & CAROL WOODALL, University of New Mexico

The Form of English Pronominal Conjunction

This paper describes factors influencing the lexical form and order of conjunction 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-hypercorrectional nominative pronouns in object position, conjunction-final, and various idioms of conjunction order. Significant factors include phonological, deeper syntactic, discourse, social, and individual influences. These participate in a dependable if indeterminately hierarchic interplay, converging in the necessity of actual lexical and syntactic choices by speakers. Generalization of selected forms encodes the composite sum of such decisions and the hierarchies underlying them. We suspect further that the same and similar principles are responsible for the choices made between conjunction and simple plural pronouns.

WILSON GRAY, Massachusetts Institute of Technology

Differential Opacity

Paul Kiparsky claims that '...the different subsrules of a rule may differ in their degree of opacity' without offering any evidence in support of this claim. I offer for his claim in the form of evidence from linguistic change in Romanian. The phonology of Old Romanian contained a rule of Diphthongization which transformed the vowels /e/ and /o/ into the diphthongs /ie/ and /o/ before a syllable containing the vowels /e/ and /o/. The subsrule /e/ → /o/ is operative in New Romanian. I argue that the loss of this subsrule is due to differential opacity resulting from the abstraction by Romanian of Old Slavic second-syllable stress in a lexical distinction between the segments /e/ and /o/. The reflexes /e/ and /o/ respectively, in OR. Both segments occurred in the environment /-C-e/. The attempt to preserve the distinction between lexical items of Old Slavic by means of the phonetic repertoire of Romanian introduced the phonemic forms of Romanian strings like [kue-e], formerly non-occurrence in the phonology as a consequence of the operation of the quoted subsrule. When such forms became occurrent, the relevant subsrule 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 /e/ → /o/ to the phonology, using Hogg's argument against an unacceptable variation of the Duke of York Gambit.

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ERIC P. HAM, University of Chicago

An Unrecognized Greek Laugzeug

In 1979/8 we celebrated the centenary of Saussure's spectacular 
monographs. It is the aim of this article to illustrate the continuing validity and heuristic of the Ausgezialt der laugzeugen, in Bragman's 1878 sense, and of the "laugzeugen" entities which Saussure disclosed.

The laugzeugen has been a stigmatized riddle from the beginning: scholars have been, so to speak, searching in the wrong part of the dictionary. We generally expect the transparent and orthogonal Greek to reflect IE tenues with tenues; therefore for *$"$ we expect T. If we otherwise shift a) our phonetic expectations, and b) our semantic focus (remembering how the Greeks arrived from an unknown language), the rule of the laugzeugen, where the "road" became the "spaghetti", we may analyze $\alpha\lambda\omega\mu\upsilon\rho\omega\nu\varsigma$ as the "flat plate" (*OIr. talan etc. *thlιh-o-ukh-IE, or *thλιh(e)-ikh-, with a feminine morphology precisely matching that of *$\tau\pi\tau\iota\nu\mu\nu\tau\iota\lambda\iota\nu\tau\iota\nu$). A detailed account of the suffixation will be given.

The phonetic rule is now seen to be: $\gamma$ $\theta\lambda\rho\nu\omega\mu\nu\varsigma$ (or $\kappa\sigma\nu\mu\nu\tau\iota\nu\lambda\iota\nu\tau\iota\nu$) before $\gamma$, with the laugzeugen providing the aspiration; the phenomenon is therefore the same as that seen in *$\gamma\kappa\kappa\kappaâ€š\mu\nu\tau\iota\nu$). We may now offer Greek explanations for the riddle of $\omega\lambda\rho\nu\omega\mu\nu\varsigma$: Finally, we discuss the question of whether this laugzeugen was confirmed by the feature of $\alpha\lambda\omega\mu\upsilon\rho\omega\nu\varsigma$.

WAYNE E. HARRIS, 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 Constraint (TSC) and the Specified Scope Condition (SSC), which refer to the configuration $Y \rightarrow \ldots \rightarrow X \ldots$. The PIC blocks binding of an anaphor X to an antecedent Y if the tense of $S$-commands X, ruling out: They believe (that each other, or sick). The SSC blocks binding if the subject of $S$-commands X, ruling out: Woman wants to shave himself.

Recently, Chomsky (1976) has replaced this system with one not referring to tense. The new system retains a version of the SSC, but adds a Nominalist Constraint (NOM) which specifies that if $X$ is nominative, the first in which the offending anaphor is the subject of $S$. The SSC duplicates all other effects of the PIC, as in *They believe (that Mary will shave himself). The PIC is thus superfluous and may be dropped, eliminating undesirable duplications. However, this is one of these languages argues for the reinstatement of the PIC to overcome grammatical.

JAMES W. HARRIS, Massachusetts Institute of Technology

Explorations in Spanish Word-Structure: an X-bar Theory

Utilizing data from the inflectional systems of Spanish, we sketch the motivation for X-bar theory of morphology, analogous to X-bar theories of syntax, and designed to capture similar kinds of inter- and intra-categorial generalizations which are not directly expressible in non-X-bar theories.

The most restrictive theory considered comprises morphological structures of the general shape $X_{1}X_{2}X_{3}X_{4}X_{5}X_{6}X_{7}X_{8}X_{9}$, which are generated by rules of the form $X_{1}X_{2}X_{3}X_{4}X_{5}X_{6}X_{7}X_{8}X_{9}$, and are instantiated in forms like [ren] [en] [e] [e] [e] [e] [e] ['e] ['e] [e] [e] [e]. (Subscription bars are used for morphological categories, in contrast to the superscript bars of syntactic categories. Syntax and morphology meet at the level X (no bars), the level of lexical entries.

The theory is almost too strong. Too vague 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 peda(g) (Haus: *pëdë(a)media(g) Adjective; media Adverb) peda, meda, meda, ... Verb.

WAYNE P. MARS, Massachusetts Institute of Technology

The Principle of Disjunctive Ordering and Motivated Pesj

The principle of disjunctive ordering states that in rules abbreviated by proessives, long 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 restrictions on the classes of segments that may be skipped over. The notion of medial feet offers an alternative to disjunctive ordering, proposed by Halle and Vergnaud: stress rules must construct the largest possible numbers of syllables that may be skipped over. The notion of the medial foot is therefore the one that may dominate. In English these are the cases where the first node must dominate a light syllable and the second a lax vowel, with feet such as cinnam, adna, and attin resulting. We will argue here for the favor of the maximal foot construction principle by showing that the stress patterns of Akan, a Philippine language, can be described in a simple and unified way using the principle, but not with disjunctive ordering.

RANALD MENDICK, University of North Carolina

On Restricting the Power of Strict Subcategorization

Strict Subcategorization has, since Chomsky's Aspects, been thought to employ a range of devices: linear order, braces, parentheses, etc. This paper reduces the power of strict subcategorization in two ways. First, it is argued that left to right ordering in strict subcategorization duplicates certain aspects of the phrase structure rules. As a consequence it is possible to eliminate left to right ordering in strict subcategorization by changing the theoretical conception of this aspect of lexical insertion. Second, it is argued that parentheses cannot be employed by strict subcategorization. Recent proposals in the (REST) have suggested that some optional elements in parentheses may in fact be alternations between abstract, and singular, phonologically null PRO's. Similarly, it is possible to conceive of optional subcategorization as selection of either lexical NP or PRO. This variation permits an empirical advance: it allows us to explain the previously unobserved fact that abstract PRO's (as seen in, for example, the related to strangers... is ambiguous, the related to strangers Jane seems courteous... is unambiguous. The explanation involves postulating abstract PRO's as mentioned above in conjunction with a condition requiring dependency relations to be nested (i.e., to show a configuration (ABA) rather than (ABB)).

THOMAS M. RYER, Institute for General Linguistics, Groningen

Preventing Significant Generalizations in Lexical Grammar

Gazdar 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 do not yet amount to a linguistic theory. Gazdar grammars contain numerous cases where, arguably, a context-free (CF) rule indexed to lexical items in such a way as to capture context-sensitive-type dependencies between proessives on these rules to derive yet more context sensitive rules. The meta-rules capture many generalizations beyond the power of phrase-structure grammars, but they are rules with the basic properties of those generalizations 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 abbreviations. A similar but distinct formal apparatus is defined in this paper. Like a Gazdar grammar, this is capable of capturing many typical 'transformational' relationships in the lexicon, but avoids both transformational and CF rules. Devices proposed by Gazdar in 1955 for abbreviating parts of the CF 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 of Hayne (1975) to the transformation NP Extrap (DeEnglish There Insertion), is base-generate.

(1) Il est arrivé beaucoup d'Américains. 'There arrived many Americans.'
(2) Il ne sont ne sont pas des pommes. 'There are apples eaten.'
(3) Il est fait souvent.

The paper presents four reasons for this argument:

First, NP Extrap makes the semantic interpretation of NP Extrap and for base generation (BG) of presentative NP's in oblique case for four reasons. First, BG correctly distinguishes the NP from the other two, as only the former (2) is allowed in presentatives. Second, BG correctly distinguishes middle cases from other cases, as only the former (2) is allowed in presentatives. Third, BG accounts for the grammaticality of the presentatives in the transformational hypothesis is being prohibited by the Specified Subject Condition. Fourth, BG provides a unified and much simpler treatment of the presentative: NP Extrap arbitrarily requires that middle case (2) and passive (3) NP's be moved twice (oblique to subject, subject to oblique); BG requires no double movement. This analysis points out a further need to study the functional role and stylistic limitations of the presentative.

JAMES J. REESINGHAM, 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 database significantly alleviates empirical problems in studying languages. I describe the Greek and Latin data bases I am developing, the statistical analysis for which they are intended and the relevance of the statistics to specific grammatical problems. These include the following: (a) the use of the database analysis to produce machine-readable code, (b) the being code for (1), which is from Xenophon, Symp. IV.11.19. I will use a handout to explain the code used in analyses.

(1) Ilo men thalatsa paraggele.
(2) O2569 N X AGGL XI 3TI3I22INFE 22AAFX

The grammatical problems considered as examples of the pertinence of the statistics of the database are: (a) the skewness of the metric of the Subject of the Verb; (b) the syntax and semantics of preposition-argument patterns; (c) the syntactic and semantic of various word categories of the subject; (d) the transitivity of the transitive objects in the database.

LEAHNE KINTON, University of California, Berkeley

Synactic Change in Decollation

In this paper, I will argue against the position maintained by D. Bickerton (1975, 1979) that syntactic change, which occurs during the process of decollation, operates directly on the basilectal (creole) grammar G1 by changing the state of this grammar, so that it yields a series of resultant grammars G2, G3, ..., G9, each of which differs from the preceding grammar by one or more rules. I will then propose a contrary viewpoint that syntactic change during the process of decollation does not always produce a grammar G9. This is, speakers can produce a series of grammars, until the output gradually responds to the output of the target language, without any significant change in the state of G9. In this case, is motivated by specific changes which are not always accompanied by the grammars. G9 that is, speakers can produce a series of grammars, until the output gradually responds to the output of the target language, without any significant change in the state of G9. In this case, is motivated by specific changes which are not always accompanied by the grammars. G9 that is, speakers can produce a series of grammars, until the output gradually responds to the output of the target language, without any significant change in the state of G9. In this case, is motivated by specific changes which are not always accompanied by the grammars. G9 that is, speakers can produce a series of grammars, until the output gradually responds to the output of the target language, without any significant change in the state of G9. In this case, is motivated by specific changes which are not always accompanied by the grammars. G9 that is, speakers can produce a series of grammars, until the output gradually responds to the output of the target language, without any significant change in the state of G9. In this case, is motivated by specific changes which are not always accompanied by the grammars.
The Karttunen/Peters (1979) notion of conventional implicature, a non-truth-conditional, non-cancellable aspect of meaning with the projection properties ascribed to presuppositions in Karttunen's earlier papers, is argued to be inadeguate for dealing with sentences involving even and only. First, the implicatures assigned to Bill likes every Mary and Even Bill likes Mary are the least likely to be considered for being accidental by the K/P model are too weak, since they don't disappear as they should under an external negation (cf. "Bill doesn't like every Mary—she's the only one he likes"). Secondly, the interpretation for even and only initial sentences is by no means unique, as is likely the case with respect to any of the K/P conditions. The second condition which fails to predict the synonymy of Not even Bill likes Mary and Even Bill doesn't like Mary (the former differing radically in implicatures from Even Bill likes Mary); even Bill in the not even phrase must be true but wide scope with respect to both conversely, the implicatures associated with even, while only, not only and only with negation (Not only Bill likes Mary does share the implicature of Only Bill likes Mary), i.e., that Bill likes Mary—and is not synonymous with Only Bill doesn't like Mary, are weaker than well-behaved Gricean or K/P conventional implicatures, since these are always less likely to be cancellable by the context. In this case, the notion of cancellable presupposition can be rescinded in (Gazdar 1986) seems preferable, but it too has problems with the even facts.

SUSAN H. HOUOSH, VA Hospital. Pittsburgh

Pragmatics in Psychotic Communication

The developing field of pragmatics or speech act theory offers a promising approach to studying psychotic communication [PC] in which conversation-level processes may be analyzed. Pragmatics, as set forth in work by Grice, Searle, Clark & Haviland and others, studies the rules by which a speaker conveys his intentions so someone may understand him and by which a listener derives meaning from what he hears. The communicative partner's standpoint is its goal determining how such presumed communication features as the Cooperative Principle and the Given-New Contract are realized in PC. Its thesis is that what goes away in PC is precisely the speaker's goals of communication, specifically, what he is engaging to say or to convey. The contract is thus not an obligation, but rather a communicative partner's standpoint, whether the listener may be engaged in the meaning of specific PC examples—whether e.g. determining that "those 2 chairs have turned back on me. " Your and my friend are leaving me is any different from determining that "my God, John, it's freezing in here." Closer to the window. Data for the paper are drawn from text utterance by patients of the author & colleagues.

NANCY BICKLER, Cornell College

Indefinites, Interrogatives, Topicalizations and Relatives: "I'm a 'Mark' in Old Russian

It has been maintained for Slavic that relative words with base 'Mark' derive some from nonphonemic interpersent words, possibly via an intermediate indefinite meaning. I suggest that the indefinite meaning is universal. On questions derived from yes-no questions containing: indefinites with base 'Mark' - Relative sentences: e.g., (Russian) 1) a StiA public khanzja a to khanlak i has the traditionally belonged to the palace; and his stork's nest, 1254; Valkia 1491/4(rsk-14) to khanlak (that, and) and 2) a material khanzja, syn bundet cobra tne qasilive 'And which son is good to the mother, to that she will give her property'. (Russian Law, 1202) western Europe, the first clause contains some meaning of the second added information. The KF in the first clause could be (modified by) an indefinite to be understood as a topicalizer (i.e., it served as a noun which it modified as topic of the following clause) and then developed into a relative pronoun, used as pre- and postpositional clauses relative clauses. All these uses are universal in OT. Or, n. s. non-acc. StiA acquired, more use as a topicalizer of the base; and clauses; the latter could be used with causal, relative, or conditional meaning.

This paper has implications for the reconstruction of relatives with base 'Mark' and for diachronic and typological studies of 'Mark'.

JUDY F. HICKS, University of Illinois. Chicago Circle

Observations on the Conditionals in Japanese

Traditionally, conditional sentences are examined in terms of the nature of the clauses represented in the two clauses and the causal-temporal relationship between them. There is a tacit assumption in this approach that the two clauses convey levels of equal importance. Studies of Japanese conditionals, of which there are many, have shown that this assumption is not necessarily the case. A number of recent observations made by Kuno and others allude to this kind of status/events occurring in two clauses and their relationship. In this paper, I discuss two forms, (3) and (6) conditional sentences. Specifically, I hypothesize that the difference between the two clauses in the status of events which can be represented in the two clauses, but the relative focus of the message they can convey. In the (3) conditional, one of the two clauses conveys the primary or dominant message, and the other the contextual or hedging information. In the (6) conditional, both clauses are of equal importance, and to indicate logical relationship between the two events represented in them. This paper provides new explanations for a number of facts heretofore observed for (3) conditionals but not the (6) conditionals. (e.g., khanzja-a to khanlak-ba, tort-qn). "If I went fast, take it", and why the (6) conditionals are used for warnings, but not the (3) conditionals. (e.g., StiA-to-bente-rei-ta, tor-nnasa. "If you drop it, it will break".)

GEORG K. IVANOV, University of Iowa & KATHLEEN BOULTON, University of Minnesota

The Typological Determination of Phonological Markers

In general, the markedness of pairs of phonological segments can be determined from the following cases: 1. The declarative sentence is that the [3]-[6] and [6]-[3] are marked relative to [6] because any language that has any one of these sounds also has [6], but not vice versa. For there are no specific universals relating pairs of segments like [p]-[s] (French and Dutch) or [l]-[k] (German), or [p]-[s] (Spanish) which is only [p] and [s]. Also, [s]-[l] (Spanish) is only [l] and [s]. In this paper, I suggest that the markedness relationships between segments like these are properly determined from implicational universals by considering classes of segments rather than the individual segments themselves. However, the presence of voiceless segments, but not vice versa, can be determined that voiced obstruents are marked relative to voiceless ones, even though the relative markedness of [p] and [s] is not clear in all cases. Furthermore, [p] is marked relative to [l] since the presence of fricatives, but not vice versa, it can be determined that [l] and [s] are marked relative to [s]. Other apparently indeterminate markedness relations are actually system sanctioned, according to whether it is [6] that is marked relative to [3] (6). Still, other oppositions, e.g., [3] vs. [r] do not seem to stand in a markedness relation at all, but with the neutralization may favor either member (various dialects of Cariban Spanish).

N. C. JACOB, Columbia University & Max Weinreich Center of VIVO

Unpredictably Unpredictable Gender Switch in Northeastern Yiddish

The historical three gender system (masculine, feminine, neuter) of Yiddish has changed radically in recent years, taken over by the Modern Yiddish (MY) system. The system has been the result of a gender marker: (my) feminine Yiddish. However, the problem of "gender switch in MY, where it might be said that the Intermediate gender ("ar fur 'the foot' or "di fur) and intermed, fem, neuter (/di-brick 'the bridge' or der-brick). Traditionally, MY Gender has been explained from the perspective of consonant clusters, or from the perspective of gender assignment of such clusters, or from the perspective of gender assignment of such clusters.

This paper claims that a gender switch occurs predictably (as we expect) only in this last paper. In fact, the gender switch occurs systematically, predictably. An application would entail a further gender system evolution.
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 the latter to be listed 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 suggested notation (a set of arrows with discursive marks) indicates, firstly, the effect on the number of contrasting units (microphones) in the environment in question (unchanged, increased, decreased), and secondly, the effect on the relationship of the microphones in question to microphones in other environments (removing together, joining with, splitting from). Simple arithmetic can be performed on a list of symbols to determine the resulting number of contrasting units in each environment, and the resulting number of phonemes.

The more generalization 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.

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

Of experiments designed to test the psychological reality of the vowel shift alternation in English, Hyman (1975) and Cené (1978) got positive results while Ohala (1974) and Starbuck & Krohn (1975) got negative results, as implicating the PR of spelling rules (long/short vowels) rather than VSR. I performed a category formation experiment in which the Sa behavior according to SR could be differentiated from VSR. All Sa followed SR and rejected VSR. Further, it appeared that the abstract phonetic alternations rather than the phonetic or phonology were responsible for VSR. Of most verb stems are used in the present study. The results of a single device show that the regularity of the abstract phonetic or phonology are more plausible than of the phonetic or phonology.

Initial Consonant Clusters in Yate Zapotec

The Sierra Zapotec spoken in Yate has a complex initial consonant cluster system which, partly due to its interaction with verbal morphology (aspetual prefixes /-m-, /-n-, /-n-/), violates a number of Greenberg's (1978) universals. 1) Voiced semivowels are regularly followed by obstruents (e.g. /kul'/ 'run', /wala/ 'I will write'). 2) Voiced/voiceless initial sequences are common (e.g. /tub/ 'last night', /tita/ 'I slept'). 3) Voiced obstruent + nasal/semivowel combinations are unmarked while unvoiced obstruent + nasal/semivowel are marked. 4) The initial combinations /ks/ and /cz/, in which /s/ and /z/ are very similar in spelling (e.g. /tshul/ 'counsel'). 5) All final consonant clusters end in the voiceless uvular fricative (e.g. /∫aw/ 'black').

Perceptions of the Vowel Contrast

It has been proposed that voicing contrasts, described in terms of voicing onset time (VT), 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 phonetic boundary aligned with the psychoacoustic one, as English does? Results of a perceptual experiment suggest that there is, in that the English listeners in one or more word cases showed a much lower than the Polish one. Polish and American listeners labeled stimuli in continua that varied in their entire range of VT. The Polish listeners showed substantial shifts in their category boundaries with changes in VT range, while the American listeners showed no shifts. In view of this finding, it is unclear whether the use of VOT to override auditory preceptions as a boundary. One possibility which will be discussed is differences in the distributions of VOT measurements for stops in Polish and in English. The Polish vowel contrast appears to be maintained more consistently across positions in the word and across speaking conditions than does the English one. It may be that the Polish contrast more from such production considerations, and that languages face a trade-off between production and perception in the choice of a voicing contrast.
WILLIAM KEMP, Université de Montréal

Variable Complexes

Work on syntactic variation in Montreal French has revealed several instances of two distinct variables interacting within a given construction. The multiple variants of such complex variables 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 those grammatical interest, in Montreal French such variable complexes lead to the establishment of particularly subtle social distinctions. I will present three cases: (1) the interaction of mood and pleonastic negation in superlatives, as just mentioned; (2) the combination of headless relative clause marking (qu'en, qu'en... on... and on) and the use of qu'en as opposed to dont to mark obligatory involving in underlying "de"; (3) paradigmatic based on appellee known as "call" may either follow the constituent so described, appearing as qu'en appelle, or it may precede it, taking the form a qu'en appelle; the latter form interacts with qu'en... est-ce que variation.

MICHAEL KERNOSKIS, University of Illinois

[PRE MORN: 6]

On Metathasis in Palestinian Arabic

At first blush, alternations such as á-hirık 'burn; a-hirık-ak 'I.b,yz', but á-hirık-ak 'I.b,yz', but á-hirık-ak appear to evidence a rule metatheorizing the strings CGC/uc to GC/CG before a vowel. It is argued that this is the wrong analysis and that the correct description results from independently needed rules synoquating unspread short high vowels to vowels syllables (to give GC/V from CG/U(CC-V)) and epenthesis of i or y in C C C hl (to give GC/CGV). The problem is to determine whether the epenthetic vowel is i or y. The solution lies in the observation that in this dialect of Arabic there is a limited but quite regular vowel harmony in which all high vowels within the stem (prefix/root) must agree in rounding: cf. t'<ph'm 'he understands', but t'd<ph'm 'he guards'. If the harmony is analyzed in autosegmental terms, with a [round] proxied associated with the root, /á-hirık-ak/ and /á-hirık-ak/ may be syncopated to /á-hirık-ak/ and /á-hirık-ak/ and the choice between i versus y will be determined by the presence or absence of the [round] autosegment. Only an autosegmental analysis permits the otherwise univocated metathesis rule to be dispensed with.

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

[SAT MORN: 1]

The Evolution of the English Plural Rule

One of the most familiar 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 continuum.

In this paper, however, our chief interest lies in giving an historical account of the rule leading up to the synchronic 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 all of Middle English because it constituted a formal device for simplifying a state of affairs which had been drastically simplified in 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 orthopists trying to preserve the past in the face of a changing language.

SUSAN S. KLEIN, Montclair State College

[PRE MORN: 6]

Comparative Toba-Caduveo: Semantics and Morphology

The purpose of this paper is to present comparative data on two relatively unknown South American Indian languages: Toba and Caduveo. The analysis indicates the unity of these two Guaykuruan internal relationships. It also provides data for areal TYPOLOGICAL analysis of Toba and Caduveo and for the semantic and morphological relationships between the two languages. The strong similarities in word order and sentence structure are also provided.

T.P. KONRAD KOENIGER, University of Ottawa

[LATE MORN: 4]

Kruszewski as a Syntactician

In most accounts of Mikolaj Kruszewski's (1851-97) contribution to linguistics his work in phonology and morphology have been recognized (cf. e.g. Klusenerg 1976). Indeed it is in the area of morphophonology that Kruszewski was most successful as a general theorist of language and, in particular, to account for Kruszewski's view, both an account of morphology and sentence formation. The analysis is based on Kruszewski's view that morphology is acquired and sentences are produced. Following J. St. the existence of the two kinds of associative processes according to which, Mill k. distinguishes between associations of simplicity and the various processes of contingency (and of consequence). It is with the latter that the paper concerns itself, namely on the criteria of 'Angrenzungsassoziationen' in what he termed 'syntaktische theory and, by extension, syntax.

REFERENCES

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 morphemes is segmentally and suprasegmentally identical with the subordinating postposition /-d/, Example 1 illustrates a simple negative sentence and example 2 provides a complex sentence which illustrates the subordinating postposition.

1) eem k'íy Nén-á-mun-dí (man woman NDO-3/see-SUB) The man didn't see the woman.
2) hëi-lík'íyo wá-nú-dén-dí na- 'o-yohk'í (man house 3-enter-go-SUB I-be asleep) When that man was entering the house, I was asleep.

Comparative data from the related Tsiwas languages both confirm this analysis (as opposed to the alternative analysis of homophonic /-d/) and suggest the importance of scope considerations in the approximation of an historical explanation for the formal property 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 affirmative—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 Xo'ux, a Bushman language, may be represented phonologically in terms of 6 binary features: Voiced, Aspirated, Fricative, Glottal, Nasal, Velar. Each of them must also be specified as [+ click] as well as for place of articulation. The clicks in Khoi languages, 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. A phonological feature such as the exclusion of [+ glottal] clicks in Xo'ux. But its is not possible to use them to fully characterize phonetic details of these languages. Many points that are phonetically characteristic of one language in comparison with another, but are not phonologically relevant in one any language. These sounds that are [+ click, + voice, + fricative, + 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 "Affective" in the Analysis of Polarity Sensitivity

Accounts of the negative-polarity sensitivity of lexical items like any, ever, and yet limit the distribution of these negative-polarity items (NP's) by requiring that they always occur in relation to a member of a class of items and constructions which Klima 1964 called "Affectives". This paper provides a definition of "Affective" within a general framework. Semantic theory of polarity sensitivity. Ineffectively, affective license entailments from supersets to subsets, while non-affectively use license entailments from subsets to supersets. Within a semantic theory of English like that of Montague's PTO, "Affectives" become a subset of the functions which express the quotational and demonstrational usages. An expression of English is affective iff its denotation is a function such that for any two arguments α and β, where α is a subset of β, δ(α) is a subset of δ(β).

The scope of English is a vast one, but the presence of English affects the diversity of expressive systems which License the appearance of NP's, distinguishes express in the first time inferences involving affective/non-affective pairs: no/some, every/some, none/everyone, doubt/ believe, be hard to be easy to be surprised that be happy that, without, with, before, after, too, enough. It also provides a structural account of the asymmetry of affective like every, and to license NP's, and similar differences between the antecedent and consequent clauses of conditional sentences.

An Analogical Explanation of the Modern Irish Plural in -ach(a)

The Modern Irish plural marker -ach(a), one of the two markers still productive, is not inherited from Old Irish. The -ach marker in the Munster dialect (e.g. cathair 'city', catharche) 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 -a and -h in relation to the Genitive plural -ach(a) (Gaelic plural) which can be shown to result from contamination with the very productive adjective declension in -ach which is often used normally (e.g. seteanc 'Englishman') pl. setean. Examples illustrating these analogical processes will be discussed.

The 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 structures 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 textual material is a set of six troubleshooting manuals for a moderately complex system which contains actual troubleshooting encounters with the control system for airport traffic flow. Three sets of participants are approximately 50 paid owner-operators of trucks who have had some knowledge (frequently erroneous) of the operating characteristics of the system, but no familiarity with troubleshooting. In almost all cases, the participants had no useful 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 contained actual actual traffic flow and heavy-duty vehicle data. Preliminary analyses show that (1) Interruptions that impost little or no mental load (e.g., 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 a continuous speech recognition system. The system to be discussed uses an augmented grapheme-to-phoneme network (ATN) as its syntactic component (see Woods 1970). The ATN was originally designed as a text parser. In speech recognition, because input is acoustical, no positive identification is available of the input segment being scanned. Instead, the machine must determine the likelihood scenario which is a function of both the input'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 highest 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 is associated with the identification of acoustic segments and results in the generation of many analysis paths. Limiting memory and processing capacity make 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.

NANCY S. LEVIN, Ohio State University

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 Kapolli 1978 provide a uniform account of the distribution of indefinite and definite NPs in these 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 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., Their brains were small, their canine teeth large). This suggests that the listing function provides motivation for the listing strategy. Other types of lists serve as input to different anaphoric processes (e.g., lists with single anaphoric elements, Conjunction Reduction). For the notion 'list sentence' to be useful in grammatical analysis, the phenomenon 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 rules, stereotyped series, such as the letters of the alphabet, months of the year, and numbers.

ROCHELL LIEBER, Massachusetts Institute of Technology

On Morphological Conversion

In this paper, I will argue that morphological conversion, the process which relates such pairs as paint, paint, in Eng., and der Kiefer, Kiefer, 'cheek' in Ger., is not a process of affixation of a zero morpheme, as has been argued in both traditional and generative grammar (Allen, 1978). Properties of overt suffixes such as -ize in Eng., and -iern in Ger., are derivationally unique. They are not phonologically and morphologically identical to any other derivational affixes to which they have attached, but also their conjugation or declension class and their argument structures. It is argued on the basis of examples from Ger. and Eng. that the so-called 'zero-affix' does not have the properties of derivational affixes, and, in fact, that maintaining a zero-affix analysis leads to considerable complication of our morphology. I propose instead that both members of pairs such as paint, pain, alike, alike, appear lexically in the inventory of the language in the same way. For this reason, morphological conversion be considered a redundancy relation: that all other things being equal, it is more highly valued in a language which has this relation for a noun (e.g., pain) to have a corresponding verb (paint) than not to have one. It will be shown that this solution simplifies our morphology, and has interesting consequences as well.

ROCHELL LIEBER, Massachusetts Institute of Technology

On Spatial and Temporal Aspects of Speech Recognition

The acquired properties of speech recognition systems are highly dependent on the amount of training and the complexity of the input. Certain aspects of speech recognition, however, are relatively independent of these factors. In this paper, we explore the role of spatial and temporal aspects of speech recognition in the acquisition of a novel language. The data we present show that children are able to acquire a novel language, even when they are only exposed to a small amount of input. The results suggest that spatial and temporal aspects of speech recognition are important for the acquisition of a novel language.
ARLENE MALROWSKI, North Carolina State University

Distribution and Function of the Auxiliaries tener and aver in Judeo-Spanish

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 form 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 isolated observations and inferences drawn from the distribution of compound tenses (Magner, Baruch, Agard, Hirsch, Renard) of both tener and aver in Judeo-Spanish free variation (Crews, Kahane and Selmo). This study reports 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, Ha Noi de Israel, and 50 taped interviews collected during three months of fieldwork in Israel during the summer of 1977. A close-up 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 MALROY, Harvard University

The Function of the Perfect in Old Babylonian Letters

In the standard analysis, the so-called "t-pc" perfect of Akkadian is thought to be a distinct tense-form approximating the meaning of the English present perfect tense, i.e., the present state produced by past action. This standard view is inadequate, however, because the t-perfect possesses a well-defined discourse function and structure in Old Babylonian prose syntax (royal and private 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 assumed construction and the other based on the facts of coordination, will be developed to prove this claim. Among the implications this analysis has for Akkadian grammar are: (1) from now on the t-form is to be discussed in terms of its functioning in discourse, (2) an isolated tense-form (2) any isolated lexical development of the Semitic mediopassive s-system must take this revised Akkadian situation into account; (3) clear parallels between the use of the t-perfect and Biblical Hebrew hinnah clauses (e.g., both tend to precede intransitives) point to a drift-like syntactic development where different formal means were used for a single Semitic clause-type.

EVANGELINE S. HARLOG, 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-semantic 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 Modern Greek, this simple sentence is not: "A man is eating with a knife.

Lehmann (1976) notes an analogy between the OVT and OVT shift and the shift from topic-pronominicity in IE languages. Li and Thompson (1976) list many features contrasting topic- and subject-pronominicity languages, but speak in terms of a topic-comment to subject predicate continuum, 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-pronominic 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 forerunner, not yet having fully reached OVT, subject/predicate status as other modern IE languages have.

JEFF M. MAXWELL & GARY WIEGMAN, Indiana University

The Acoustic Differentiation of [3] in a Deviant Phonology

This paper presents an acoustic analysis of an apparent 19-way neutralization in the speech of a functionally misarticulating child, age 3;11. A phonological analysis indicates a severe lack of the contrasts used in adult speech: there is no voice or manner contrast, and no evidence to support positng phonological processes of neutralization. Recent research indicates, however that both deviant and normal children may be maintaining acoustic or phonological distinctions in their own speech which are perceptually indistinct to adults (Kornfeld 1977, Macken and Barton 1977, Hessling, Elbert and Dittmann 1979). This study therefore investigated the acoustic characteristics of this child's [3] in words which are contrastive in adult speech. It was found that the child possesses a voice contrast (pc.002) which is being made between the [3] which correspond to adult /d/ and the VOT of the 10 other [3] and 2 a statistically significant distinction (pc.002) in VOT being made between the [3] which correspond to adult [voice] segments and those which correspond to adult [voice] segments. The latter results indicating that the child possesses a voice contrast are crucial important for planning strategies of therapy for this type of child. This study answers the call for acoustic justification of claims about contrasts in child speech.

JEFF M. MC A'ULAY, Université du Québec à Montréal

Against Raising to Subject

This paper argues that subject of infinitives are not accessible to major (nonlocal) movement transformations, but only to interpretive rules. The Left Branch Condition, with TENSE (AUX) as the head of S, is used to prevent subjects from moving out of Under deep structure clauses by XP-movement. The on the other hand, this accounts for the fact that no raising-type transformations exist in French. On the other hand, it explains the ungrammaticality of (1) does it seem to be hard? (from Jenkins 96) without either giving up transformations altogether or making use of a rule such as (2) to insert 11: (2) NF v (A) (PF) [S, 11] (from Chomsky & Lasnik??)

where 11 goes into NF and V = be, seen, etc. With the problem of (1) solved by the LBC, only the presence of the head of S, namely TENSE, is needed to trigger 11-insertion, rewritten as (3): (3) \text{S} \rightarrow \text{TENSE}

There are now two conditions on transformations that do not apply to interpretive rules: subcategorization and the Left Branch Condition.

JAMES MC CLOONEY, University College Dublin

The Modern Irish Prepositional Relative and Successive Cyclicity

This paper examines a Modern Irish relative clause construction in which relative prepositional phrases can appear either at the head of an embedded clause or at the head of the relative clause itself, thus suggesting successive-cyclical application of a move rule. An analysis of these data using base-generation and a cyclic-locative notation is constructed and is argued to be superior to the movement analysis.

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SALLY MC CONNELL-GINTZ, Cornell University

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 (D) (inter) predicates with free agent variables, we can then modify (1a) and (1b) adverbial modifiers of the short passive (1c); we can also represent the preferred interpretation of (1c) as implying multiple agents.

(1) a. John was asked to fly a jet. (PRO to do t)
   b. John was asked U [what PRO to do t]
   c. Trace theory has been misunderstood.

Indeed, unless Chomsky's index arb is interpreted as the mark of a free variable rather than a binder, PRO will incorrectly be predicted as completely "uncontrolled" in (2).

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


GORDON M. MEISING, Cornell University

Did Homeric Heroes Speak in Different Styles? A Negative View

This paper challenges the article of P. Friedrich and J. Redfield, "Speech as a personality symbol: the case of Achilles," Lang. 54, 265-288 (1978). FAR argue that their stylistic tests differentiate speeches of Achilles from other comparable speeches in the Iliad. They have confused characterization (Homeric epitholia) with individualization. They fail to take account of the requirements of oral poetry, the involved history of the Homeric text, and the similar problem of characterization in other genres of ancient Greek literature. Their historical results, admittedly limited (since many tests were negative), are also inconclusive because they merge two separate types of stylistic research, identification of style markers and the quantitative analysis of texts to determine e.g. authorship or authenticity. FAR's hypothesis would make sense if Homer were a court reporter, taking down the actual words of real speakers, or if their stylistic tests, as they freely acknowledge, correlate with Achilles' ethos; where they diverge, e.g. his allegedly idiosyncratic use of subjunctives or of certain particles, I believe these criteria have no validity.


DAVID MICHAELS, University of Connecticut

Length in English Vowel Alternations

In the analysis of English Vowel Alternations (e.g. the same -an/-an, manager-manag- managerial), there is a traditional ambiguity in the use of the features of teneness and length. Adopting a more analysis of length in place of teneness 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 diphongization. The more 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, that the Lengthening (Tensing) Rule add a mora, and that Diphongization rules 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 Adjustment) apply only to morphologically derived forms resolves in a general, but concrete account of the alternations in question and also provides an account of why [a], [eo], and [e] never occur as outputs of Tensing.


JULIE F. NEMER, Indiana University

Stop-Formation and Markedness in Two African Languages

Lozano (1978) argues for a reanalysis of the alternation in Spanish between voiced fricatives and stops as a process of stop-formation, rather than spirantization. Traditionally, the voiced stops are considered to be underlying on the basis of markedness theories in which stops are less marked than fricatives and therefore the presence of voiced stops in a systematic phonemic inventory implies the existence to the corresponding voiced stops. This does not hold up as a universal, as Lozano has shown.

There is, however, another part of the markedness argument which Lozano does not deal with. This is the further implication drawn by Houlahan and Iversen (1979) that rules which are non-neutralizing should produce variable forms. Therefore non-neutralization of spirantization are somehow more natural than rules of stop-formation. In Lozano's analysis these two aspects of markedness seem to be related. However, there are languages, for instance Bima (Speakers: Henneh, Schimmel), which have rules of stop-formation without a 'defective' inventory. There are, in addition, languages such as Bagam- Banli which have voiced fricatives but no voiced stops, and also a rule of stop-formation which does not act on the class of fricatives. That is (1) the existence of a rule of stop-formation is an issue independent of the question of inventories and (2) rules of stop-formation exist which are non-neutralizing.


KARELA NEUMOR & ERIENS VOGEL, University of Amsterdam

External Sandhi Rules and Syntax in Italian

Eppe & Beschor (1979) give the syntactic environments in which an external sandhi rule of Italian, raddoppiamento sintattico (RS) is prohibited. In this paper, we investigate the complements environments, i.e. where RS is permitted, and show that a more thorough analysis of these environments can further specify the extent of application of RS. More specifically, on the basis of data from two varieties of standard Italian, we identify four degrees of application ranging from obligatory to infrequent. We show, furthermore, that the same syntactic conditions specify the degrees of application of another sandhi rule, ness presa, 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.


MICHAEL NOONAN & FELIX QUESADA, 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 nonanalized 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 influence from Spanish, operating through extensive Spanish-Jqeuchua bilingualism. The dialects of Quechua, however, differ considerably as to the degree of use of the sentence-like complement-type, ranging from conserva- tive dialects like Ancash, where sentencolike complements are little used, to San Martin, which makes extensive use of sentence-like complements. In this paper, we will discuss the manner in which sentence-like complement-types have become integrated into the complementation system. We will exam- ine data from a number of dialects (Ancash, Camarata, Cuzco, San Martin) showing that sentence-like complement-types have been used in preference to nominalized forms in a predictable sequence; that is, certain complements take predicates are more likely to occur with sentence-like complements than others, these predicates being arranged on a sort of implicational scale. Finally, we will speculate on the basis for this scale.
The Phonetics of Dissimilation: A Hypothesis

Consider syllables of CyVCy shape where Cy, Cy, 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 extensive assimilation all three syllable types could be realized 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 Cy, Cy, or both 'looking' the distinctive feature? The point is, in some cases he can't and he therefore makes an incorrect analysis. In the case labeled dissimilation he attributes to either Cy or Cy (usually the latter) a distinctive feature that used to belong to both. In his own careful pronunciations, the listener-turning-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 onto adjacent vowels.

W.A. O'NEILL & J.J. KEISER, 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 All 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. GOODR & S.R. SRIKANTH, 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, Khamde, Italian, Russian, and Turkish. The data showed a man and some familiar objects (blocks, balls, etc.) in action and static relations; the sequence induced cognitive presuppositions and contrasts (given/new information, actor vs. agent, salience, unfulfilled expectations, etc.) which were expected to result in a certain type of syntactic/semantic structure (e.g., definite articles, adjectives, passive and other movement, transformations, embeddings, negation, etc.). The data reveal several universal patterns decline in adjectives and indefinite reference with increased "givenness" of entities; use of passive and topological structures to express object salience; 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/
'nonfinal plural marker' and 'second person singular verbal marker', /m/ 'third person plural verbal marker', and /t/ 'infinitive marker'. We distinguish, through analysis of autosegmental diagrams, phonological and grammatical variation from what is in fact grammatical variation. Lack of consistent functional effects on /s/ reduction within the NP is traced partly to independence with verbal /m/. Infinitives are marked by distinctive steps to tense, exemplifying the conditioning of /t/ retention by phonological and not functional factors. A distinction between /s/ and /m/ on the one hand, and /t/ on the other, is reflected in co-occurrence patterns of variant usage among speakers. The variants of /s/ and /m/ are distributed across a preserved/reduced dichotomy according to functional criteria - information-bearing variants are opposed to those with none, while the variants of /t/ are disposed according to phonological criteria - the conserved variant versus the reduced ones.

ELLEN F. HINCE, 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 1973, 1977), 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.

APPROXIMATOR implicate 'fuzziness' within the propositional content, while the subclass corresponding to G. Lakoff's notion of a hedge indicates nonpropositonal membership in some class; it occurs most frequently in the description of symptoms. Another subclass occurs most commonly with measurements: here a precise description is possible but is either not relevant or available. This subclass cannot establish the propositional content, and the speaker is marked in some way. The subclass implicates varying 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 implicates 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 KOMEKHA PURCELL, University of Hawaii, Hilo

A Sociallinguistic Continuum in Micronesian

A sociallinguistic continuum is described, analogous to the continua discussed recently in reports of large-scale studies of adult speakers in creolizing and decentralizing communities. The subjects of the present investigation are fourteen Hawaiian 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 in terms of relative English (as opposed to General English) phonological, intonational, and lexicogrammatical variants. Rank correlation is measured for pairs of variants and for social and regional groups. The study demonstrates that individual speech performance can be affected by the social context and by the behavior of the child's group. 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.

GILBERT RAPPAPORT, University of Texas, Austin

A Hierarchy Governing Verbal Aspect in Russian

Verbs in Russian typically have two aspectual forms. When a verb is to describe repeated (subevents, a conflict can arise. On the one hand, the perfective form might be used, preserving the integrity of the subevents. If the speaker is referring 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, while the subclass corresponding to G. Lakoff's notion of a hedge indicates nonpropositional membership in some class; it occurs most frequently in the description of symptoms. Another subclass occurs most commonly with measurements: here a precise description is possible but is either not relevant or available. This subclass cannot establish the propositional content, and the speaker is marked in some way. The subclass implicates varying 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 implicates 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.

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Nonreferential Noun Phrases as Pools

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 underlined phrases cannot be pronounced as definers of nouns; and there is an essential 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 characteristic of predicatives, existentials, and amount phrases like many hours and much headway). The fact that the NPs can later be pronounized, 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 sensible to pronounization. A case in point is an idiosyncratic syntactic derivation for definite relatives like the six hours: the movie lasted well-spent. With the semantic explanation proposed here, the identifiable reading of the definite head follows: if the predicate NP's are identified by the assertion as properties of the subject, then they are identifiable and the definite head on clauses in which they are relativized is acceptable, in fact necessary. Thus the semantic function of the simple assertions above will explain several longstanding exceptional relatives.

TANYA REHART, 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 certain linguistic rules are stated in terms of clauses (e.g., that their domains are clauses. However, there is increasing evidence that such rules obey stricter restrictions: they may operate on two given nodes only if one is an element of the other (e.g., Chomsky, 1975; Chomsky, 1976; Chomsky, 1978); e.g., their domains consist of the full range of constituents in s, not just clauses. This linguistic evidence is consistent with an alternative process of analysis which constituent are the minimal processing units (e.g., Kimball, 1973). More direct support for this analysis comes from the examination of perceptual complexity, which shows that a failure to analyze close constituents smaller than those in a preceding dissection results in a processing difficulty of the same order as the one resulting from a failure to close a clause.

ERIJK J. NEWLAND, State University of Groningen

Dutch Subordinatve Clause Types and the Syntax of Logical Form

There are in Dutch three main types of subordinate clauses: finite, infinitival and participial; all of the category finite subordinate clauses may be introduced by bare complementsizers (dat 'that'), relatives, -WH-phrases, prepositional conjunctions (nadat 'after', doordat 'because'), and adverbial conjunctions (even 'when', indien 'if', hoevel 'although'). Adverbial conjunctions are analyzed as adverbs moved into Comp by wh-movement and the prepositional ones as [Prep dat]. Infinitival clauses take only -WH-phrases and prepositional conjunctions without dat; participial clauses are only introduced by adverbial conjunctions. It is investigated how these restrictions can be stated in terms of which constituents are the minimal processing units. It is shown that all unaccepteable combinations will be marked ungrammatical by independently motivated considerations as to the function of the clause introducer and the clause it heads in the clause in which they are embedded. This information is reflected in the Type and the prepositional ones as [Prep dat]. Infinitival clauses will be assigned an argument Type, and so will -WH-phrases: as a consequence they will have environments in common. A participial clause will be assigned a Type suited to modifiers which it will share with the subject and therefore an admissible combination. A participial clause will have an environment in which an expression with the Type of a -WH-phrase may appear, yielding ungrammaticality in this case.

SUANNIE ROMAINE, University of Birmingham

Stylistic Variation and Syntactic Diffusion in a Historical Change

Few historical sociolinguistic studies have investigated the relationship between stylistic variation and syntactic diffusion in the process of language change. I approach this problem here through an examination of the history of the relative clause system in Scottish English dialects, which have lagged behind standard English in integrating the use of the WH relative system (i.e., who, which, etc.) into the wider British English tradition. I have looked specifically on variation in the marking of relative clauses (i.e., WH forms, that or Ø) in a stylistically stratified sample of Scots from the 16th century and the modern period in terms of syntactic complexity. My index of syntactic complexity is based on the frequency with which NP's in certain syntactic positions are relativised. The results reveal that the WH relativization strategy appears to have entered the language in the third complex, and least frequent, relativized syntactic position, 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.

ALICE NYERS ROY, California State University, Los Angeles

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 role in the interaction without alienating the conversational partner by taking all the available 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 structural stratum for initiating and maintaining hearers’ attention, and even when speakers may have specialized means to begin or continue in the face of possible interruption. Non-narrative discourse does not have such a built-in strategy.

Analysis of segments of three-person conversations shows that irony functions as a strategy for a speaker in non-narrative discourse to monopolize attention and topic while at the same time ostensibly sharing in social turn-taking. The ironic utterance can disrupt the flow of information-exchange or task-oriented discussion and can thus gain for the speaker temporary control of the conversation.

ALAN RUMSEY, University of Sydney

Lative and Transitive in Ungarinian

The Ungarinian language of northwestern Australia (on which I have done fieldwork) has grammatical case relations by verbal phrase reference and local ones by nominal postpositions. In general, these two methods are mutually exclusive: case postpositions do not normally occur on cross-referenced NPs. An interesting exception is lative -wu-ju, which can occur on a (cross-referenced) transitive object or intransitive subject NP when its referent ostensibly undergoes a change of state as a result of the VP's action. There is also a different kind of subject NP which can also occur on a transitive subject NP when it becomes a new topic.

Drawing on Euryzovic's rigorous distinction between primary and secondary case functions, I argue that -wu-ju is a local case with adnominal function, whereas the grammatical and discourse levels, but some of its "local" semantic content is relevant at the other two levels as well. This I adduce as evidence against Euryzovic's notion (shared in a different form by Chomsky and the interpretativists) of syntax as autonomous and semantic.
The Affected Agent

This paper discusses rules that distinguish between two agent types – the affected vs. the non-affected. These rules then form agent types with other affected roles such as datives, patients and experiencers. The motion affected agent challenges the Case Grammar claim that case categories are unified, mutually distinct semantic primitives. (2) Case categories are not mutually distinct because syntactically, the affected agent groups with datives, patients and experiencers. (ii) Case categories are not semantically-syntactically unified because agents classify into the affected (affected) or non-affected (non-affected agents) or non-affected (non-affected agents) and instruments so that the affected vs non-affected contrast is even more primitive than that of case categories.

DAVID ZANOFF, Centre de Recherches Mathématiques

Ordering Variable Rules

Quantitative studies of linguistic variation must account for the relative frequencies of occurrence of two or more variants in a rich 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, substitution and relaxation rules, linguistic variations can be exactly determined which forms are derived from which, and 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 order of all rules vs non-order rules, such as for a given variable, the statistical procedures necessary to assess each, and a series of examples concerning syllable-final consonant reduction in Caribbean Spanish and syntactic variation in Montreal French.

DAVID ZANOFF, Centre de Recherches Mathématiques & SHANA POPLACK, 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 grammars 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 this consideration of code-switching behavior as not only rule-based, but syntactically predictable, within a coherent and integrated grammatical framework.

ANURAGA SARKARWA, University of California, Los Angeles

Input-Prominence in Navajo

Serious questions have been raised regarding the universal primacy of the input in the construction of a sentence. Bellrose and Thompson (1976) have demonstrated that for some languages 'topic' may be a more potent input category. L. and Thompson (1976) have proposed a typological distinction between 'topic-prominent' languages and 'subject-prominent' languages. We present evidence that some Navajo sentences in which topic-prominence makes possible the pronunciation of a number of problematic aspects of its grammar, including noun ranking and ordering restrictions, certain apparent irregularities in verb classifiers, and word reference in discourse. Evidence is also presented from Tlingit and Northern Athabaskan in which the same topic-prominent pattern occurs. The study includes texts collected by Boas, Sapir, and Haile in its data base, as well as sentences recorded in Navajo and several related languages.

ANURAGA SARKARWA, University of California, Los Angeles

An Evaluation of Prosodic Cues in Adjective-Noun Phrases Using Reiterant Speech

The present work further examines the role of duration as a cue in judging triasyllabic adjective-noun phrases into words as discussed by Nakatani and J. Shanks (1970). Pairs of sentences ending in such phrases were mimicked both by a human male voice and by a speech synthesizer using the technique of reiterant speech. The sentences of each pair differed only in the final phrase, which contained the final word or words for the final phrase. While there was no difference in final word word, the sentences with the final phrase "It is your dog" differed in the location of the word boundary (e.g. "bold" design vs. "nice dog"). In the reiterant versions, all syllables were replaced by /ma/, but the original prosody was retained. The only difference between members of each pair of sentences was thus that in those final phrases with an initial monosyllabic word the final word of that word was of longer duration than the vowel of the corresponding initial syllable of the corresponding initial syllable of the corresponding initial syllable to the data set. We discuss the combinatorial problem of establishing the order of all rules vs non-order rules, such as for a given variable, the statistical procedures necessary to assess each, and a series of examples concerning syllable-final consonant reduction in Caribbean Spanish and syntactic variation in Montreal French.

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Adverbial Clauses: The Interaction of Syntax, Semantics and Pragmatics

Delineating the domain of syntax, semantics, and pragmatics is an issue being seriously debated within generative grammar. Navajo temporal, conditional, and purposive clauses that are not distinguished by specific lexical items (e.g. if, when, because) provide important data bearing on this issue because these Navajo constructions 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 semantic information gives 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/or aspect and the semantics of the complementizers.

I have argued elsewhere that -I/- is a non-past referential complementizer and /-go/ is a semantically empty connective. Referential includes both discourse anaphora and reference to truth (i.e. factivity). The -I/- 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 Schleskan, 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 (e.g. passives, auxiliaries) (Bresnan 1976, Wasow 1977). In particular, extensive work has been done on a class of lexical rules that prepose a word in first-sister position to the verb (Vergnaud 1973, Aronoff 1976, Hooper and Siegel 1978). This class includes participles, adverbial compounds, adverbial compounds and verbal compounds. Data on the acquisition of -er compounds (e.g. 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 prosodic 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 F. Schenkel, University of Texas, Austin

Imperatives 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 act types, 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 set-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 having to specific social rituals.

Elenke Schuoner, Northwestern University

ELLEN SCHUONER, Northwestern University

The Semantics of Qwahil Augmentatives and Diminutives

S体制 augmentatives and diminutives are so intimately tied up with Noun Class that their content is a variable determined by the class to which a given noun belongs. Thus the appropriate augmentative or diminutive prefix happens to be identical to the Noun Class prefix of a noun, constraints on haplography create the necessity to shift either up or down one level on the augmentative-diminutive scale. Thus ki-tub, 'book', cannot take the first level diminutive, ki-, but must shift to the second level, ki-tu- to form its diminutive, ki-tu-tub. ki-tub has only one level of diminution whereas nouns belonging to other classes would have two, e.g. sanduku, 'suitcase'; ki-sanduku, 'a small suitcase'; ki-n-sanduku, 'a very small suitcase', Ashton (1944, pp. 295-99) recognizes the 'suitcase diminutive idea' provided by a- (after ki-), but makes no mention of these restrictions. Similarly the first level of augmentation is marked by a null prefix, but NP class nouns which are members of the same prefix Noun Class a shift must be made to the next level of augmentation taking a ki- prefix. Hence ki-ki-tub becomes ki-tub, 'big book'. However, for other nouns the semantic content of ki- is 'big' while that of ki- 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.

Cindy Nyende Gorton, Michigan State University

Investigation of Some Expressions of English

English contains rate expressions such as 3 times a week (John goes to the beach three times a week), which I call "phrases". These constructions are restricted: there is a quantified NP capable of having nonspecific referents (John kicks George a ball), they require a time expression which must be an interval rather than a point, and which refers to a period which has passed at least once (George writes to his father every P.M.). "I had been visiting clients a week for only 3 days when...". In this paper I attempt to motivate these restrictions by relating them to the semantic and pragmatic characteristics of rates as a class. Rates are defined as 'a measured quantity that occurs or is attained within the limits of a fixed quantity of something' (The American Heritage Dictionary of the English Language, 1969). Thus, these "phrases" require 2 elements: a quantified NP and another NP describing a unit of measurement which occurs or is attained within the limits of a fixed quantity. Hence ki-tub is a generic NP, expressing what the Speaker considers to be a standard unit of measurement. This investigation throws new light on the behavior of adverbs of frequency, quantifiers and generic expressions, and the complexity of their interactions.

Betty Ann Shappell, San Diego State University

ELLEN SHAPPELL, San Diego State University

PETE M. SHERIDAN, Indiana University/Air University

The Semantics of Qwahil Augmentatives and Diminutives
Evidence from Negation for an Interpretive Rule of Gapping

In this paper, I argue from the behavior of negative sentences that an interpretive theory of Gapping is superior to a deletion theory. Contrary to many linguists' claims, negative sentences cannot be gapped. A sentence like (1) 'I can't eat caviar, and Sue can't eat beans' is ambiguous between (2) 'I can't eat caviar, and Sue can't eat beans' and (3) 'I'm not possible for Ward to eat caviar and Sue to eat (cally) beans.' Although affecting Gapping by either deletion or interpretation can 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

\[ \neg E \neg C \neg [_5 \text{I can't eat caviar}] \text{ and } [_{52} \text{Sue can't eat beans}] \]

Then, a syntactic rule, constrained not to interfere with sentences having their own Auxes, 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, as interpretation analysis involves operator-raising, a rule which has the advantage of merely interpreting operators as having 5 scope just in case they are in Gapping contexts.

ROYAL SHOUSEN, 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) re-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 SOBOS, 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, sentence-internal gapping (IG) is constrained less broadly by RSSR than by a condition which requires that IG apply only to an NP which is remaindered to the left of the gap as subject. Given such a condition, IG appears to be a relation-related process.

STEPHEN S. SPEARS, University of California, Santa Cruz

Some a Modal-like Form in Black English

In Black English (BE), in addition to the motion verb come, there exists a modal-like come which expresses speaker indignation, e.g.,

(1) He come coming in here raising all kind of hell.

This come is comparable to other modal-like forms, identical to motion verbs which occur in Black and non-Black varieties of English and which signal various degrees of disapprobity; however, it occurs in BE only. Establishing this come as a creole would be supported by its existence in creoles, but the major studies of English-based creoles do not reveal a similar form. It may be an independent development in BE.

It is of special interest that occur even in aroleceal varieties of BE, thus showing that the post-creole continuum in the US differs from that in creoles as described by Blochert (1975), who states that forms identical to ones in the base-language but which are functionally distinct do not occur in aroleceal varieties.

MARK J. STEIN, University of Massachusetts

Cogram Vowel 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. Thai lacks determiners, plurals, and a restrictive/non-restrictive relative clause distinction. This, as well as the presence of pronominal deletion in the declarative and the distinction between implicit and explicit pronouns, suggests that Thai is a non-clausal language. However, the Thai noun phrase structure is similar to English with respect to the existence of terminal nominal groupings.

B.H. STEPHENS, Stanford University & J.S. JUSTERSON, University of South Carolina

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 of sound changes and less linguistic interpretation have been accorded this process. This paper presents 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 cumulative effects of sound change assume a quantitatively stable form across languages. 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 times (and confidence intervals) are derived and applied. The relation of sound change rates to lexical replacement rates is explicitly formulated. The models account 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. JAL. 21 [1955], 116-20) and the temporal behavior of the Justeson/Stephens likelihood function for chance cognates (Chance cognation. Papers from the E. IV, edd. E. Traugott, et al. 1979. Amsterdam: Benjamins).
Stress Assignment as Morphological Adjustment in English

In Aromoff'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 \rightarrow electricity \rightarrow electricity). This ordering does not permit stress-determining affixes to exist which contain stress contour conditions on their bases. However, stress-determining -ic (Germanic-formic) can attach to an exist base, X bisyllabic, only if X has penultimate stress; -ical, -ical, -ical, versus -ical, -ical, -ical, (cf. Latin-ic, Latin-ic, Latin-ic). In the former, such affix must instead apply intrinsically after each (stress-determining) affixation. This converges directly with Aromoff's class of allomorphy rules (e.g., -ality, -ality, -ality, -ality), which also apply intrinsically only after stress-determining affixations. Cyclic stress assignment is, in fact, nothing more than noncyclic stress assignment intrinsically ordered after each (stress-determining) affixation.


Applications of Catastrophe Theory to Linguistic Analysis

This essay explains the French toposcopic, which has published a number of the past few years applying his topological theory of catastrophes to the problems of modeling linguistic phenomena. The models have been linguistic for the past few years, and catastrophe theory has not taken its rightful place as a useful analytic device in contemporary linguistics theory.

In order 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 diachronic model which elucidates the change of Chinese language typology from SOV to SVO, and I show how additional variables may be incorporated into the model by use of more complex catastrophes. I show two instances where the catastrophe approach clears up problems in generative phonology models of French and of Khasni, a language of Oregon.

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

Linguistic Determiners 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 once like buy/sell indicate different locations of attentional focus. But languages mark further distinctions. A perspective-point can be stationary--either a syntopic view of many scene elements at once; or moving--with a close-up view of the elements in sequence. This difference is marked, e.g., in: There are a number of houses everywhere in a house every man is a house each observer is a house, or attention, there are other patterns than "Focus and the periphery" for selectively attending to aspects in a scene. Thus, while a plurality is referred to in both All the men being raised their hands and each member raised his hand, the full complement is attended to in the one, and a representative exemplar in the other. Distinctions like these seem fundamental. They are marked, e.g., by deaf children who have developed their own signing system. Thus, one boy, wanting his experimenter to remove her glasses, first gestured as if removing them from her own face, and, as if removing glasses from his own face. Or, to express 'give me', he either indicated the end-points of the transfer or its pathway. Many further factors are present in perspective and attention. They seem to fit into a system that, among other properties, allows embedding.

Resource Explanation for "Specified" and "Unspecified" NPs in Universal Grammar

The grammars of many languages distinguish between "specified" (definite/referential) and "unspecified" (generic/non-referential) object constructions (SOC's and UOC's). An explanation of the differential behavior of these two types of NPs derives from the fact that SOC's tend to occur in the foregrounded, or event-centered, parts of the discourse, while UOC's tend to occur in the backgrounded, or non-event-centered, portions of the discourse. Languages have UOC's in which the V is marked as intransitive, or the O is omitted, incorporated, or stripped of certain morphological information. These constructions tend to involve the same types of V's across languages, those referring to habitual, routine human activities, and they tend to occur in non-event-centered discourse, e.g., in habitual or imperative contexts, but not in event-centered discourse, e.g., in affective contexts, imperatives, and with specific time expressions. SOC's are marked by such devices as absorptive or accusative case markers, transitive V morphemes, and special grammatical morphemes derived from V's meaning 'take, hold', and these tend to occur precisely in event-centered discourse. In contrast to the sharp distinction between UOC's and SOC's, agents/subjects are neutral with respect to the event-centered/non-event-centered discourse functions because of their autonomy as topics vis-a-vis the predicates which signal grounding.
The Nature of Lexical Representation: A Study of Breaking in Friisian

Breaking in Westerlauwers Frisian involves the conversion of the falling (unbroken) diphthongs [ai] and [au] into the corresponding rising (broken) diphthongs unrounded. The process generally takes place when a syllable is added to the stem, the noun [ki:]-[g'le] 'calf' is broken into the plural [ki:]-[ka], the diminutive [ki:]-[zi:]-[g'le] 'calf', and the compound [ki:]-[slo]-[pü]-[g'le] 'calf’s leg'. In the present-day language, far from automatic, it is subject to a number of factors that influence its occurrence. To address the process of marking for whether or not it undergoes the process, the article approach is that many morphs undergo the process in some compounds, but not in others. For example, [tär]-[sär] 'golden headress', as opposed to [tär]-[sär] 'serving'. It is concluded that the presence or absence of Breaking is proper of the morpheme, but rather of the respective derived form or compound, and that this argues for a lexicon made up of words in place of morphemes only.

PATRICIA TRAISIN, University of Toronto

A Rule of Presupposition Carrying in Alternative Questions

The treatment of interpretive rules such as VP-anaphora (and presumable 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 to Japan is semantically present in the reduced clause, because the base rules may generate an empty PP node there. I propose, therefore, that the semantic representation of the second clause is filled out by carrying across all presuppositional rules from the first clause (the base rules) to the second (Jackendoff's 1972 treatment of focus and presupposition). This analysis predicts correctly that to Japan is necessarily present in the second clause. This rule works much like Jackendoff's 1972 rule of happen pre-sententialization, except that it adds semantic material where there is no anaphoric element, 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 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. TROTHE, National Clearinghouse for Bilingual Education

Center Embedding in Coahuilteco

Kuno (1974) has suggested as a functional explanation for Greengard's (1963) Universal 17 that nominal modifiers usually precede nouns in SOV languages, having postnominal relative clauses would increase the likelihood of center embedding. Coahuileco, an extinct Indian language of South Texas, with a basic SOV word order, also shows center embedding of relative clauses, with as many as three levels of embedded (or nested) S's. A unique feature of Coahuileco, so far reported in no other language, which serves to delimit the relative clause boundaries and hence facilitates 'tracking' the embedded clauses, is subject-object concord. In this system, the determiner following the noun is marked for subject status by a -g suffix. All non-subject NPs are marked by a suffix denoting the nominal corresponding to the person of the subject of the s. In addition to the function of marking clause boundaries, subject-matness, subject concord may also serve as an indicator of subject reference within a discourse sequence.

KUN II LING, Stanford University

The Categorial Aspects of Chinese: Its Referential and Socio-stylistic Meanings

This paper reanalyzes the definition Y. T. Chao (1968:252) on the "tentative" aspect (n'yiv') in Mandarin Chinese. Chao claims that this aspect expresses the meaning—"just" and "making a try." However, a "just" at a temporal adverb does not presuppose that one does it, but the actions in sentences such as which aspect appears could be interpreted out. In this paper, the "tentative aspect" is reanalyzed as having the referential meaning of describing the short durational temporal profile of a situation. According to the new analysis, it is proposed that the name of the aspect be changed to Delimitative aspect, and that the meaning of the adverb appear in the sentence can be interpreted out. 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 lends 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 subject in the command gives the impression that the hearer has the option of choice toward the commitment he makes in reading of the book. Thus, the meaning of deference. This form abu ni kan (yiv') this class. You're going to read app. (Please take a look at this book.)

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

Final Vowel Deletion: Conclusions for Rule Application

This paper discusses a (cyclic) account of the vowel deletion process in Klamath and draws conclusions for two theories of rule application in phonology: 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 directionality, it is suggested that the subrules are expanded linearly, in the order determined by the formalism. Within 2, several derivations are considered, where the application of a single rule, as well as the interaction of several rules, cannot be predicted correctly by universal principles.

RUDOLPH C. TROTHE, National Clearinghouse for Bilingual Education

The Neurolinguistic Processing of Rhyme

This study sought to compare the performance of unilingual and bilingual neuropsychologically on a task involving different types of processing of linguistic material. Stimuli consisted of word pairs presented briefly 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 similar instead. Results revealed that both unilinguals and bilinguals were faster at making judgments of rhyme than of meaning. Moreover, bilinguals responded faster to words from the left visual field (right hemisphere). In a second experiment, both the rhyming and nonrhyming items were phonetically similar. When subjects were thereby obliged to analyze the words phonetically, a significant right visual field (left hemisphere) superiority emerged among the unilinguals. The findings are discussed in terms of group differences in preferred information processing mode, with bilinguals favoring a right hemisphere-based verbal analyzing strategy, and the unilinguals a left hemisphere-based phonetic processing strategy.
**DIANA VAN LANCKER & GERALD J. CAMPER, Northwestern University**

**Idiomatic versus Literal Interpretations of Idirotically Ambiguous Sentences**

"Idirotically" ambiguous sentences (each having both a literal and an idiomatic possible meaning) were prepared for listeners' discrimination judgments by having fifth-grade children write sentences in the ambiguous paragraph. The sentences were taken out of the paragraphs and presented in randomized order to 26 subjects. Listeners were unable to discriminate the literal from the idiomatic version of these task sentences under any of the conditions. Instead, 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 dittopic sentences as "idiomatic" correlated with the rankings of ease of sentence understanding. It is concluded that an idiom is an idiomatic as opposed to a literal meaning in natural language situations. In a further experiment, the same fifteen dittopic sentences were recorded in pairs by speakers seeking to convey unequivocally the complements of the conditions, listeners were easily able to discriminate the literal from the idiom versions in each pair. These discriminations were apparently based on prosodic cues.

**IRENE VOGEL, EYVERSEN VAN DER PLIER, & GERARD HOL, University of Amsterdam**

**How Dutch Children Learn to Use Intonation to Disambiguate Who-Questions**

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

1. (Who is the man paying?)
2. (Who is paying the man?)

The problem is that Dutch questions are intonated with an intonation pattern that is the same as intonated yes-no questions. The main accent falls on the verb in (1) and on the noun in (2). 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 whether the first or second word corresponded to the question meaning. The results show not only that this use of intonation is well developed and relatively late, but also that this development follows a U-shaped pattern rather than a linear course.

**JOHN R. WATTERS, University of California, Los Angeles & Summer Institute of Linguistics**

**An Argument Favoring the Suprasegmental Representation of Tone**

Various arguments have been given to support a suprasegmental representation of tone. One frequently neglected argument—neglected because tone rules in the segmental approach are usually written in abbreviated form—is that involvement of the form of tone rules in the two approaches in order to determine 1) which approach, if either, provides a simpler account of tonal processes, and 2) which approach, if either, reveals the generalizations concerning tonal processes. In the segmental approach, the main accent falls on the noun and verb of Ejagham, an Ekoi Bantu language, are formalized in both approaches. The comparison shows that the suprasegmental approach is both simpler and more general: it requires considerably fewer rules, in the form of fewer environments, than the segmental approach; and more general because it uses only relevant information, namely tonal environments and syntactic categories, while the segmental approach includes additional information, all of which is irrelevant to the processes. These facts suggest that tone, at least in Ejagham, should be treated suprasegmentally.

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**CHARLOTTE WEND, San Diego State University**

**Constraint of Progressive Consequential Assimilation**

In an attempt to characterize some of the facts concerning assimilation, Schachter and Schane (1972) have proposed several metatheoretical constraints on assimilation. While these constraints account for many assimilations, neither of the proposals accounts for constraints on consonant cluster assimilations. The purpose of this paper will be to provide a brief survey of the types of assimilation constraints which occur and to examine in particular detail the nature of assimilation constraints in consonant clusters and in two specific examples. A systematic survey reveals the following generalizations: 1) assimilation rules are found of progressive assimilations in which the primary place of articulation changes and 2) regressive assimilation rules occur with far greater frequency than the progressive assimilation rules. In conclusion, a regressive assimilation constraint is proposed: Progressive consonantal 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.

**STEVEN MEISLER, Stanford University & University of Texas, Austin**

**Ternary Dependency Grammar, Vorphrase Deletion, and Logical Form**

In general, the arguments for non-transformational grammars have considered two classes of rules: long-distance rules and local rules. However, Schachter (1978) has argued for non-transformational Dependency Grammar on the basis of a paper on Vorphrase deletion (VDP). Since VDP is a member of a third class of rules—the Daphna rules, Schachter's arguments have the potential for providing independent evidence for the nontransformational position.

This paper argues that Schachter's analysis of VDP is faulty especially where it posts the feature [pto] which is asserted to play a consistent role in the syntax of Germanic, English, and other Germanic languages. The analysis will also show that the analysis of S and P deletion, as we would wish.

The analysis I support involves applying the VDP transformation subject to an identity condition requiring identity between the translations of the target and argument. This analysis explains the interacction between genitive and temporal scope and VDP, and also the possibility of deriving sentence-contained deleted. Here I argue that appeal to logical form is sufficient to explain the facts, but that Schachter's purely syntactic analysis is too weak. The implications for localist syntax are discussed.

**GUY G. WEISBERGER, DANIEL A. DINGS, & MARY P. ELBERT, Indiana University**

**A Clinical Study of the Voicing Distinction and Final Stop Deletion**

This investigation examined the speech of three children who manifest as clinical entities the omission of final stops. We reasoned that, although these children generally failed to produce word-final stops, certain contrastive features associated with final stop voicing may be reserved by different manner of onset in the deleted stopped. Data bearing on this hypothesis were obtained by constructing a speech sample in which the voicing of word-final stops was systematically manipulated, and by having determinate subjects utter these utterances under controlled conditions. Acoustic measurements of vowel duration showed that for all target voiced and voiceless-final position which were judged unanimously by three transcribers to be omited, two of the children produced vowel durations which were clearly sensitive to the voicing characteristic of the deleted, final stop. The third child failed to show a consistent difference in vowel duration dependent on the voicing of the final stop. Analysis of spontaneous speech samples showed that the two children who produced the vowel vowel duration difference also showed clear evidence of medial stops when the form containing the deleted final stop was inflected. The third child, however, omitted both inflected and noninflected form. These results are discussed in terms of the conditions which may be necessary for a child to use different vowel durations to mark the voicing of deleted stops, and 2) an incomplete neutralization.

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Inversion Person Marking in Nootkan

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 inversion person marking system, closely analogous to the system of direct and inverse person marking systems in the Algonquin 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-Makah system, as well as of some "split-ergative" type languages of Asia.

RICHARD MOJCKI, Barnard College, Columbia University

Borderline Cases Between Rules and Processes

McCawley (1979) has criticized Stampe's natural phonology for failing to clarify the notion of 'rule' (as opposed to 'process'). In fact, Donegan and Stampe (1979) (henceforth DS) remark that contraction is a rule in their terminology, but that it is not a rule. Another borderline case is the question of whether the /-a/- allophone of the English plural is related to other allomorphs (/-a/ and /-e/), or by a rule or 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 pronunciation. 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 scalpional distinction between rules and processes by refining, sometimes redefining, Stampe's concept of rule. Specifically, it is argued that rules are functionally identical with suppletion, that they represent real constraints on speech production, and that they may vary with casual/formal style (but not fast/slow tempo). Borderline cases can also be resolved by studying cases in language acquisition.

JAMES MOODY, Gallaudet College

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 from five different sign language "families.

Crossed handshapes are much less common than uncrossed handshapes in all the sign languages. Several sign languages do not have crossed handshapes. For those that do, there is an order of less than 0.2% of all occurrences: normally, outnumber their crossed counterparts by forty-two times (in American Sign Language) to one hundred forty times (Swedish Sign Language). Co-occurrence restrictions with locations for the handshapes are also implicationally ordered at a 100% rate of scalability: uncrossed handshapes occur in more locations than crossed for all languages.

This analysis provides further evidence that sign language phonologies operate under the same constraints of markedness as do oral phonologies (only the particular physiology is different.) It is interesting that certain artificial signing systems designed to mimic English are much more marked than natural sign languages. For example, SEE-II has over 300% more crossed handshapes than American Sign Language.

JAMES DE LONG ZIEGLER. Consultant in Linguistics

The Acquisition of Cognition and Linguistic Competence Among the Young Deaf

Application of Sinclair (1967) cognition and linguistic experiments to profoundly deaf children shows that IQ to determine what extent link between cognition and linguistic competence remains demonstrable in spite severe language handicap. Linguistic competence not closed say but depends on cognitive level (Piaget). Subjects: 12 deaf (5 to 11 yrs) who signed English w/o w/o speech. Data to be collected by simultaneous notation of speech, sign, and gross gesture (Inverney 1976, 1979). Conservation of liquids was used to serve as cognitve test to determine level of conservation WC-NC-conserving, PC-non-conserving. Results: 6/12 linguistics tasks with clay, disks, chips) and marks follow procedures detailed in Sinclair (237f). Responses to be analyzed for completeness and content, identifying types of words used as vectors ('simple' and 'with adjective') and scalers (subjective and objective). Results to be compared with French, English, and French retardates. Expect to find descriptive language use appropriate to level of conservation with lower % complete responses and less variety within given category of response, spread of cognitive levels comparable to hearing children, restricted variety within any given type response more like responses of retardates. Hearing handicap retards language development but not cognitive development upon which it must be based.

DAN A. ZUBIN, State University of New York, Buffalo & KLAUS-MICHAEL KREUTZER, University of Hamburg

Cognitive Constraints on Constituent Ordering

Are the constraints determining the order in which the speakers of a language produce constituents specifically linguistic, or are they a function of general cognitive biases? Psycholinguists (e.g. Osgood and Mook, 1975) have proposed a number of cognitive principles (such as perceptual salience) which influence the ordering of nominal constituents. In this paper we will argue that the syntactic constraints on the order of subject and object in German dependent clauses proposed in literature are in fact a subset of cognitive constraints which are accounted for by such principles. The constraint ordering 0-5: subject before object and 0-5 ordering in some contexts, also for preferred ordering in contexts in which order is apparently free.

The data consist of native speaker ratings of 14 target sentences in which subject and object are in one of two positions between rules, and the order of subject and object were phonetically varied, e.g. (1) and its mate with 0-5 order:

1. Dieses Tor ist nur gefallen, weil der Schnee den Torwart geblendet hat.
2. This goal was made only because the snow (nom) blinded the goalie (acc)

The sentences all described events in a soccer game, and were preceded by a sportsman's monologue, in order to contextualize the experimental task as much as possible.

ARNOlD M. ZIECKY, Ohio State University

Stranded to

The unacceptability of English sentences like

(1) *Children really shouldn't play with rifles, since one is to be incredibly dangerous.

(2) *It's not easy to justify your attitudes, and to you would have to do some fast talking

results from the 'stranding' of the complementizer to as the only morpheme left right of constituent to form a phonal phrase with it, but in (1) and (2) this attachment is blocked. An account of the attachment possibilities must distinguish cases like (1) and (2) from acceptable leftward attachment like

(3) *It's easy to justify your attitudes, and not to would be foolish.

The account I propose refers to the bracketing of sentences into constituents: very roughly, attachment to the right is blocked by the rightmost bracket, while attachment to the left is blocked by the left brackets; within these constraints, to go right if possible, otherwise left.
abstracts

of symposium papers
Exceptional types of language, such as aphasic language or the language of children, is often claimed, may illuminate our understanding of normal adult language. This symposium is convened to examine precisely how they may do so. Recognising 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 amuse cemiteia.

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., Blumenthal). 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., Ohler). 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, Lehff).

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 seeing 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.
LOMBAN K. OBER, Boston Aphasia Research Center

Language in Dementia

In dementing patients, phonology, morphology, 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 complete complex syntactic structures but rather respond associatively to lexical items. In the lexical choice process 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 processes for which we may explore 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.

7:55 SHIELA E. BLUMSTEIN, Brown University & Boston Aphasia Research Center

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 observe 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 speaker in a particular way to the study of aphasia can uniquely inform linguistic theory. The first issue concerns the nature of the primitive levels. Although the controversy between linguistic grammar, 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 concerns 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 formattives in syntax. The third issue concerns the dissociation of components of the grammar found in aphasia, but not necessarily directly elucidated within the structure of the linguistic grammar.

8:20 GILLIAN SAWOFF, University of Pennsylvania

Pigdim-Creole Studies and Language Change

The importance of pidgin-creole studies to general linguistics has recently been stressed by a number of scholars who have claimed that creolization in particular may constitute a key to the understanding of the human faculté de langage (Bickerton, Trawiott). Some striking parallels in several creole languages have been seen as a reflection of language universals, which may be more accessible in a situation of minimal other-language input to those acquiring the language. Bickerton has indicated five such areas of remarkable grammatical similarity. In point of the stabilized language "facta", however, it is easy to miss the crucial diachronic aspect, perhaps the most important for general linguistic theory. In pidginization-creolization, one may be able to study the grammaticalization process in its entirety, tracing the institutionalization of innovations on the way to becoming "facta" of the language. Using diachronic data from Tok Pisin on the features Bickerton claims are crucial to "early-creolised" languages, I discuss how grammatical elaboration in creolizing languages to general problems in language change. The data are also used to examine the relevance for syntactic change of Weinreich, Labov & Herzog's account of the basis for an adequate theory of language change (applied only to phonological change in their presentation).

8:35 RANDY DORIAN, Bryn Mawr College

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 reflect or promote the linguistic system of the speech community? (3) Are features reliably critical for semi-speakers as a group? (4) Is the remarkably small amount of change in a dying language's grammatical system produced by any (or all of the factors which promote change in "healthy" languages)? These questions are answered as follows, using data from a dying Scottish Gaelic speech form: (1) Only Hynmin's broad view of the communicative competence which characterizes a speech community is adequate to embrace speech communities in which semi-speakers are successful participants. Semi-speakers, although the latter is her brother and is only one year older than she, (2) Semi-speakers performed more like her fellow semi-speakers than like the youngest of the three speakers. (3) Tense is found to be controlled better than embedding by semi-speakers generally, (4) Within the tense system the simpler of the tenses survive best. (5) The best of the semi-speakers performed more like her fellow semi-speakers than like the youngest of the three speakers. (6) None of 4 factors taken to promote change in healthy languages account for systematic change here, nor do all 4 together, nor does simple decreasing use. Thus change patterns in language death present a challenge for current theories of linguistic change.

8:50 LISA MEYH, Boston Aphasia Research Center

Child Language as a Source of Constraints for Linguistic Theory

Linguistic theory needs metalinguistic constraints, some of which should derive from the facts that language is a human communicative behavior which is largely learned. The study of language development is obviously crucial to theories concerning rules learnability, inheritance, etc. Being restricted 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. Some models, e.g. Macdonnach's, center on the learning of morphology. Such a model has the explicit predictions of the error patterns of the learner and the conditions which would have to be satisfied before one could say that an individual possessed a morphophonological rule in an active (generalizable) or passive (specifically recognisable) sense. Another group of models focused on early child phonology dissects the relationship between rules and output constraints, clarifies the notion of real-time processing in language production, and suggests testable hypotheses on syllable-structure constraints in adult language.

9:15 DEBORAH KELLER-COHEN, University of Michigan

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 transference. 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 known. 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 between second and first languages; topic-prominent language. Mcgurk (1977) found evidence of imposition of Mandarin topic structure on the subject position in the English sentences of a native Mandarin speaker. By looking cross-culturally at second language learners from diverse language back-grounds, we may develop the nature of linguistic rules that 'incribe' into a person's second language system regardless of their first language. We should point to a set of nuclear rules of second language acquisition which ought to be a part of a universal grammar.
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/decroolization) 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 approached an aspect of the theme of the symposium from a different perspective in his/her own research. 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 20-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 (Weis). The perspectives from which Hatch’s paper will be discussed are (1) Foreigner Talk (Ferguson), (2) the importance of input in SLA (Larson-Freeman), and (3) simplified input and the origins of pidginization (Naro). Weis’s paper will be discussed from the perspectives of (1) language death (Boros), (2) research on Foreign 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 Decroolization as Processes of Language Acquisition.” The lead paper by Valdman will deal with creolization and SLA and the paper by Schumann and Stubbe with decroolization and SLA. Valdman’s paper will be discussed from the following perspectives: (1) processes of creolization and linguistic universals (Slobin), (2) the social context of processes of croolization (Sanoff), (3) relations between structure and function in child language, pidgins and creoles (Selin), and (4) language change (Trawgott).

9/45 DIANE LARSON-FREEMAN, The Experiment in International Living’s School for International Training

DISCUSSANT’S PERSPECTIVE: The Importance of Input in Second Language Acquisition

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 most often, the most, etc. The morphemes which have been studied have varied somewhat from study to study; nevertheless, the following are the ones usually included: the be auxiliary and the ing of the progressive aspect, the be copula, the articles, the preposition as, 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 the 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) prior stereotypes or cultural strategy for un 2) a case 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 training in Lisbon, 1460-1465) it is likely that previous systems of simplification contributed little more than a tendency to putverbs in the infinitival form. Major modifications were determined by the following strategy in these initial small-scale contacts: (1) separation of each invariant, separately. This is expressed by meaning to at least phonologically separate, invariant stress-bearing form' (A.J. Naro in Lg.54:318). Soon however, the 'simplified' speech that resulted from these first contacts spread to the populace as a whole through popular plays and songs. Thus, by the time the Portuguese colonization of Africa began in large scale in the 1460's, the component of simplification due to prior stereotypes was undoubtedly much greater.

10:40 JURGEN M. MEISEL, Gesamthochschule Muppertal

LEAD PAPER: Strategies of L2 Acquisition: More than One Kind of Simplification

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 approximate system without 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 deletion phenomena and word order, we maintain that there exists a dimension of simplification at each stage of L2 acquisition, characterizing different learner types. Socio-psychological factors are said to influence the formation of such learner groups. Thus, a distinction is made between structural properties of simplification, strategies employed at 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.

11:10 NANCY ZORAN, Bryn Mawr College

DISCUSSION'S PERSPECTIVE: Simplification in Natural SLA and Language Death

Like natural second language learners, imperfect "semi-speakers" of a dying language speak some other language fluently and are unattached 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 of the number of allomorphs and generalization of one high-frequency allomorph in complex morphemes (mourn, pl. gerund); (2) omission of allVerbs that can be replaced with the same verb in the approximate system: the preposition (recognize): (3) transfer of a complex morphological system largely to a single overused representative of a large class (tense system); (4) elimination of unusual or complex syntactic forms in favor of analytic forms (let person conditional, conjuring prepositions). (5) But their Gaelic does not show particularly heavy admixture of English lexic or grammar, and it remains considerably more grammatically complex than their pidgins. Relative psychological distance is not predictive of relative grammatical skill, among second-language learners. The claim of the study of semi-speaker linguistic systems may lie in discovering what simplification will appear despite outstanding receptive skills and what complexity will survive despite incomplete acquisition and partial use.

11:30 NARO BALTARELLI, University of Hawaii & SUSAN GoWE, Iowa State University

DISCUSSIONS' PERSPECTIVE: L2 Acquisition: More than One Kind of Simplification

While many of the research on the linguistic problems of immigrants have 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 subsequent generations. We have focused on generational studies of emigrant languages, the type and rate of language shift, and what factors influence these changes. We have found that the processes and strategies characteristic of L1 acquisition are also involved in the acquisition of an emigrant language. Likewise, attitude, motivation, and social distance are not important here as in natural SLA. In spite of the similarities of the language learning situat doing for example, the case of children in which the child of the immigrant usually acquires the language of his parents in a situation in which their language group is politically and economically inferior to the dominant language group, and the child lives all the time outside the family. The linguistic situation which obtains with emigrant languages in is clearly different from that which obtains for pidgins. Unlike the process characteristic of natural SLA, in which the language evolves from pidginy through intermediate stages toward eventual contact with the target language, the emigrant language continues to simplify, evolving fairly rapidly in a direction which is away from the native language as spoken by their original immigrants, until its eventual death is the third or fourth generation.

SESSION VII: Focus on Creolization and Decreolization as Processes of Language Acquisition

11:50 ALBERT VALLABHIA, Indiana University

LEAD PAPER: The Implication of Creolization for Second Language Acquisition

Creolization involves the crystallization and subsequent elaboration of an autonomous interlanguage system. It consists of nativization, the crystallization and elaboration of the SL system, and of language shift. Nativization, the use by a multilingual community of learners for intergroup communication. Creoles originate in situations where there is a high degree of isolation from the standard language. In the case of creoles, the situation is directed multilingual situations where rapid language shift is occurring, e.g., the acquisition of French in multilingual settings in Francophone Africa. Creolization occurs in the elaboration of the multilingual economic system with assimilated TL systems. In formal L2 learning, situations must be created in which communicative needs can be integrated into sessions with the native system and where learners function as a linguistic community. Such attempts will be reviewed and evaluated.
8:35 DEREK BICKERTON, University of Hawaii

DISCUSSANT'S PERSPECTIVE: A Unified Model of Acquisition/Change

Pidglinization, creolization, decreolization, LI 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 languages. 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 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: what happens 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 for a child 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 LI—can 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 LI model can be followed, others (such as definite/ indefinite distinctions) where innate hypotheses can override LI influences. But basically, LI and L2 learners’ positions do not differ—both are correcting pre-existing hypotheses rather than ‘learning’ a language.

8:45 GILLIAN SANDOFF, University of Pennsylvania

DISCUSSANT'S PERSPECTIVE: Processes of Creolization - The Social Context

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 criticality 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 syntactic 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) massive increase in the number of second language speakers; (2) the beginning of a generation of first language speakers; and (3) a great expansion of communicative functions in private and public life (e.g., the passage of speeches in the House of Assembly, which rose from c.40-50% in Tok Pisin in 1964 to 95% in 1974). Looking at language use in context provides a functional explanation for the development of certain features, while others are more clearly attributable to other influences (substrate, superstrate). I have argued that even changes attributable to the natural relization and extension of language competence must be established in the language through social interaction. This discussion paper will evaluate the relative importance of two levels of social analysis (macrohistorical social processes and the dynamics of face-to-face interaction) in creolization.

8:55 DAN SLOVIN, University of California, Berkeley

DISCUSSANT'S PERSPECTIVE: Relations Between Structure and Function in Child Language, Pidgin, and Creoles

Pidgin languages and early stages of child language reflect a similar set of solutions to functional pressures on a linguistic communication system: (1) Semant 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 depidginization-creolization, are characterized by reduction in semantic transparency and blurring of surface markings, along with expansion in rhetorical and cohesive devices.

8:55 ELIZABETH TRAUGOTT, Stanford University

DISCUSSANT'S PERSPECTIVE: Processes of Creolization from the Perspective of Language Change

Processes of creolization continue to pose important theoretical questions for the theory of language change concerning such constructs as naturalness and genetic relationship. They provide crucial evidence on the relation between language change and language acquisition. Demonstrating that language acquisition and restructuring are separate processes that are restricted, but not brought to a close, at puberty. They confirm findings that phonological change and children’s acquisition of segmental phonology have little in common, while syntactic-morphological change are widely matched by corresponding processes: such differences can be accounted for in terms of differences in developmental and especially in the functionally different roles of phonology and syntax-morphology in language. They also provide a testing ground for evaluating what is meant by ‘the discourse origins’ of syntax or morphology, supporting the hypothesis that all grammaticalization ultimately originates in forms with propositional meanings which are selected to specify some previously unexpressed (or no longer ambiguously expressed) discourse meaning. Processes of creolization are not special cases of, but test cases for, the theory of change.

9:50 JOHN SCHMAAN & ANN-MARIE STAUBLER, University of California, Los Angeles

LEAD PAPER: A Discussion of Decreolization and Second Language Acquisition

Bickerton and Waughbaugh disagree about the nature of decreolization, but they both agree that decreolization is a variety of second language acquisition (SLA). In support of this point of view, Stauber has demonstrated that the acquisition of English negation by Spanish speakers is motivated by the same processes (replacement and restructuring) as the acquisition of acrolect negation in the decreolization of Gypsy Creole. Bickerton finds Waughbaugh’s lexical diffusion model unacceptable as an explanation for decreolization. Nevertheless, Waughbaugh’s claim that high frequency associations in the lexical input result in replacement of lexical forms finds support in SLA research where there is evidence that the order of acquisition of grammatical morphemes correlates highly with the frequency of those morphemes in the input. Even though there is agreement that decreolization is SLA, there is evidence that depidginization is also a SLA phenomenon. Bickerton and Odo claim that pidginization is SLA with restricted input and imply that as input becomes less restricted second language development occurs through the process of depidginization. The data that exists on depidginization shows that this process, like decreolization, is a product of reorganization and proceeds through replacement and restructuring. Therefore, it may be the case that decreolization and depidginization are the same phenomenon at the process level.
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 Lasting 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 Bisyllabic Lasting Rule (BLR). Second, the BLR is one of numerous examples of the fact that the traditional phonological deep structure of English (à la 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

On Predicting Phonological Difficulty in Second Language Acquisition

One of the problems 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 allomorphs. Thus, for example, Spanish allomorphs [d] and [m] are phonemes in English and present problems for Spanish speakers (Stockwell and Bowen 1965); and Japanese [t] and [r] 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 allophonic 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 [p] and [b] as allomorphs of /b/, since the acquisition of /p/ involves learning a phoneme in the TL which is relatively less marked than the NL /b/.

DOUGLAS E. FLAKES, Colorado State University

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. Analysis 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 diagnostically 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 investigations. 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 for this study. The explicit data used to elicit feedback in such a problematic 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 SS post-feedback responses, are examined.

ROBERT M. 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

Deletion-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) order and "non-hierarchical" (equal or temporal) order. Several factor analyses conducted to establish the construct validity of those relationships are summarised.

The extended close-open technique is presented as a tool for understanding how people perceive information in context. In the extended close-open 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-open approach 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.

JANICE SAVILLE-TROIKE, Georgetown University

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

Early stages in the acquisition of English 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 be-ing constructions are reinterpreted 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 s-play for the boy is playing); be between Ws 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 finite constructions may be followed by be interpreted as the equivalent of 'at-é 'it is', optionally used for emphasis in Navajo.
The Language of Accidental Death and Dismemberment: A Case of Forensic Linguistics

The paper embodies an actual report commissioned by a law firm; a linguist's "expert opinion" on the interpretation of critical language in an insurance contract. The issue revolves about the meaning of the terms "accident" and "disease," since the insured drowned while suffering a heart attack. If he died accidentally, the heirs can collect; if he died of a disease or infirmity, they cannot. The report develops the semantic features of the critical terms and shows how they are understood "in the light of the reasonable expectation and purpose of the ordinary man when making an ordinary contract."

This report, an example of "forensic linguistics," demonstrates how, in a particular landmark case, the expertise of the linguist was employed in the prosecution of a lawsuit. Depending upon the outcome of the case, the language of all standard accident insurance policies may need to be revised.

Amy Sheldon, University of Minnesota

The Acquisition of /r/ and /l/ by Japanese Learners of English: Evidence that Speech Production Ability Precedes Speech Perception Ability

The paper presents 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 perceive and produce this new contrast. The hypothesis that is being tested is that the acquisition of the ability to perceive new phonemic distinctions precedes the ability to produce them. In other words, the learner can not produce new sounds or new sound distinctions before they can perceive them. Participants were Japanese learners of English and native speakers of English. Tape recordings were made on which each subject said a list of English words with /r/ and /l/ appearing in different positions within the word and in different vowel contexts. Each person listened to a tape recording of every other subject as well as their own recording. Subjects were tested on both an identification and a discrimination task. The results indicate 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 the word that it occurred in as well as the vowel environment. The results of this study will be discussed in relation to previous research on the acquisition of liquids by Japanese speakers, and in relation to linguistic aspects of liquids in other languages. The applied implications of this study will be discussed also.

Robert C. Williamson & John A. Van Eerden, Lehigh University

Language Maintenance and Shift in a Breton and Welsh Sample

The study concerns the status of two minority languages, notably the relative health of Welsh as compared to the more marginal situation of Breton. Interviews were conducted with 77 Breton and 81 Welsh inhabitants of villages and small towns in the spring and summer of 1979 in Finistère and Cardigan-Merioneth, respectively. A major aspect of the study was the testing of hypotheses regarding the affect of social backgrounds or "subcultures" (for example, age, sex, socio-economic status, and urban-rural origin) on the use of the minority and official languages in various domains. In addition, problems of language identity, interference, the role of formal and informal socialisation, and the mass media are analysed. Attention is also given to the question of language loyalty and the literary renaissance, as well as projections about language survival in the context of religious, political, and economic factors.

EXHIBITORS

Booths
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