Linguistic Society of America

FORTY-FIFTH ANNUAL MEETING
DECEMBER 28-30, 1970
WASHINGTON, D.C.

Meeting Handbook
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Meeting Handbook
Contents

PROGRAM  

Monday, December 28  
FIRST SESSION  
Section One  
Section Two  
Section Three  
SECOND SESSION  
THIRD SESSION: Symposium on Language and Intelligence  

Tuesday, December 29  
FOURTH SESSION  
Section One  
Section Two  
Section Three  
FIFTH SESSION  
Section One  
Section Two  
Section Three  

Wednesday, December 30  
SEVENTH SESSION  
Section One  
Section Two  
Section Three  
EIGHTH SESSION: Symposium on Semantics and Transformational Grammar  

INDEX  

1  
7  
22  
34  
42  
53  
55  
60  
70  
78  
87  
104  
115  
131  
149  
154  
156  
159
PROGRAM OF THE FORTY-FIFTH ANNUAL MEETING
Sheraton-Park Hotel, Washington, D.C.
December 28–30, 1970

Committee on Arrangements: Charles Kreidler, Chairman,
Joseph R. Applegate, William Orr Dingwall, John H. Hammer,

Program Committee: Bernard J. Spolsky, Chairman, Warren
Cowgill, D. Terence Langendoen, Robert E. Longacre, Ilse
Lehiste, Theodore W. Walters.

The Executive Committee will meet in the Adams Room, Sunday,
December 27, 10:00 a.m.

The Registration Desk will be open in the Concourse of States from
7:00 p.m. to 9:00 p.m. on Sunday, December 27, and from 8:00 a.m. to
4:00 p.m., December 28 through 30.

Book Exhibits will be displayed in the Potomac Room during the fol-
lowing hours: 8:00 a.m.-6:00 p.m., Monday, December 28, and Tuesday,
December 29; 8:00 a.m.-2:00 p.m., Wednesday, December 30.

Sessions One, Four, Five, and Seven are divided into three simulta-
neous sections; Section One will meet in the Maryland Suite, Section
Two in the Virginia Suite, Section Three in the Delaware Suite. Sessions
Two, Three, and Eight will meet in the Park Ballroom. Session Six
(Business Meeting) will be held in the Maryland Suite.

8:00 a.m. Registration, Concourse of State
9:00 a.m.-12:00 p.m. First Session

Section One (Robert J. Di Pietro, Chairman)

1. Yakov Malkiel (University of California, Berkeley): Primary, sec-
ondary and tertiary etymologies. (20 minutes)
2. E.D. Francis (Yale University): Greek haíónai. (20 minutes)
(15 minutes)
4. Gordon M. Messing (Cornell University): The Romance collective
neuter and the survival of the Latin ablative. (20 minutes)
5. Anthony J. Naro (University of Chicago): Fidginization and natural
change. (20 minutes)

Section Two (William Orr Dingwall, Chairman)

6. Barbara Robson (University of Texas at Austin): Turkish is an SOV
language. (15 minutes)
7. Bruce T. Downing (University of Southern California): Parenthesi-
zation rules and obligatory phrasing. (20 minutes)
8. Arthur Schwartz (University of California, Santa Barbara): Con-
straints on movement transformations. (20 minutes)
9. Patricia M. Wolfe (University of British Columbia): On the develop-
ment of some deletion constraints in English. (20 minutes)
10. Charles M. Jenkins (University of Texas at Austin): On the relevance of psycholinguistic data. (18 minutes)

Section Three (Charles S. Bird, Chairman)

11. Matthew Chan (University of California, Berkeley): Sasaale and nasalization in Chinese. (20 minutes)
12. W. L. Ballard (Georgia State University): The Mandarin Chinese palatals. (20 minutes)
13. Ralph W. Fasold (Georgetown University): The tone features of Thai. (15 minutes)
14. John A. Rea (University of Kentucky): Phonology and the rules of French versification. (15 minutes)
15. Karl E. Zimmer (University of California, Berkeley): Vowel and consonant harmony in Turkish. (20 minutes)

2:00 p.m.-5:00 p.m. Second Session (Yakov Malkiel, Chairman)

16. Walter A. Cook (Georgetown University): Case structure as a deep structure in tagmemic analysis. (15 minutes)
17. Charles S. Bird (Indiana University): Associational phrases in English and Samburu. (20 minutes)
18. Bruce Fraser (Language Research Foundation): Towards a theory of conventional use. (20 minutes)
19. James W. Harris (Massachusetts Institute of Technology): Paradigmatic regularity and naturalness of grammars. (20 minutes)
20. Barbara Hall Pardee (University of California, Los Angeles): Directionality is grammar. (20 minutes)

5:30 p.m.-7:00 p.m., Cocktails, (Paying Bar), Maryland Suite

8:00 p.m.-10:00 p.m., Third Session, Park Ballroom

Symposium on Language and Intelligence
Charles A. Ferguson, Chairman

John B. Carroll (Educational Testing Service): Report on the Technical Committee on Language and Cognitive Development. (30 minutes)
William Labov (University of Pennsylvania): The adequacy of languages. (30 minutes)
Thomas G. Bever (Columbia University): Environment and the emergence of linguistic structures. (30 minutes)

TUESDAY, DECEMBER 29

9:00 a.m.-12:00 p.m. Fourth Session

Section One (William O. Bright, Chairman)

21. Margaret A. Naeser (University of California, Los Angeles): The American child's acquisition of differential vowel duration. (15 minutes)

22. Arlene I. Moskowitz (University of California, Berkeley): Early phonology acquisition. (20 minutes)
23. Eve V. Clark (Stanford University): The acquisition of the meaning of before and after. (15 minutes)
24. Gaberelli Drachman (Ohio State University): Some assumptions concerning language acquisition. (20 minutes)
25. William Orr Dingwall (University of Maryland) and Galina Toniks (University of Colorado): Government and concord in Russian: A study in developmental psycholinguistics. (20 minutes)

Section Two (D. Terence Langendoen, Chairman)

26. Ralph Vanderslice (Hunter College of the City University of New York): Distinctive intonation features. (10 minutes)
27. Timothy S. Smith (University of California, San Diego): The phonetic and linguistic descriptions of vowels. (20 minutes)
28. Massayoshi Shibatani (University of California, Berkeley): The role of surface phonetic constraints in generative phonology. (20 minutes)
29. Marcel A. A. Tatham (University of Essex): A linguistically-oriented approach to speech synthesis-by-rule. (15 minutes)
30. Alan Bell (University of Colorado): Dynamics of syllable structure -- a nondeterministic model. (20 minutes)

Section Three (Bernard J. Spolsky, Chairman)

31. John P. Kimball (University of California, Santa Cruz): Recursion in deep structure and logical form. (10 minutes)
32. Laurie Karttunen (University of Texas at Austin): Some observations on factivity. (20 minutes)
33. Wilbur A. Hass (Shimer College): The syntactic relevance of presupposition and interference. (20 minutes)
34. Robert Wall (University of Texas at Austin): On the notion "presupposition of a sentence." (20 minutes)
35. Gerald B. Mathias (Indiana University): On the topic. (15 minutes)

2:00 p.m.-5:00 p.m. Fifth Session

Section One (Theodore Walters, Chairman)

36. Hans Aarsleff (Princeton University): Condillac and Herder. (20 minutes)
37. D. Terence Langendoen (Brooklyn College and Graduate Center of the City University of New York): A study of the linguistic practices of the PTC. (20 minutes)
38. Ingrid Guenterdor (University of Kansas): A prosodic isogloss in German dialects. (10 minutes)
39. Catherine Carvey (John Hopkins University): The structure of a conversation type. (20 minutes)
40. Archibald A. Hill (University of Texas at Austin): A theory of speech errors. (20 minutes)
Section Two (Warren C. Cowgill, Chairman)

41. Joseph L. Malone (Barnard College and Columbia University): The isolation of "Schemaatisierung": A service of linguistics to philology. (20 minutes)
42. Hain-L Hoieh (University of Detroit and University of California, Berkeley): Subcategorial diffusion. (20 minutes)
43. David DeCamp (University of Texas at Austin): Hypercorrection and rule generalization. (10 minutes)
44. Thao vondernemann (University of California, Los Angeles): Reconstruction of phonemes vs. reconstruction of rules: On vowel length in Gothic. (20 minutes)
45. Johanna Nichols (University of California, Berkeley): The internal syntax of Uralic inflected nouns. (20 minutes)

Section Three (Ilse Lehiste, Chairman)

46. Robert S. Kirmser (Columbia University): Some remarks on focus, expletive er, and the pseudohomophony of the Dutch indefinite article. (20 minutes)
47. Terence H. Wilbur (University of California, Los Angeles): Noun phrase complementation and the ko-positive of Basque. (20 minutes)
48. Elaine K. Eisteen (Bloomington, Indiana): A comparison of the subjective and objective conjugations in the Samoyedic languages. (10 minutes)
49. Robert Underhill (Harvard University): Turkish participles. (20 minutes)
50. David Cohen (University of Texas at Austin): Hindi appnas: A problem of referent assignment. (15 minutes)

8:00 p.m.-10:00 p.m. Sixth Session, Business Meeting, Maryland Suite

A. Minutes of the last meeting
B. Report of the Secretary
C. Report of the Treasurer
D. Report of the Executive Committee
E. Report of the Committee on Publications
F. Reports of the Standing Committees, Appointed Committees, and Delegates.
G. Appointment of Committee on Resolutions
H. Other business, proposed by any member of the Society.

WEDNESDAY, DECEMBER 30

9:00 a.m.-12:00 p.m. Seventh session

Section One (Roger W. Shuy, Chairman)

51. Edith A. Moravcsik (Stanford University): On disjunctive connectives. (20 minutes)
52. Bruce L. Pearson (University of California, Berkeley): Lexical insertion and translatability. (20 minutes)

54. Susan H. Houston (Northwestern University): Contingency grammar: Introduction to a general theory of competence and performance. (20 minutes)
55. Georgia M. Green (University of Illinois): A syntactic syncretism in French and English. (20 minutes)

Section Two (Barbara Hall Pardee, Chairmen)

56. James L. Fidelholts (University of Maryland): Why Arab may rhyme with screech and Arab, but not dare grab or may rub. (15 minutes)
57. Daniel R. Fullner (Oakland University): Underlying phonological segments for tense vowel complexes of English. (15 minutes)
58. Clarence Sloat (University of Oregon) and James E. Hoard (University of Victoria): The inflectional morphology of English. (20 minutes)
59. William W. Cressy (University of Michigan): Two proposed conditions governing phonological descriptions. (20 minutes)
60. Jerry Larson (University of Texas at Austin): A redefinition of the terms "tone language" and "pitch language." (20 minutes)

Section Three (Robert Wall, Chairman)

61. David Ingram (Stanford University): Toward a theory of person deixis. (20 minutes)
62. Garland D. Bills (University of New Mexico): The Quechua directional verbal suffix. (20 minutes)
63. G. Koolemans Beynen (University of Rochester): " Contrast" as a semantic category in Russian. " (10 minutes)
64. Paul C. Chapin (University of California, San Diego): What's in a word?: Some considerations in lexical theory. (20 minutes)
65. Haamig Seropian (University of California, Berkeley): Is there a "be in semantic structure"? (20 minutes)

12:30 p.m.-2:30 p.m. Presidential Luncheon, Cotillion Room

After the luncheon, Charles A. Ferguson, Stanford University, will present the presidential address: Some requirements for a theory of language behavior.

2:45 p.m.-5:00 p.m. Eighth Session, Park Ballroom

Symposium on Semantics and Transformational Grammar

Rolin Wells, Chairman

Jerrold J. Katz (Massachusetts Institute of Technology): Interpretative semantics. (45 minutes)
James D. McCawley (University of Chicago): Generative semantics. (45 minutes)
Pioneer etymologists of, say, the 19th century could afford to list several "solutions" without attempting to connect or to hierarchize them. In a reaction against this laxity, the Golden Age of historical linguistics insisted on the uniqueness of correct solutions, but in the process often simplified and, in the last analysis, distorted highly complex situations. At present, it seems possible, at least in some instances, to revert to the earlier view of multiple sources, provided these can be tidily arranged in defensible sequences: A given word may spring into existence within one family, then change its allegiance and become a member of another family, and finally come under the influence of a third family. These successive shifts can each be expected to leave an impact on form and meaning, and such impacts serve as clues in unraveling the word biography. Spanish saña 'wrath', enseñar 'to rage', and sañudo 'furious' qualify as an illustration of this state of affairs.
HARDOUT

Primary, Secondary, and Tertiary Etymologies

I. The Hispano-Romance families at issue —
(a) Sp. saña (= Ptg. sancha) 'fury, anger, wrath', sañudo 'angry, furious', Cl.-Sp. ñando 'id.', anseñar (= Cl.-Sp. amarn) 'to make furious', refl. 'to fly into rage', ensañamiento 'spell of fury'.
(b) OSp. sañamañar 'to mock, ridicule'.

II. The first possible Latin source —
(a) SANUS 'sound, healthy', SANO-ARE 'to heal', SANITAS 'health';
(b) INSANUS 'mad, raging, deranged', INSANIA 'frenzy', INSANIO INSANIA 'to be mad, rage, rave' > 'INSANITAS'.

III. The second possible Latin source —
SANIES (ver. -IA) 'corrupted blood' > 'stagnant water', SANTICUS 'resembling, or full of, dung water', EXSANITAS 'to exude or drip corrupted blood'.

IV. Unmistakable Romance reflexes
of the second Latin source —

V. The third possible Latin source —
SANNA 'grimace, mockery', SANNIOTIS 'buffoon', SANNIO-ARE 'to mock', SANNATOR 'mocker, jest', DÉS-SANNAIRE 'to laugh (in one's sleeve, behind the victim's back)', SUBSANNAIRE 'hidden' mocker.

VI. The original range of the Latin reflexes
of the Latin suffix -ITUS —
(a) Starting points: SANNUS-ITUS 'whittled-grey' > 'aged' (SAUNUS-ITUS 'white hair'), CORUS-ITUS 'horned' (CORUS), MANUS-ITUS 'long-handed' (MANUS), MAUS-ITUS 'large, long-', sharp-nosed' > 'acute, sagacious, satirical'. Of, ALATUS 'winged' (ALAT), BARRATUS 'bearded' (BARRA); AURUS-ITUS 'long-eared' > 'attentive' (AURUS), CINNITUS 'airy, long-haired, crested' (CINNUS). (b) Old Provengal evidence:
(c) General impression of a switch from -ATUS and -ITUS to -UT, as in glut, barbut: ormit.
(8) Semitic break-down: aspelut (aspm 'shoulder'), polut (pole 'throat'), guinibut (guinbo 'whiskers'), luomet (luou 'tongue'), mawout (mau 'belly'), etc.; branout 'many-branched' > 'forked', folbut 'leafy', nodut 'knotty', remut 'branching'; connout 'pointed', tontut 'cup-like'; seubut 'learned'.
(d) Old and Modern French evidence: barbu 'bearded', bousu 'hunch-back(ed)', obsolu, bouche 'big-mouthed', bourru 'cross, surly, peevish' (from bourre 'fluff, flock, floss'), branche 'forked, many-branched', charnu 'fleshy, bewary, pulpy' (of chern < CARNUS), chevelu 'airy, shaggy', cornu 'horned', fig. 'extravagant', obs. oreu 'long-haired', orâpu 'woolly' (of hair), 'crisp, frizzled' (of creep 'curled' < CRISPUS), crocu 'crooked, hooked, light-fingered' (croc 'hook, crook'), obs. dentu 'big-toothed', feuillu 'leafy', fourchu 'forged, cloven', etc.
Of the three Greek aorists with stem-final ẹ (halōnai, biōnai, goūnai), only goūnai can be analyzed convincingly as the regular continuation of an athematic root aorist. Alternative explanations of halōnai and biōnai (e.g. comparison with the ẹ- aorists) have not accounted for the unmotivated ẹ/ọ ablaut or a patternless opposition of ẹ- and ọ-extensions which they imply. After exhausting other possibilities I propose to interpret halōnai (← *walōnai) as the direct continuation of an ẹ- aorist formation *wal-ẹ-, in which the *-ẹ- of the derivational suffix *-ẹ- was colored by the preceding ẹ-, resulting in Gk. *wal-. Damēnai, not *damēnai (from *damē-ẹ-), might appear to contradict this view. Replacement of *damēnai by damēnai can, however, be explained according to conditions which do not apply to halōnai. Avoidance of potential homonymy with (wa)lōnai and the paradigmatic isolation of the stem shape *wal- also favored the retention of *walōnai. This analysis of halōnai suggests that the suffix *-ẹ- became productive in the prehistory of Greek before laryngeals had merged with other consonants, vowels, zero, and vowel length. It provides not only a clear case of laryngeal coloring across morphological boundaries but also evidence against recent theories of laryngeal umlaut according to which we would expect *wal-, not *wal-. These conclusions can be extended to account for other problematic Greek data. For example, the stem of biōnai may be similarly derived from *g10-ẹ-. Mitos and thēnaios (and possibly other eo-nouns) can be plausibly interpreted as continuations of *g10-ẹ- and *hū-ẹ-. The divergent stem vocalism of g-stems such as *gene(s)- (< *gēn-ẹ-s-) and *krewa(s)- (< *krew-ẹ-s-) may be attributed to a difference in root-final laryngeals. An important source for the Greek thematicization of PIE athematic root aorists is provided by *g- final roots from which 3 pl. *g-ẹ-ẹnt would regularly become Pck. *g-ẹ-ẹnt by phonological change.
2c. οἰκεία Λαβριά — οἰκεία Θρο; ἐγρέθετε: ἀγορέσεν
3a. ἦταν ἀποκλασμένοι — ἵνα τὴν ἀπαγόρευσεν

b. ἦταν ἀποκλασμένοι — ἵνα τὴν ἀπαγόρευσεν

c. προ-δοτικό — ἀπο-δοτικό

d. ἀπο-δοτικό — ἀπο-δοτικό

3b. συνθέτικο — MSS συνθέτικο συνθέτικο

MSS ἀπο-δοτικοί — ἀπο-δοτικοί; συνθέτικο — συνθέτικο

4. Ἰερ. συνθέτικο — Ἰερ. συνθέτικο

OL. Preverb + ἐν + ἐν ἔντιτσι + ἐν παστ

= no + παστ + παστ

Herod. ἄπειρο Θεό; ἀπειρο Θεό; τοῦ ἐπικρατεῖν

Av. pairi. ἀνεκατά θέλειν; 5, 1, 5 'he saw' — anaventios H 2, 13; 'you saw'

OP ἐκείνη ἐκτός — ἐκτός ἐκτός; 'he saw'

τεταγμένα: ἐκτός ἐκτός οἱ ἐκτός ἐκτός

Av. μικρὸς ἀνυφράστης ἀνακηρύσσειν

ποροσατό ἀνυφράστης ἀνακηρύσσειν

ἀνακηρύσσειν: [ἐκ] ἀνακηρύσσειν: [ἐκ] ἀνακηρύσσειν

5a. *πρὸ βοηθήνες: πρὸ βοηθήνες; πρὸσβοηθήνες; πρὸσβοηθήνες

*ἐναέρη — *ἐναέρη; πρὸ τοῦ παράθυρου

*ἐναέρη — *ἐναέρη; πρὸ τοῦ παράθυρου

*ἐναέρη — *ἐναέρη; πρὸ τοῦ παράθυρου

5b. *πρὸ βοηθήνες: πρὸ βοηθήνες; πρὸσβοηθήνες; πρὸσβοηθήνες

*ἐναέρη — *ἐναέρη; πρὸ τοῦ παράθυρου

*ἐναέρη — *ἐναέρη; πρὸ τοῦ παράθυρου

*ἐναέρη — *ἐναέρη; πρὸ τοῦ παράθυρου

*ἐναέρη — *ἐναέρη; πρὸ τοῦ παράθυρου

*ἐναέρη — *ἐναέρη; πρὸ τοῦ παράθυρου

*ἐναέρη — *ἐναέρη; πρὸ τοῦ παράθυρου

*ἐναέρη — *ἐναέρη; πρὸ τοῦ παράθυρου

*ἐναέρη — *ἐναέρη; πρὸ τοῦ παράθυρου

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*ἐναέρη — *ἐναέρη; πρὸ τοῦ παράθυρου

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*ἐναέρη — *ἐναέρη; πρὸ τοῦ παράθυρου

*ἐναέρη — *ἐναέρη; πρὸ τοῦ παράθυρου

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*ἐναέρη — *ἐναέρη; πρὸ τοῦ παράθυρου

*ἐναέρη — *ἐναέρη; πρὸ τοῦ παράθυρου

*ἐναέρη — *ἐναέρη; πρὸ τοῦ παράθυρου

*ἐναέρη — *ἐναέρη; πρὸ τοῦ παράθυρο
Romance scholars apply the term "collective neuter" to a range of phenomena often involving collective nouns and variously attested in dialects of Southern Italy and Spain (Asturias). Hall distinguishes five categories: (1) presence of a distinctive final vowel (especially, -o for -u) in nouns, adjectives, and the definite article; (2) absence of palatalization in the consonant stem of the definite article; (3) absence of unstressed, where this is usual in masculine nouns; (4) gemination of the initial consonant of a noun after the definite article; (5) masculine adjective in agreement with feminine noun. All this has been explained as a still surviving distinction between Vulg. Lat. -m(e) and -u(e) > -o (Lausberg) or as arising from a Vulg. Lat. neuter *illīc formed on illū after the model of hoc and offering a variant for the definite article (Merlo). Hall has recently suggested that the source is rather: (1) an ablative (hence final -o) but with the Latin and Italian ending -d̪; (2) use of the preposition de with mass-nouns in a partitive sense. Unfortunately, -d̪ is out of the question: the -d̪ had been lost in Latin by 200 B.C.; -d̪ was lost in Umbrian; while it occurs in Oscan texts as late as 63 A.D. (Pompeian graffiti), it may have been unstable; in any case, Oscan -d̪ could not influence the Spanish forms. Hall's suggestion of a distinctive ablative can be salvaged, but the clue may lie, not in -d̪ but in -c from another source: Lat. cum, surviving in Spain and Italy, was sometimes used after its object (cf. pecum, tecum, and derivatives in Spanish and Italian). An *illīc-c(u), or even pleonastic *cum illīc-c(u) (cf. Sp. conmigo etc.), or -c(u) after a mass-noun, with -c eventually lost or assimilated to a following consonant, is here proposed.
The Romance Collective Neuter and the Survival of the Latin Ablative

A. Five phenomena cited to justify the existence of a Romance collective neuter; see Robert A. Hall, Jr., "Neuters", Mass-Nouns, and the Ablative in Romance," *Lante.*, 44.480-6 (1968):

1. Distinctive final vowel, normally -o, contrasting with -u of ordinary masculines
   a. Noun in -o: *fierro* 'iron', *vino* 'wine' Lena (Asturias)
   b. Adjective in -o referring to collective neuter: *la negro al arrugs* 'the rice is black' Lena (Asturias)
   c. Differentiation in article and noun: *lo ferro* 'the iron' but *lu piëtu* 'the chest' Norcia (Umbria)
   d. Differentiation in article only: *o latte* 'the milk' but *u lõpe* 'the wolf' Nemi (Lazio)

2. Absence of palatalization in the consonant stem of the definite article (where ordinary masculine palatalized): *lu panò* 'the bread' but *lu kanó* 'the dog' San Felice Circeo (Lazio)
   *le papò* 'the pepper' but *i petò* 'the foot' Trasacco (Aquila)

3. Absence of unlaud found in ordinary masculines in stressed syllables under the influence of final -u:
   *pelo* 'hair' (collective) but *pilu* 'hair' Asturias
   *kòrgu* 'body' but *kòc* 'eight' Trevi (Umbria)

4. Gemination of initial consonant after definite article (sometimes plus change described under 3.): *o amêla* 'the honey' but *o canó* 'the dog' Naples
   *lu ppane* 'the bread' but *lu piëttu* 'the bed' Meta (Campagna)

5. Masculine adjective modifying feminine noun:
   *la farina era tam blanku* 'the flour was so white' Cabranes

B. Use of -d in Old Latin as o-stem ablative singular

1. So-called Senatus Consultum de Bacchanalibus, 186 B.C. *Sacra in (o)quolud ne quisquam fecisse velet, neve in poplicid neve in preivatod but in agro Turano* "Let no one be minded to hold ceremonies in secret, whether in public capacity or in private" but "In the domain of Taurani."

C. Italic treatment of o-stem ablative singular

1. Oscan: *tristaamentud* = Lat. *testamentum* but cf. final -h for -d in *sulub* and *gusul puh* from the *corpus of Viblia*

2. Umbrian -d lost *pplu* = Lat. *populo*
When groups of speakers of non mutually intelligible languages attempt to communicate one particular language is sometimes taken as a basis for verbal communication, but is modified in significant ways in order to facilitate the process. The compromise system, called a **pidgin**, is no one’s native language and is therefore perhaps not even of the same formal class as natural languages. If the pidgin eventually serves as data for grammar construction in a new generation of speakers the natural language which results is called a **creole**.

Opinion on the linguistic relationship of a pidgin, and hence of a creole, to the base language differs widely. Specific data are here adduced to show: [1] although base-creole correspondences are regular and stateable, they violate at least one very well motivated phonological constraint on natural language change. Supporting syntactic and semantic data are also presented. [2] Violations of constraints cannot be ascribed exclusively to sub or super stratum influences since such influences are normally limited to cases where the resulting surface structure is interpretable, at least in the early stages, as a well-formed surface structure in the base language. Thus, they appear to be typical cases of re-analysis and therefore do not differ markedly from natural change. Abrupt changes, foreign to broad trends in the base language family, can however be introduced through deliberate ‘simplification’ by native speakers of that language.
In "Gapping and the order of constituents", Ross claims that Turkish is an underlying SVO language rather than an SOV language, because in certain sentences dative and locative elements can occur after the verb (which Ross says can't happen in true SOV languages), and because Turkish gaps both SOV and SOV. Ross' claim is somewhat surprising, in view of the fact that Turkish behaves in all respects but these like an SOV language. This paper presents an alternative analysis of the crucial data which is based on an underlying SOV order, and which has the advantage of being consistent with Ross' gapping hypothesis without necessitating explanations as to why a non-SOV language has so many SOV characteristics.

1. Ross' rule (Ross 1967, unpub.): 
   \[ \ldots X \] 
   \[ \begin{array}{c} 1 \\ 2 \\ 0 \\ 2 + 1 \end{array} \] 

2. Emphasis rule in Turkish: 
   \[ X [+\text{emphasis}] N, V Y \] 
   \[ \begin{array}{c} 1 \\ 2 \\ 3 \\ 2 + 1 \\ 0 \\ 3 \end{array} \]

T3. "Ahmet lives at school." 
   Ahmet okulda oturur. \(\Rightarrow\) Okulda Ahmet oturur.  
   (A. at-school lives)

T4. "Come here." 
   Buraya gel. \(\Rightarrow\) Gel buraya.  
   (To-here come)

T5. "Give it here." 
   Onu ver. \(\Rightarrow\) Ver onu.  
   (it give)

T6. "Masa lives at school." 
   Masa-wa gakkoo-ni sun-de-iru. \(\Rightarrow\) Gakkoo-ni Masa-wa sun-de-iru.  
   (M. at-school lives)

T7. "Come here." 
   Koko-ni ki-nasai. \(\Rightarrow\) Ki-nasai koko-ni.  
   (to-here come)

T8. "Give me the book." 
   Watakusi-ni hon-o kudasa-i. \(\Rightarrow\) Kudasa-i hon-o watakusi-ni.  
   (to-me book give)
9. Ross' derivations of surface orders:
   Base: A. SOV SOV SOV    B. SOV SOV SOV
   + Gapping: SOV SOV SOV    SOV SOV SOV
   + Verb shift: SOV SOV SOV    SOV SOV SOV
   + Gapping: SOV SOV SOV    SOV SOV SOV

T10. 'Ahmet ate the pickles, and Mehmet the cucumber salad.'
   a. SO SOV:
      Ahmet türdüm, Mehmette cacığı yedi(ler).
      (A. pickles, M.-s. c.s. ate (pl.))
   b. SOV SO:
      Ahmet türdü yedi, Mehmette cacığı.
      (A. pickles ate, M.-s. c.s.)

T11. 'I washed the walls, Nur the windows, and Peri the curtains.'
   a. SO SO SOV:
      Ben duvarlarım, Nur penceleri, Peride perdele yıkladım.
      (I walls, N. windows, P.+s curtains I-washed)
   b. SOV SO SO:
      *Ben duvarlarım yıkladım, Nur penceleri, Peride perdele.
      (I walls I-washed, N. windows, P.+s curtains)

T12. "I didn't eat fish, and Ahmet rice, and Mehmet roast beef.'
   a. SO SO SOV:
      Ben balık, Ahmet pilav, Mehmete dana rosto yedimik.
      (I fish, A. p. M.+s r.b. I-didn't eat)
   b. SOV SO SO:
      *Ben balık yemedim, Ahmet pilav, Mehmete dana rosto.
      (I fish I-didn't eat, A. p., M.+s r.b.)

13. Derivation of surface orders:
    Base: A. SOV SOV SOV    B. SOV SOV SOV
    + Gapping: SOV SOV SOV    SOV SOV SOV
    + Emphasis: SOV SOV SOV    --

T12. c. OSV OS SO:
    Duvarlarım ben yıkladım, penceleri Nur, perdele Peride.
    (I walls I-I-washed, windows N. curtains Pери.)
The paper advances four restrictions on movement transformations:
(i) that the nucleus or head of a phrase not be moved within its phrase;
(ii) that a phrase moved out of its phrase not attach to anything but
the boundary of the next highest phrase, or it not that, an s-boundary;
(iii) that a phrase not become a constituent of a sister-phrase;
(iv) that a movement rule affect only one term (not a variable) of its
structural analysis. The clearest and least controversial of 'trans-
formational' relationships by and large support these constraints; in
turn, these constraints serve to explain why, on the one hand, some
constructions do not occur in natural language, and why, on the other-
for those that do occur--some hypotheses have never been advanced (and
are not likely to be). Accepting these constraints means calling into
question a number of currently 'plausible' formulations since these
formulations would otherwise, for the sake of isolated constructions,
force a disproportionate extension of the power of linguistic theory.
These constraints then should find expression somewhere in linguistic
theory, not as imposed on the application of rules but in the very form
of the rules themselves. The unit-movement constraint (iv) affords a
revealing example of how the search for such natural incorporation leads
to a clarification of the principle itself: only one constituent need
be mentioned in a movement rule since, at most, the only other non-
variable required is a property (feature). It also becomes clear that
features do not move but are, instead, localized. The constraints, taken
together, suggest that operations on the localization of features con-
stitute a class of statements distinct in character from the operations
on constituents discussed in this paper.

HANDOUT
Constraints on Movement Transformations

(1) the man wanted to go to the 3rd floor.
(2) the man on the 3rd floor resembled his sister.
(3) *the man to the 3rd floor resembled his sister.
(4) the man on the 3rd floor wanted to go to the 1st floor.
(5) the man to the 3rd floor wanted to go.
(6) *the 3rd floor man to the 1st floor wanted to go.
(7) *the man to the 1st floor wanted to go to the 3rd floor.
(8) it was the man to the 3rd floor that wanted to go.
(9) which man to the 3rd floor was it that wanted to go?
(10) *the man to the 1st floor tended to go.
(11) *the man to the 1st floor started to go.
(12) the man to the 1st floor desired to go.
(13) *the man to the 1st floor wished to go.
(14) *the man, to the 1st floor wished that he, might go.
(15) the man, wished that he, might go to the 1st floor.
(16) *we expect that the man to the 1st floor might want to go.
(17) *we expect the man to the 1st floor to want to go.

(i) N A
\[ \begin{array}{c}
1 \quad 2 \\
\varnothing \quad 2 \quad 1 \\
\end{array} \]

(ii) N A
\[ \begin{array}{c}
1 \quad 2 \\
\varnothing \quad 2 \quad 1 \\
\end{array} \]

(iii) N A
\[ \begin{array}{c}
1 \quad 2 \\
\varnothing \quad 2 \quad 1 \\
\end{array} \]

(iv) N A
\[ \begin{array}{c}
1 \quad 2 \\
\varnothing \quad 2 \quad 1 \\
\end{array} \]

(v) N A
\[ \begin{array}{c}
1 \quad 2 \\
\varnothing \quad 2 \quad 1 \\
\end{array} \]

(vi) N A
\[ \begin{array}{c}
1 \quad 2 \\
\varnothing \quad 2 \quad 1 \\
\end{array} \]

(vii) N A
\[ \begin{array}{c}
1 \quad 2 \\
\varnothing \quad 2 \quad 1 \\
\end{array} \]

(viii) N A
\[ \begin{array}{c}
1 \quad 2 \\
\varnothing \quad 2 \quad 1 \\
\end{array} \]

(ix) N A
\[ \begin{array}{c}
1 \quad 2 \\
\varnothing \quad 2 \quad 1 \\
\end{array} \]

(x) N A
\[ \begin{array}{c}
1 \quad 2 \\
\varnothing \quad 2 \quad 1 \\
\end{array} \]

(xi) N A
\[ \begin{array}{c}
1 \quad 2 \\
\varnothing \quad 2 \quad 1 \\
\end{array} \]

(xii) N A
\[ \begin{array}{c}
1 \quad 2 \\
\varnothing \quad 2 \quad 1 \\
\end{array} \]

(xiii) N A
\[ \begin{array}{c}
1 \quad 2 \\
\varnothing \quad 2 \quad 1 \\
\end{array} \]

(xiv) N A
\[ \begin{array}{c}
1 \quad 2 \\
\varnothing \quad 2 \quad 1 \\
\end{array} \]

(xv) N A
\[ \begin{array}{c}
1 \quad 2 \\
\varnothing \quad 2 \quad 1 \\
\end{array} \]

(xvi) N A
\[ \begin{array}{c}
1 \quad 2 \\
\varnothing \quad 2 \quad 1 \\
\end{array} \]

(xvii) N A
\[ \begin{array}{c}
1 \quad 2 \\
\varnothing \quad 2 \quad 1 \\
\end{array} \]
(6) (i) S
   NP            VP
   dog             vms...gate
   as big as S

(7)(i) S
   NP            VP
   car             we paint front

(8)(i) VP
   give book boy

(9)(i) S
   NP            VP
   boy was in garden

(10) (i) all of us have noticed the same thing.
   we all have noticed the same thing.
   we have all noticed the same thing.
   (ii) both of them can sing well.
   they both can sing well.
   they can both sing well.
   (iii) each of the boys will start at the beginning.
   the boys each will start at the beginning.
   the boys will each start at the beginning.

(11) (i) whenever he had the money, he could reach Los Angeles.
   (ii) he could reach Los Angeles, whenever he had the money.
   (iii) he could, whenever he had the money, reach Los Angeles.

(12) (i) these pieces of wood, we might need them later.
   (ii) these pieces of wood we might need later.

(13) (i)(a) he is, it seems, a friend of hers.
    (b) there are many people, I regret to say, whose dues are still not in.
    (c) some of the reports, it turns out, need modification.
    (ii)(a) it seems he is a friend of hers.
    (b) I regret to say there are many people whose dues are still not in.
    (c) it turns out some of the reports need modification.

(14) (i)(a) she used to put—whenever it was available—the book on the shelf.
    (b) she used to put—it turns out—the book on the other shelf.
    (ii)(a) she used to put the book—whenever it was available—on the shelf.
    (b) she used to put the book—it turns out—on the shelf.

(15) (i) S
   NP            VP
   Bill gave book boy
to book Bill gave

(16) (i) we can do without this key—this key we can do without.
    (ii) we can do without this key to the office—this key to the office
    we can do without.

(17) (i) e sogli e le teine le tama i le to'ma ma le mafi
    "the girl cuts the boy with the ax and the knife",
    "the girl cuts the boy with the ax and the knife"
    cuts by the girl the boy with the ax and the knife
    "the girl cuts the boy with the ax and the knife"

(18) voglio poter dartelo.
    "I want to be able to give it to you."
    voglio poter dartelo.
    to lo voglio poter dare.
    *voglio potere darlo.
    *lo voglio potere dare.
    etc.

(19)(i) X V
   Y Pro (Pro) Pro Z
   1 2 3 4 5 6 7
   1 2 3 4 5

(20)(i) non voglio poter dartelo.
    "I don't want to be able to give it to you."
    non voglio poter dartelo.
    non te lo voglio poter dare.
    non te lo voglio poter dare.
    "I want not to be able to give it to you."
    voglio non poter dartelo.
    voglio non poter dartelo.
    *te lo voglio non poter dare.
    *te lo voglio non poter dare.
    *te lo voglio non poter dare.

[28]
(21)(i) NP VP S
   V' X Y Z

(22)(i) NP VP S
   V' X Y Z
   John work begin

(23)(i) NP VP S
   V' X Y Z
   I believe him be honest

(24)(i) NP VP S
   V' X Y Z
   seem Joe be old

(25)(i) NP VP S
   V' X Y Z
   John hill be similar

(26)(i) NP VP S
   V' X Y Z
   boy hit ball

(27) (i) he is upset but (still) rational.
(ii) they arrested somebody but I can't tell who.
(iii) you wrote this faster than that.
(iv) such designs as are used there tend to be faulty.

(28)(i) NP VP S
   V' X Y Z
   she saw man in rain

(29) (i) Der Mann wird das Buch lesen können.
(ii) lesen können wird der Mann das Buch.
(iii) *Können wird der Mann das Buch lesen.

(30)(i) NP VP S
   V' X Y Z
   dog farmer

(31)(i) [ NP X N Y ]

(32) (i) thou goest hence.
     goest thou hence?
     (i) she could say something that might upset them.
     what could she say that might upset them?

(33) (i) X NP NP Y
     1 2 3 4
     1 3 2 4

[30]
Many grammarians have noted that sentences of the type:

*Percy liked the girl wanted to date his brother instead
in which the subject relative pronoun has been deleted, were apparently
formerly grammatical, cf.:

... for there was nother kyngg, cayser, nonther knyght that day
myght stonde hym ony buffete
Than they loked and were ware of a slepyng knyght lay all
armed undir an apil-tre

Langendoen and Bever have recently attempted an explanation for the loss
of this construction based on the interaction of perceptibility and
learnability. However, the existence within the same work of sentences
with ungrammatical (by present standards) deletion of the subject in
conjoined sentences, e.g.:

And there was brought hym robis to his pleasure, and wolde
have had Balyng lewe his sverde behynde him
Than was there joy and game amonge the knyghtes of Rounde
Table, and spake of the grete prouesse that the mesayngers
ded that day ...

suggests that any explanation based on relative reduction alone is
faulty, and that the two phenomena should be examined together. The
available data provides confirmatory evidence for analyzing relative
clauses as derived from conjoined sentences, and also suggests interest-
ing developments in the constraints on deletion in English, in particular,
that this could take place at deeper levels in Middle English than is now
possible. In addition, there are some methodological implications for
the study of linguistic change.

Peters and Ritchie have shown that current transformational theory
underdetermines the grammars that are written. We may resolve this
difficulty by either tightening grammatical theory or seeking other
primary data. The latter course is urged and psycholinguistics is
argued to be a source of relevant primary data. Theoretical grounds
for this view are given, and truncated passives are discussed as examples
in which the usual transformational analysis (truncated passives are
derived from full passives) and psycholinguistic data (children develop
truncated passives before full passives) conflict. It will be argued
that truncated passives are not derived from full passives by truncation,
but rather from subjectless deep structures because:

a. a truncation transformation does not exist
b. there exist deep subjectless sentences
c. there is a transformation to move objects to subject position

These arguments support the evidence of the psycholinguistic data and
the argument that in the case of such a conflict the linguistic analysis,
not psycholinguistic theory, should be revised.
Recently Foley and Lightner each made some interesting proposals regarding universal rules or tendencies of vowel nasalization. This paper purports to supplement these and similar studies concerned with language universals with a broader empirical basis by bringing in materials from a score of Chinese dialects. It also purports to evaluate various claims about language universals with regard to sound change affecting nasals on the basis of fresh data.

Specifically, the present paper will pose and attempt to answer such questions as (1) What phonological environments condition vowel nasalization and other changes of nasal elements? (2) How can we reconcile on the one hand the claim that /n/ is the most favored nasal segment and, on the other hand, the observation that in the 18 Chinese dialects studied /ŋ/ prevails in such a way that the presence of /m/ always implies the presence of /n/, and the presence of /n/ always implies that of /ŋ/? (3) How do language-specific morpheme structure conditions interact with language-universal tendencies of sound change? (4) What are the physio-acoustic factors that determine interactions between nasal endings and the vocalic elements?
The Mandarin Chinese Palatals

<table>
<thead>
<tr>
<th>pa</th>
<th>ta</th>
<th>tsa</th>
<th>ka</th>
</tr>
</thead>
<tbody>
<tr>
<td>pu</td>
<td>tu</td>
<td>tsu</td>
<td>ku</td>
</tr>
<tr>
<td>pi</td>
<td>ti</td>
<td>tqi</td>
<td></td>
</tr>
</tbody>
</table>

Table 1

Diffuse
- Strident
- Grave

<table>
<thead>
<tr>
<th>Hypothetical</th>
<th>Occurring</th>
</tr>
</thead>
<tbody>
<tr>
<td>se[tsi]</td>
<td>se[ki]</td>
</tr>
</tbody>
</table>

Table 2

Rule a:

TS, K

Rule b1:
Diffuse
- Strident
- Grave

<table>
<thead>
<tr>
<th>K</th>
<th>C</th>
<th>TQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voc.</td>
<td>i,y</td>
<td></td>
</tr>
</tbody>
</table>

Rule b2:
Diffuse
- Strident
- Grave

<table>
<thead>
<tr>
<th>TS</th>
<th>TQ</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Voc.</td>
<td>i,y</td>
<td></td>
</tr>
</tbody>
</table>

It is far easier to find discussions in the literature on generative phonology concerning features needed for the description of segmental phonology or stress systems than concerning features needed for the description of lexical tone. This paper presents data and a proposed feature analysis for a portion of the tone system of Thai.

Thai is generally described as a language with five distinctive tones. In a binary system, five tones can be distinguished with a minimum of three features. The question arises as to whether or not the facts of Thai tonal phonology indicate such an optimal number of features; and, if so, what are they. In determining the correct features for phonological segments, the most crucial evidence often comes from morphological alternations. In Thai, a language with very few morphophonemic alternations, this kind of evidence is seriously lacking. However, it appears possible to decide what the tone features of Thai are on the basis of two facts about Thai tone phonology: 1) restrictions on just what kinds of syllables can take which of the five tones, and 2) the behavior of tone in a certain relatively rare reduplicative process. The analysis which most succinctly accounts for these facts requires a slight modification in the set of features proposed by Wang (1967) to account for lexical tone.

The suggested analysis also has implications for the theory of morpheme structure conditions.
Treatises on French versification, both descriptive and prescriptive, claim that the devices of rhyme and of meter in French are for the ear, not for the eye. But a number of rules pertaining to French verse do not directly reflect the overt phonetic facts of contemporary French pronunciation. Some authorities explain these discrepancies, particularly those as to permitted rhymes, as in part based on orthography, that is to say as intended for the eye as well as for the ear. Others see in these same rules the traditional remnants of an earlier period when they were established on the basis of then current pronunciations which no longer survive. Often it is suggested that such archaic rules ought to be abandoned, as indeed they occasionally are by the more hardy experimenters; but in the main the rules persist with a tenacity hard to ascribe to the dead hand of tradition or typographical prettiness.

It is the thesis of this paper that these rules of versification in French are in fact based neither on orthography per se, nor on persistent tradition, but that they are accurately based on the phonological structure of contemporary French, and that indeed no additional rules are needed for the description of French verse beyond those already needed for an account of normal spoken French. Supporting examples will be adduced with regard to both scansion and rhyme, including data on vowels, consonants, and clusters of semi-vowels and vowels.
A. 'Normal' suffix harmony:

There are two kinds of vowel alternations in Turkish suffixes, one involving the high vowels
1, ü, 1, u,
the other involving the unrounded low vowels
ê, a.

Rule I:
Suffix vowels agree with the last stem vowel with respect to frontness.

Rule II:
High suffix vowels agree with the last stem vowel with respect to rounding, unless a low suffix vowel intervenes, in which case their rounding value agrees with the latter.

Examples:

1-dü-l-u  accusative
e-a  dative
ler-lar  plural

acc. dat. acc. pl. dat. pl.
ev+i ev+e ev+ler+i ev+ler+e
gül+i güle+ler+e
ek+u ok+a ok+ler+1 ok+ler+a
kiz+i kiz+a kiz+ler+1 kiz+ler+a

ev 'house'
gül 'rose'
ok 'arrow'
kiz 'girl'

B. 'Normal' distribution of laterals and velars:

The phonetic segments involved are 'light l' [l] and 'dark l' [l], 'fronted k' [k] and 'velar k' [g], and 'fronted g' [g] and 'velar g' [g].

Rule:

[1], [k], and [g] occur in syllables with front vowels; [l], [k], and [g] occur in syllables with back vowels.

C. Examples of exceptions to A. and B. in loan words:

usul 'manner'
[usul], not [usul]
acc. [usu'l] (syllabified [u-su-l])
fevk 'top'
[fevk], not [fevk]
acc. [fevk] (syllabified [fev-k])
hâk 'earth'
[hâk], not [hak]
acc. [hâk] (syllabified [ha-k])

D. Adaptation of loan words:

<table>
<thead>
<tr>
<th>Vowel harmony</th>
<th>Consonant harmony</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage I (unadapted)</td>
<td>[hağ]</td>
</tr>
<tr>
<td>[hâk]</td>
<td>-</td>
</tr>
<tr>
<td>Stage II (partially adapted)</td>
<td>[hak]</td>
</tr>
<tr>
<td>[hâk]</td>
<td>-</td>
</tr>
<tr>
<td>Stage III (fully adapted)</td>
<td>[hak]</td>
</tr>
<tr>
<td>[hâk]</td>
<td>+</td>
</tr>
</tbody>
</table>

Note: Forms which are [+ vowel harmony] and [- consonant harmony] (e.g. [hâk]) do not occur.
The system of tagmemic analysis is a well-defined system for dealing with the grammatical elements of surface structure in terms of the function and form of each unit. Designed for field methods situations, its primary concern is with the description of the surface structure of sentences with particular attention to the grammatical meaning of each element of the structure. Case grammar (Fillmore) is a system which views the deep structure of sentences as a set of relations between a VP and a series of case-marked NPs. This series of NPs constitutes a set of roles which are useful in defining verbs in terms of the case frames in which they occur, and useful for relating sentences with identical deep role structures, but diverse surface syntactic structures.

The advantages of using Fillmore’s case grammar as a deep structure for tagmemics are as follows: (1) the case grammar provides a ready-made deep structure for relating sentences; (2) surface cases, such as subject and object, would be more clearly represented as subject-as-agent, subject-as-goal, and the like, as already suggested by Pike; (3) the definition of surface adverbials such as place, time, manner would be more clearly defined by comparison of deep and surface structures. For the case grammar model, tagmemics would provide a set of ready-made descriptions, for demonstrating the universality of the presuppositions on which case grammar is founded.

### 1. Preliminary Analysis

#### A. Active Uses of the Verb "break"

<table>
<thead>
<tr>
<th>(1)</th>
<th>The window</th>
<th>broke</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface</td>
<td>+ S: N</td>
<td>+ P: iv</td>
</tr>
<tr>
<td>Deep</td>
<td>O</td>
<td>V</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(2)</th>
<th>The hammer</th>
<th>broke</th>
<th>the window</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface</td>
<td>+ S: N</td>
<td>+ P: tv</td>
<td>+ O: N</td>
</tr>
<tr>
<td>Deep</td>
<td>I</td>
<td>V</td>
<td>O</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(3a)</th>
<th>John</th>
<th>broke</th>
<th>the window</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface</td>
<td>+ S: N</td>
<td>+ P: tv</td>
<td>+ O: N</td>
</tr>
<tr>
<td>Deep</td>
<td>A</td>
<td>V</td>
<td>O</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(3b)</th>
<th>John</th>
<th>broke</th>
<th>the window</th>
<th>with a hammer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface</td>
<td>+ S: N</td>
<td>+ P: tv</td>
<td>+ O: N</td>
<td>± Ins: RA₂</td>
</tr>
<tr>
<td>Deep</td>
<td>A</td>
<td>V</td>
<td>O</td>
<td>I</td>
</tr>
</tbody>
</table>

#### B. Passive Uses of the Verb "break"

<table>
<thead>
<tr>
<th>(4a)</th>
<th>The window</th>
<th>was broken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface</td>
<td>+ S: N</td>
<td>+ P: tvp</td>
</tr>
<tr>
<td>Deep</td>
<td>O</td>
<td>Vpass</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(4b)</th>
<th>The window</th>
<th>was broken</th>
<th>with a hammer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface</td>
<td>+ S: N</td>
<td>+ P: tvp</td>
<td>± Ins: RA₂</td>
</tr>
<tr>
<td>Deep</td>
<td>O</td>
<td>Vpass</td>
<td>I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(4c)</th>
<th>The window</th>
<th>was broken</th>
<th>by John</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface</td>
<td>+ S: N</td>
<td>+ P: tvp</td>
<td>± Ag: RA₁</td>
</tr>
<tr>
<td>Deep</td>
<td>O</td>
<td>Vpass</td>
<td>A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(4d)</th>
<th>The window</th>
<th>was broken</th>
<th>by John</th>
<th>with a hammer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface</td>
<td>+ S: N</td>
<td>+ P: tvp</td>
<td>± Ag: RA₁</td>
<td>± Ins: RA₂</td>
</tr>
<tr>
<td>Deep</td>
<td>O</td>
<td>Vpass</td>
<td>A</td>
<td>I</td>
</tr>
</tbody>
</table>
2. Deep Structure from Case Grammar

1. S → V + O  for sentences (1), (4a)
2. S → V + O + I  for sentences (2), (4b)
3. S → V + O + A  for sentences (3a), (4c)
4. S → V + O + I : A  for sentences (3b), (4d)

Case Frame: break = + [ ___ (A) (I) O ]

V
(A)
break

[Passive]

S

John

(A)

hanger

[-animate]

O

window

[-animate]

3. Surface Structure in Tagmemic Analysis

1. Intransitive Clause, with O as subject

iCl = + S₀ : Nᵢn + P : iv

2. Transitive Clause, with I as subject

tCl₁ = + S₁ : Nᵢn + P : tva + O : Nᵢn

3. Transitive Clause, with A as subject

tCl₂ = + S₂ : Nαn + P : tva + O : Nᵢn ± Ins : RAᵢ

4. Passive Clause, with O as subject

pCl = + S₀ : Nᵢn + P : tvp ± Ag : RAᵢ ± Ins : RAᵢ

In the strong form of the generative semantics model as represented by Gruber and McCawley, lexical items are formed by pre-lexical transformations which incorporate embedded structures into single matrices, enabling the grammar to capture the relation between meaning and syntax with a unary set of rules.

All distinctions of meaning are represented in the deep structure such that there would be n deep structures to account for the n interpretations of any given string or segment of a string. The rules which conflate embedded structures are necessarily ad-hoc and this is claimed to reflect the arbitrariness of the lexical inventory of any given language. Given the ad-hoc nature of these rules, strict parallels between conflating rules in two totally unrelated languages would have to be explained either through universals or through chance. The odds against such parallels being fortuitous in three or more unrelated languages would be so great as to exclude this alternative from consideration.

This paper will be an attempt to show that there are strong parallels between the great ranges in meaning of with-phrases in English and their Bambara counterpart, ni...ye-phrases. It will be demonstrated that there are over twenty possible low-level semantic functions of with-phrases in English which are matched one for one by ni...ye-phrases in Bambara.

The strong form of the generative semantic model would require a unique underlying structure for every surface representation of with having a different meaning. This of course implies that there are twenty some odd homonyms with in English and twenty some odd homonyms ni...ye in Bambara and that these sets of homonyms have the same semantic functions in both languages. Both languages would have to have the same rules neutralizing in surface representations the same deep structural contrasts.

It will be demonstrated that, although on some grounds a word or lexically based model is notationally variant to the generative semantic
model, a word-based model not only captures the speaker's basic intuitions concerning the sameness of words, but also allows the identity of with as a single morpheme by assigning a constant semantic function which is abstract or indeterminate at the deepest level of interpretation and which is subsequently made more specific by later interpretive rules operating much the way low-level phonetic rules spell out the correlates of phonological distinctive features.

TOWARDS A THEORY OF CONVENTIONAL USE

In addition to the syntactic, semantic and phonological aspects of a sentence, the native speaker is aware of another aspect: how the sentence is conventionally used, e.g. as a promise, command, threat, etc. Sometimes the relationship between the linguistic form and the conventional use is highly stylized and only remotely interpretable, e.g.

i) Would you like to see my etchings (request for a liaison)

ii) Shake a leg (command to move faster)

iii) She has a bee in her bonnet (statement that subject is excited about something)

However, the vast majority appear to exhibit a systematic relationship between the linguistic form and conventional use, e.g.

i) Will (can, would, could) you pass (hand, give, toss) me the NP (has the form of a request for information but conventionally used as a request for action)

ii) Help Mary and I'll VP (has the form of a command conjoined with a declaration but is conventionally used as either a promise or threat, depending on the content of the VP)

I will argue and support with examples the claim that only a theory of conventional use which interprets the entire derivation (the semantic reading and the deep and surface structures) can adequately account for this aspect of English sentences. In particular, I will present two sorts of cases: (i) where optional transformations alter the range of conventional uses for a particular deep structure (thus directly challenging the performative analysis supported by generative semantics); and (ii) where the conventional use of sentences can be most effectively determined after the application of two or more transformations, rather than at the level of deep structure.
Neither analogy nor paradigmatic relations have any official status in generative phonological theory. Paradigms are, however, a part of language, not an artifact of the linguist.

Spanish verb forms provide evidence for the role of paradigmatic relationships in a synchronic grammar. The verbs hacer and decir share a unique irregularity in certain paradigms. The only descriptively adequate account attributes this irregularity to the reversal of the order in which two phonological rules apply to all regular verbs. The best-known theory of generative phonology, in which rules apply in a fixed order, disallows the descriptively correct analysis. S.R. Anderson's theory of "local ordering" allows rule-order reversal, and states universal conditions under which rules may apply in different orders in different derivations. Anderson's theory, however, fails in the present case. The formal property that distinguishes the exceptional from the normal order of the rules in question is that of paradigmatic uniformity.

The history of Spanish verb forms provides examples in which preservation of or increase in paradigmatic uniformity (traditionally, and correctly, ascribed to analogy) results in grammars that are more complex and less natural, by current measures: A single rule becomes more complex, and is morphologically rather than purely phonologically conditioned; a rule is inserted into the grammar in non-chronological order (presumably unusual) and moreover in a marked order with respect to a chronologically prior rule (heretofore undocumented, as far as I know).

Paradigmatic relationships are thus seen to play a role in the organization of grammars, from both synchronic and diachronic points of view, and therefore must be incorporated into linguistic theory.

---

**HANDOUT**

Paradigmatic Regularity and Naturalness of Grammars

*A number of assertions about data will have to remain unsupported here because of time limitations, and a number of rules will be given in simplified form for the sake of clarity. Fuller discussion of most of the synchronic data and of all the rules can be found in my Spanish Phonology, MIT Press, 1969.

(1) "mark" /mark-/
    /mark/  "cook" /kok-/
    /kok/  Underlying form of stem (cf. co[k]ción)
    sklər  sklər  Infinitive
    sklər  sklər  let pers sing, pres indic
    skləməs  skləməs  let pers plur, pres indic
    skləməs  skləməs  let pers plur, pres subjunct

    "pay" /pə-/  "protect" /pər-/
    pə[θər]  pər[θər]  Underlying form of stem (cf. prote[k]ción)
    pəθər  pəθər  Infinitive
    pəθər  pəθər  let pers sing, pres indic
    pəθəməs  pəθəməs  let pers plur, pres indic
    pəθəməs  pəθəməs  let pers plur, pres subjunct

(2) Velar Softening: $x \rightarrow x$ [-back]  Truncation: $V \rightarrow \emptyset$  

(3) First conjugation /a/ = "theme vowel" /e/ = "pres subjunct"
    /a/ = "theme vowel" /e/ = "pres subjunct"
    /mos/wist pers plur
    (MARKED)  (UNMARKED)
    /mark+mos  /mark+wist/  /kork+mos  /kork+wist/  VSoft
              /mark+mos  /mark+wist/  /kork+mos  /kork+wist/  Trunc

    /pag+a+mos  /pag+a+wist/  /proteg+a+mos  /proteg+a+wist/  VSoft
              /pag+a+mos  /pag+a+wist/  /proteg+a+mos  /proteg+a+wist/  Trunc
### 8. Wrong Results

<table>
<thead>
<tr>
<th>/pak*+a+e+a/</th>
<th>kerka*+e+a/</th>
</tr>
</thead>
<tbody>
<tr>
<td>ε</td>
<td>ε</td>
</tr>
</tbody>
</table>

### 9. Formerly Modern

<table>
<thead>
<tr>
<th>ingl</th>
<th>ingl</th>
<th>lat per sing, pres indic</th>
</tr>
</thead>
<tbody>
<tr>
<td>cus[e]</td>
<td>cus[e]</td>
<td>lat per sing, pres indic</td>
</tr>
<tr>
<td>cós[e]mos</td>
<td>cós[e]mus</td>
<td>lat per plur, pres indic</td>
</tr>
<tr>
<td>cós[e]mos</td>
<td>cós[e]mos</td>
<td>lat per plur, pres subjunct</td>
</tr>
</tbody>
</table>

### 10. Noun or Adjective

<table>
<thead>
<tr>
<th>Verb</th>
<th>Noun or Adjective</th>
</tr>
</thead>
<tbody>
<tr>
<td>depúlito</td>
<td>deposito</td>
</tr>
<tr>
<td>pláncia</td>
<td>catálogo</td>
</tr>
<tr>
<td>castigálogo</td>
<td>castigálogo</td>
</tr>
<tr>
<td>continuo</td>
<td>continuo</td>
</tr>
<tr>
<td>prosépero</td>
<td>doméstico</td>
</tr>
<tr>
<td>disemna</td>
<td>disemna</td>
</tr>
</tbody>
</table>

### 11. Latin of Spain

**Modern**

<table>
<thead>
<tr>
<th>renégo</th>
<th>renégámus</th>
</tr>
</thead>
<tbody>
<tr>
<td>renégas</td>
<td>renégásis</td>
</tr>
<tr>
<td>renéugat</td>
<td>renéugant</td>
</tr>
</tbody>
</table>

### 12. Latin of Spain

<table>
<thead>
<tr>
<th>Modern</th>
</tr>
</thead>
<tbody>
<tr>
<td>renégo</td>
</tr>
<tr>
<td>renégas</td>
</tr>
<tr>
<td>renéugat</td>
</tr>
</tbody>
</table>

---

### 4. Mark a + mos

<table>
<thead>
<tr>
<th>Marked</th>
<th>Unmarked</th>
</tr>
</thead>
<tbody>
<tr>
<td>kok*+e+m*+os</td>
<td>mark*+e+m*+os</td>
</tr>
<tr>
<td>Vsoft</td>
<td>Vsoft</td>
</tr>
<tr>
<td><em>kók</em>emos</td>
<td><em>mark</em>emos</td>
</tr>
</tbody>
</table>

---

### 5. Unmarked

<table>
<thead>
<tr>
<th>Marked</th>
</tr>
</thead>
<tbody>
<tr>
<td>/kok*+e+m*+os/</td>
</tr>
<tr>
<td>Vsoft</td>
</tr>
<tr>
<td><em>kók</em>emos</td>
</tr>
</tbody>
</table>

---

### 6. First Conjugation

<table>
<thead>
<tr>
<th>TRUNCATION</th>
<th>Second Conjugation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indic</td>
<td>Subjunct</td>
</tr>
<tr>
<td>/am*+a/mus/</td>
<td>/deb*+o</td>
</tr>
<tr>
<td>Vsoft</td>
<td>Vsoft</td>
</tr>
<tr>
<td><em>am</em></td>
<td><em>deb</em></td>
</tr>
</tbody>
</table>

---

### 7. "Veler Softening" much later than "truncation"

1. v - e - e (Ly, i, et) |  
2. k - ε/ — (Ly, i, et) |  
3. Noun (pak*+e+a) pakleg > pakleg | (nom, acc plur) |  
Verb (fak*+e+a) fakleg > fakleg | (pres indic) |  
BUT (pak*+e+a) pakleg > pakleg but pakleg | (pres subjunct) |  
(pak*+e+a) pakleg | (pres subjunct) |  
(cirk*+e+a) kirkleg | (pres subjunct) |  
(kirkleg, kirkeleg) kirkleg | (pres subjunct) |  

The development of differential vowel duration was observed in six children who were tape recorded at one-month intervals from 26 to 36 months of age, and in three children from 21 to 24 months of age. The children's task was to produce a series of CVC English words using each of the vowels /i i u/ before one voiceless and one voiced stop, and one voiceless and one voiced fricative. Four stimulus conditions were used: 1) a visual stimulus, using familiar story-book pictures, and 2-4) three sets of tape recorded stimuli with the vowel /i/: one set had normal differential vowel duration, another had abnormal equal vowel duration, and the third had four occurrences of each word with graded vowel durations. Results showed that acquisition of differential vowel duration preceded control of the voicing feature which conditions it in adult English. Some inferences were made from the results regarding development of differential vowel duration and control of voicing of final consonants. Variations in responses under the four types of stimuli used, and individual variations between one child whose parent evidenced distinct dialect differences (black dialect), and the other eight children (white dialect), permitted the positing of three stages in the acquisition of differential vowel duration in American English in relation to the voicing of final consonants.
A child's acquisition of the phonology of his first language is an intricate interaction of the ability to discover the system, and the articulatory ability to duplicate the model. The theory presented here outlines a process of learning which is highly dependent on the environment and makes minimal assumptions about innateness; it is reasonably simple and explains a variety of phenomena of language acquisition which have not previously been explained.

The system is discovered by successive utilization of basic units of phonology; each unit is a natural outgrowth of the form the data has taken before that unit's inception. During late babbling, the unit is the sentence, a string of random sounds distinguished by the superposition of intonation. [Data from children of English-, Russian-, and Chinese-speaking homes will be presented to indicate that fundamental information about intonation has in fact been learned by this time.] The next phonological unit, the syllable, retains the characteristic of intonation but incorporates an early form of consistent sound production. [A re-analysis of data from several previous studies will be presented to indicate the integral part that syllabic structure plays in the development of a more sophisticated phonology.] From the syllabic organization of phonology the child is able to abstract a system which is similar to the systematic phonetic level proposed by Chomsky and Halle.

The present research examines the acquisition of two temporal conjunctions, before and after, by 40 children in four age-groups between 3.0 and 5.0 years. The children participated in a comprehension task where they were given descriptions of two events ordered in time and asked to make toys act out the sequence. The descriptions used were:

1. X happened before Y happened.
2. Before Y happened, X happened.
3. Y happened after X happened.
4. After X happened, Y happened.

The results indicate that the youngest children (21 3yo) understood neither conjunction, and used 'order of mention' as a cue for their responses, i.e. they gave consistently "correct" answers to (1) and (4), but consistently incorrect ones to (2) and (3). A second group of slightly older children (11 4yo) had learned the meaning of before—(1) and (2) correct—, but not yet of after. After was either treated as it had been by the younger children—(4) "correct", (3) wrong—or else as if it were identical in meaning to before—both (3) and (4) wrong.

The third, oldest, group (6 5yo) interpreted both conjunctions just as adults would—(1), (2), (3) and (4) correct.

A model of semantic features was used in predicting and explaining the results. Both before and after are characterized as +Time, -Simultaneous; they are differentiated from each other by +Prior. The children in the second group have learned the more general features: +Time and -Simultaneous, and one value of Prior, but they have still to learn that +Prior is what distinguishes between before and after. The older group have learned the feature +Prior. These results provide some evidence that the more general features of meaning are acquired before the more specific ones.
This paper builds upon notions concerning the importance of matur-
ation in language acquisition which I outlined before this Society's
July meeting.

At that time, I questioned the assumption that the articulatory
abilities required for all segments in all contexts are equally avail-
able at any given time early in the acquisition process; and I outlined
a possible model of physiological maturaiton to account for the 'order
of vocalization' of phonetic representations.

In the present paper, I shall discuss the validity of several
further, and equally basic assumptions concerning language acquisition.
The most important of these are, first, that nothing essential to mature
speech is carried over from the babbling stage--that is, that the develop-
ment of the child's vocalization is discontinuous; and second, that the
child has correctly represented the full shapes of [at least] all the
language forms he attempts to utter--that is, that auditory perception
and storage is from the first equally efficient for all segments in all
contexts.

In this paper we report on a series of experiments conducted in the
Soviet Union in the summer of 1970 dealing with the development of govern-
ment and concord in the speech of Russian children ranging in age from
one year, eight months to eight years. These studies were both natural-
istic and experimental in nature. In addition to the collection of a
sample of spontaneous speech, they involved such techniques as picture
description, the answering of questions about various objects in a barn
and elicited sentence imitation on the production side as well as picture
choice and object manipulation on the comprehension side.

The individual experiments in the series were designed to test a
number of interesting hypotheses concerning developmental psycholinguistics
--hypotheses which have recently appeared in the literature and
which are based almost entirely on the acquisition of English as a native
language -- on a language whose structure is not only quite different from
English but offers, we believe, a more tangible source of information on
acquisitional strategies.

The results of these studies which extend the investigations of
such scholars as A.N. Gvozdev in the Soviet Union and D.I. Slobin in the
United States suggest to us that the child must be endowed with at least
three basic capacities: (1) an abstractive capacity, (2) a capacity for
parsimony and (3) a storage capacity which need not be assumed to be
specific to language acquisition but may well be characteristic of the
general cognitive make-up of homo sapiens at birth.
A recent proposal by Vanderslice and Ladefoged—to simplify the SPE stress cycle (while retaining its insights) through the substitution of binary accentual features for the 'prosodic source' of stress—depends crucially on a rigorous factorizing out of intonation from accentual pitch effects. The present paper describes more fully the intonational part of the new binary suprasegmental feature system. The features CADENCE (post-nuclear low pitch) and ENDSLIDE (pre-terminal rise) yield the three major contours—falling, rising, and fall-rise—and a marginal sustained or level one. When permuted with variations in accent placement, these account in an intuitively satisfying way for the grammar-expounding intonational phenomena of English. Indexical variants are shown to be responsible for the residue of pitch patterns.

(1) Instead of jailing the pediatrician, it's the president they should incarcerate.

(2) Shall YOU ride to town today? Shall you RIDE to town today?
Shall you ride to TOWN today? Shall you ride to town TODAY?

—John Mason 1748

(3) Grammatical intonation features:

<table>
<thead>
<tr>
<th>Contour</th>
<th>Cadence</th>
<th>Endglide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Falling</td>
<td>Joe ate his soup</td>
<td>+</td>
</tr>
<tr>
<td>Rising</td>
<td>Joe ate his soup</td>
<td>-</td>
</tr>
<tr>
<td>Fall Rise</td>
<td>Joe ate his soup</td>
<td>+</td>
</tr>
</tbody>
</table>

(4) (a) the wireless telegraph...

syllabic  + + (+) + + +
strong     - +(-) - + +
accent     + + +
cadence    - +
endglide   - +
(5) An intonation-type-and-accent-recession paradigm:

(a) The workmen from Boston are leaving

The workmen from Boston are leaving

(b) The workmen from Boston are leaving

The workmen from Boston are leaving

(c) The workmen from Boston are leaving

The workmen from Boston are leaving

where \( I = F, R, FR \)

(6) Indexical features:

(a) +DIP:

\( \text{How are you} \)

\( \text{How ARE you} \)

(b) +SCOFF:

\( \text{It's wonderful} \)

\( \text{It's wonderful} \)

\( \text{it's in\'explicable} \)

\( \text{it's inexplicable} \)

(7) Sample text of factual prose showing salient referential relations:

\( S_1: \) Human experience and human behavior are accessible to observation by everyone.

\( S_2: \) The psychologist tries to bring them under systematic study.

\( S_3: \) What he perceives he requires no microscope or electronic gear.

\( S_4: \) A genuine discovery in this field is a wholly new item of experience or a fact about behavior previously unknown— is accordingly rare.

\( S_5: \) Such a discovery is made.
Ever since the time of Melville Bell, most phoneticians and linguists have described the vowel sounds of language in terms of articulatory features which involve the position in the vocal tract of the point of maximum tongue constriction. The Jakobsonian acoustic features represented perhaps the only significant departure from this practice. Recent generative phonology, however, has returned to a descriptive framework conceptually very similar to Bell's, involving deviation of the tongue body from a hypothetical neutral position of the vocal tract.

Casual inspection of X-ray still pictures of steady-state vowels appears to support the use of such features. A recently concluded series of experiments utilizing X-ray motion pictures of the vocal tract and electromyographic recordings from the major extrinsic tongue muscles involved in vowel production, however, indicates that features such as "high," "low," and "back" are descriptively inadequate with respect to the articulation of vowels. A different set of articulatory features is proposed, based upon suggestions made in publications by W. Wang and R. Lindblom. The binary features "palatal," "velar," and "pharyngeal," used in conjunction with an independent non-binary feature of vowel height, are more in accord with the physiological data.

The incorporation of this set of features into generative phonological theory would increase the power of the theory in several ways. It would allow a more natural representation of underlying vowels, and would directly account for certain facts expressed in the marking conventions for vowels. This set of features also has certain drawbacks, in that some common rules appear to be more difficult to state. The linguistic advantages and disadvantages of this physiologically viable set of features will be discussed in detail.
The Role of SPC's in Generative Phonology

(1) \( \mathfrak{f}( C \mathfrak{V}^2 \mathfrak{I}) \mathfrak{I} \)

(2) \([-\text{sonorant}] \mathfrak{I}\)

\([-\text{voiced}] \)

(3) \([+\text{nasal}] \)

\([-\text{voiced}] \)

(4) \begin{align*}
\sim & \quad +\text{anterior} \\
& +\text{coronal} \\
& -\text{continuant} \\
& -\text{nasal} \\
\end{align*}

\begin{align*}
& +\text{anterior} \\
& +\text{coronal} \\
& -\text{continuant} \\
& -\text{nasal} \\
\end{align*}

(5) dogs [\text{dɒɡz}]

tasks [tæksz]

busses [bʌsɪz]

(6) \$ \longrightarrow \emptyset / [+\text{strident}] _____ [+\text{strident}] /\$

(7) z \longrightarrow s / [-\text{voiced}] _____

(8) \begin{align*}
[-\text{sonorant}] [-\text{sonorant}] \mathfrak{I} \\
\end{align*}

\begin{align*}
[-\text{voiced}] [-\text{voiced}] \\
\end{align*}

(9) \sim +++\text{strident}+++\text{strident}+++\

(10) dogs [\text{dɒɡz}]

tasks [tæksz]

busses [bʌsɪz]

(11) \#(C) (G) \mathfrak{V}^{(C)}(\mathfrak{I}) \mathfrak{I} \\

\emptyset

(12) C C \\

\[\alpha X \] [\alpha X]

Where \( X \) = place of articulation features.

(13) \begin{align*}
\sim & \quad +\text{anterior} \\
& +\text{coronal} \\
& -\text{continuant} \\
& +\text{high} \\
\end{align*}

\begin{align*}
& +\text{anterior} \\
& +\text{coronal} \\
& -\text{continuant} \\
& +\text{high} \\
\end{align*}

(14) 'win' 'Present Indicative' 'see' 'Present Ind.'

/ \text{kat} + \text{ru} / \\
/ \text{mi} + \text{ru}/

(15) r \longrightarrow \emptyset / C + _____

(16) \text{kat} + u

(17) \text{kacu}
The majority of research projects in synthetic speech center around the development of a set of rules to provide correct time-varying control signals for driving a speech synthesizer. 'Correct' usually means capable of enabling the device to generate speech-like sounds where quality is determined by spectral analysis or subjective listening tests. This approach is criticized, and the implementation of a linguistically-oriented speech production model is discussed. The model, it is argued, is inadequate if it seeks to generate speech from a simple quasi-phonemic input alone. The consequences of adding a time dimension by rule to a segmental input are reviewed, but it is argued that there may be better ways of incorporating such hitherto problematical features by denying the single channel input.
It has been argued by some proponents of a view of grammar known as generative semantics that deep structure can be reduced to logical form. If the notion of logical form is taken from standard systems of logic, then this thesis can be shown to be untenable on purely syntactic grounds. Deep structure and formal languages for logic differ minimally with respect to the mechanisms in their grammar which provide for recursion. It can be shown that the only recursive symbol in the grammar of logical languages is the initial symbol. However, the need for recursive symbols other than the initial symbol in deep structure has been demonstrated; in particular, it is necessary to have deep structure conjunction of noun phrases (and, perhaps, verb phrases) as well as sentences. Thus, predicates in natural language which take conjoined subjects in deep structure have no counterpart in logic. Logical predicates corresponding to words of English like 'meet' and 'intersect' would have to be able to take arbitrarily many arguments. However, this would make impossible the interpretation of such logical predicates in any model of the calculus, for an interpretation consists of a set of n-tuples, for a fixed n, where n is the order of the predicate. Further, no trivial modification of known systems of logic can yield a system which incorporates predicates which may take arbitrarily many arguments. Thus, the difference outlined here seems to be essential.

I will discuss three types of anomalies that present serious problems for any analysis of factive verbs that has been proposed thus far. The first problem is posed by the fact that, in sentences such as (1), the complement of a factive verb contains a variable that is bound by a quantifier outside the complement itself.

(1) Anyone who has regretted that he is no longer young has had the same feeling as I.

Here the complement of regret, 'x is no longer young', does not constitute a complete proposition in isolation of the main sentence. It is not something that can be considered as true or false. Consequently, it cannot be 'presupposed' in the usual sense. The addition of the quantifier anyone does not solve the problem. Certainly, (1) does not presuppose that 'for any x, x is no longer young'. But what does it presuppose?

The second problem concerns the difference between that complements and other complement types which manifests itself in the counterfactual mood. For example, in the indicative mood there is no difference in factivity between that complements and poss-ing constructions. (2a) and (2b) both presuppose (3).

(2a) That his bride is not a virgin bothers Harry.
(b) His bride's not being a virgin bothers Harry.
(3) His bride is not a virgin.

However, in the counterfactual mood there is a difference. That complements remain factive but poss-ing complements may be used with the understanding that they are not true in the actual world. (4a) presupposes (3) but (4b) does not.

(4a) That his bride is not a virgin would bother Harry if he knew about it. (**Luckily, she is a virgin.)
(b) His bride's not being a virgin would bother Harry if he knew about it. (Luckily, she is a virgin.)
Finally, it is not that verbs either are or are not factive. Instead, there seem to be degrees of factivity. Factive verbs differ in a systematic way with respect to environments in which they carry along the expected presupposition. This can be seen by comparing verbs like regret, realize, and find out in the examples (5)-(7).

(5) Bill didn’t ______ that he had not told the truth.
(6) Did you ______ that you had not told the truth?
(7) If I ______ later that I have not told the truth, I will confess it.

Wilbur A. Hass, Shimer College
THE SYNTACTIC RELEVANCE OF PRESUPPOSITION AND INERENCE

Recent papers on syntax-semantics, as well as the supporting philosophical literature, have made frequent reference to presupposition and/or to inference; the present paper deals with the status and differentiation of these two concepts in the linguistic theory of syntactic structure.

Although one might try to relate presupposition and inference to performance factors (production vs. reception) or to the nature of the information being used (linguistic vs. extra-linguistic), neither of these interpretations is feasible. The former (production vs. reception) fails because presupposition and inference have, in the uses under consideration, a clear bearing on competence. The latter (linguistic vs. extra-linguistic information) fails when a slight extension is made of Katz and Fodor’s familiar argument on the autonomy of syntax (cases of extra-linguistic information being quite fittingly handled by linguistic formulation).

Distinctions between intra-S and inter-S relations obviously do not serve as a possible basis for differentiating presupposition and inference, but their general bearing on the issue is problematic. What is the relation between a sentence which expresses a presupposition or an inference and a sentence which contains (but does not express) a presupposition or supports (but does not express) an inference? Examples are considered, and no grounds are found for rejecting the strong hypothesis that the two cases can be treated by the same means.

Presupposition and inference are not, it can readily be shown, matters of truth value or belief status, i.e. matters of propositional content.

If presupposition and inference are to be grounded in structural universals, the universals involved must be ones of the structure of argument. Here presupposition and inference form, respectively, initial and terminal poles. In this treatment, presupposition and inference gain a status similar to topic/comment and other transformationally-structured aspects.
Much recent work has been focused on the relation between a sentence and its presuppositions and how this relation is to be represented in a grammar. By the usual definition, A presupposes B if and only if A implies B and \( \sim A \) (the negation of A) also implies B. Thus, for example, if either sentence (1) or its negation (2) is true, then sentence (3) cannot be false, and therefore (1) and (2) presupposes (3).

(1) John has stopped beating his wife.
(2) John has not stopped beating his wife.
(3) John has beaten his wife at some time.

It is also usual to say that when A presupposes B and B is false, then A is neither true nor false, but has no truth value.

This paper examines the notion of presupposition in terms of this kind of three-valued logic and shows that the usual definitions of presupposition and of implication cannot both be maintained. An alternative definition of presupposition in terms of necessitation avoids this difficulty, but neither approach escapes the following paradoxical results: (a) A presupposes itself unless it is false; and (b) A can presuppose B and B can presuppose A when A and B are both true or both without truth value. Various means are suggested for eliminating these paradoxes while retaining the essential features of presupposition and implication. Finally, some proposals for extending these notions to interrogatives, imperatives, etc. are discussed.

Concepts of "topic" or "comment" have been of little utility in general language theory, but play a role in the grammars of such languages as Japanese and Korean. In Japanese, a subject-like NP-wa is the "topic" in distinction to NP-no, the "subject," from which it is often derived through a "topicalization transformation". Comparing "cognitively synonymous" sentences in sets of these forms:

(1) NP1-no VP1 (kernel sentence?)
(2) NP1-wa VP1 (topicalized transform of (1)?)
(3) VP1-no-no VP1-da (cleft transform of (1)?)
(4) VP1-no-wa NP1-da (topicalized transform of (3)?)

we discover, with special exceptions, a strikingly higher level of synonymity between (1) and (4) than between any other two. Assuming the suggested derivations, it appears that the cleft and topic transformations have less effect on the meaning of a Japanese sentence together than singly! Now, the hypothesis that every sentence has a topic (just as a layman might understand it) which is optionally realized in the surface structure not only accounts for the close synonymy of (1) and (4), but also eliminates all need for cleaving or topicalizing rules in Japanese. In most cases, the unexpressed topic of (1) is intuitively equivalent to the predicate, i.e. the VP-no- of (4); in the "special" cases it is not. The English case generally parallels the Japanese: If the intonation is right, then a sentence is synonymous with its "cleft transform"- but there are exceptions, often translations of the Japanese special cases. The same hypothesis, distinguishing topic-of-the-comment and subject-of-the-predicate, will account for the variations in synonymity and some intonation patterns in English.
(1) I'm going (to go) to school.
(2) boku-ga gaQkoo-e iku "I'm going to school." boku = "me"
(3) boku-wa gaQkoo-e iku "I'm going to school." gaQkoo = "school"
(4) gaQkoo-e iku "I'm going to school." iku = "go(es)"
(5) gaQkoo-e iku-no-ga boku-da "The one going to school is me." (??)
    - no = general relative pronoun
(6) gaQkoo-e iku-no-ga boku-da "The one who's going to school is me."
(7) NP-ga VP === VP-no-ga NP-da (8) NP-ga VP === VP-no-wa NP-da
(9) atama-ga itai "My head hurts." (head, is painful)
(10) tuki-ga deta "The moon is up." (moon, emerged)
(11) tori-ga naite-iru "Birds are singing." (bird, is singing)
(12) ame-ga huQte-iru "It's raining." (rain, is precipitating)
(13) itai-no-wa atama-da "What hurts is my head."
(14) deta-no-wa tuki-da "What's up is the moon."
(15) naite-iru-no-wa tori-da "What's crying is birds."
(16) huQte-iru-no-wa ame-da "What's precipitating is rain."
(17) S --> Topic Comment; Topic --> NP-wa; Comment --> NP-ga VP
(18) i. Equi-NP deletion ii. Understood topic deletion
    iii. Equi-verb deletion iv. NP-to-VP conversion
(19) boku-wa boku-ga gaQkoo-e iku [3] [28] [26] [26] [4]
(20) gaQkoo-e iku-no-ga boku-ga gaQkoo-e iku [2] OR [3] [18] [28] [26] [6]
(21) boku-wa atama-ga itai "My head hurts." [18] [28] [9]
(22) What I bought was a car. (23) I bought a car. (24) I bought a car.
(25) The one who bought a car is me. (26) I am the one who bought a car.
(27) My head hurts == What hurts is my head.
(28) i. Equi-NP delexicalization (usually pronominalization if NP is -Definite)
    ii. Understood topic deletion iii. Equi-Noun/Verb deletion
    iv. EE insertion v. Focal stress addition
(29) What I bought: I bought a car [28] [26] [24]
(30) What I bought: I bought a car [28] [24]
(31) Me: I bought a car [28] [24]
(32) The one who bought a car: I bought a car [28] [24]
The Problem. In the history of linguistics Herder's prize-essay Über den Ursprung der Sprache (1772) has occupied a central position. Attempts to deal with its context have taken two forms. (1) Recently the essay has been placed in the 'Cartesian' tradition; since there is no historical evidence for this interpretation, either in regard to 'Cartesian linguistics' in general or to Herder in particular, this opinion can be dismissed. (2) The Ursprung has been seen to contain an entirely new and original view of the nature of language, rejecting the dominant contemporary views as found especially in Condillac. If this interpretation is correct, there can be no continuity in the history of linguistics. But this reading lacks both textual and historical support. The problem then is: Can continuity be established, and if so, how?

The Answer. The philosophical--chiefly epistemological--problem of the origin of language was introduced by Condillac's Essai sur l'origine des connoissances humaines (1746). Though commonly ignored or grossly misunderstood, the Essai is incomparably the most significant work in the study of language in the 18th century. In the Berlin Academy it caused a close, vigorously pursued, cogent debate on the nature and origin of language. Participants were, among others, Maupertuis, Süssmilch, and Michaelis, who formulated Herder's topic. The Ursprung is intimately related to the Essai owing both to its position in the debate and to Herder's careful reading of the Essai's long section on language in the mid-1760's. But for reasons that can be explained Herder misrepresented the Essai's argument. His key concept of 'Besonnenheit' or 'Reflection' is the Essai's 'reflexion,' which to Condillac was a function of reason. Thus by examining the relations between the two works, the lost continuity can be reestablished. This continuing tradition connects with Locke's Essay, on which Condillac based his Essai. This tradition is the key to our understanding of the history of linguistics.

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A STUDY OF THE LINGUISTIC PRACTICES OF THE FTC

Advertising is considered false if it is potentially misleading to those who depend on it for making decisions regarding the product or service being advertised. In the United States, the Federal Trade Commission has the primary responsibility for deciding that particular advertisements are deceptive, and for issuing guidelines to industry regarding the advertising of particular products. Many of the problems that arise are primarily linguistic, and in many of these cases the FTC has either failed to be consistent, or has taken a highly dubious position. Here we shall consider the following problems: the naming of products, the uses of the terms guarantee(d), free, sale, manufacturer, and the general problem of the interaction between the regulation of deception and restraint of trade.

REFERENCES


A dialect study of over forty communities of the Palatinate, West-Germany, has revealed a dialect boundary that runs in a northeasterly direction from the Franco-German border southwest of Pirmasens toward the Rhine close to Ludwigshafen. It separates the region in which falling terminal contours prevail in yes-no questions, w-questions and even questions of the type "Du gehst schon heim?" from the region in which rising terminal contours prevail in these question types. This intonation boundary resembles numerous isoglosses of the maps published in the Phälisches Wörterbuch. To the best of the author's knowledge this is the first dialect boundary of sentence intonation ever discovered in German dialects.

In a listening test questions of the type "Du gehst schon heim?" as spoken by dialect speakers from the north were not perceived as questions by dialect speakers from the south but as statements. We see, therefore, that intonation is a basic factor of communication and for this reason should be included in future research on German dialects.

<table>
<thead>
<tr>
<th>Questions used in the dialect recordings in the Palatinate, summer 1970</th>
<th>Yes-No Questions</th>
<th>Assertive Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Two different stress patterns:</td>
<td>a) Wer kommt?</td>
<td>a) Du kommst!</td>
</tr>
<tr>
<td>Wo ist der Wirt?</td>
<td>b) Um wie bald?</td>
<td>b) Du kommst heute!</td>
</tr>
<tr>
<td>d) Ist das die Wirtfrau?</td>
<td>c) Heute ist das gut?</td>
<td>c) Du kommst heute das gut!</td>
</tr>
<tr>
<td>2) Three different stress patterns:</td>
<td>a) Wer weist das?</td>
<td>a) Der Wirt weist das!</td>
</tr>
<tr>
<td>Wo ist der Wirt?</td>
<td>b) Der Wirt weist das heute?</td>
<td>b) Der Wirt weist das heute!</td>
</tr>
<tr>
<td>d) Ist das die Wirtfrau?</td>
<td>c) Ist das die Wirtfrau?</td>
<td>c) Der Wirt weist das heute!</td>
</tr>
<tr>
<td>3) Four different stress patterns:</td>
<td>a) Wer weist das?</td>
<td>a) Der Wirt weist das!</td>
</tr>
<tr>
<td>Wo ist der Wirt?</td>
<td>b) Der Wirt weist das heute?</td>
<td>b) Der Wirt weist das heute!</td>
</tr>
<tr>
<td>d) Ist das die Wirtfrau?</td>
<td>c) Ist das die gute Wirtfrau?</td>
<td>c) Der Wirt weist das heute!</td>
</tr>
</tbody>
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<thead>
<tr>
<th>Involuntary C's</th>
<th>Final word ending in volitional C's</th>
<th>Typical C's</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Without stress placement marked on informant's handout</td>
<td>Gewiss schon heis!</td>
<td>Gewiss schon heis!</td>
</tr>
<tr>
<td>2) With stress placement marked on informant's handout</td>
<td>Gehiss schon heis!</td>
<td>Gehiss schon heis!</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Typical C's</th>
<th>Involuntary C's</th>
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<tbody>
<tr>
<td>Gewiss schon heis!</td>
<td>Gehiss schon heis!</td>
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</table>
One of the most interesting characteristics of conversation (and one that has hampered its analysis) is the emergent property of both form and content. An approach to the study of the structure of conversation is made through the analysis of a single functionally defined type of dyadic communication which was observed in three similar tasks. The exchange between two participants is the basic unit of analysis and one which reflects the dynamic quality of conversation. Units of increasing complexity are isolated, and the lower order units are classified according to behavioral type, structural interaction type and content type. The chunk, a higher order unit exhibiting a major, unifying theme, serves as the context for distributional statements of the lower-order unit types. An index of interrater reliability ($r = .93$) supports these preliminary analytical operations, which are illustrated by examples from child and adult conversations. One of the more striking characteristics of adult conversations (as contrasted with children's conversations) is the distribution and frequency of structural units containing signals of message reception and/or message evaluation.

The chunk may be viewed as a paragraph constructed in the dyadic interaction. That adult participants in the communication fail only rarely to agree on when a chunk begins or ends suggests that speakers share complex sets of rules relating to establishing, maintaining and terminating the theme of a chunk. The means which speakers employ to establish chunk themes are a class of phenomena serving the function of 'motivated topicalization' and will include many of the features noted by Halliday in his discussion of information focus. Members of this class are, however, in part selected by the specific nature of the task (or goal of the conversation) even though showing considerable consistency for an individual speaker within a single task.
The Structure of a Conversation Type

'Convergent communication' is a type of dyadic conversation in which
1) an explicit goal is pursued by
2) an exchange of information provided by
3) overt, verbal cooperation on the part of the participants. The communications
examined have in common the distinction of a 'knower' and a 'doer' function.

Examples of the units, event and exchange:\[1\]

5) what do I do when I get to
   the intersection?#  6) you take a left#
7) okay -- a left# then I
   should be going north#
8) yeah# so you go north until
   you hit the belfway#
9) right#

Example of the unit of content, the chunk:

\[1\] Events are numbered sequentially throughout a communication. Symbols used
are [], question (so marked intonationally, syntactically or lexically); [],
major pause or sentence final intonation; [], minor pause or unfilled hesitation;
[ ], interrupted utterance; no sentence punctuation is used. Classification of
events by behavioral type and content type and of exchanges by structural relation-
ship type is described in C. Garvey and T. L. Baldwin, Studies in Convergent
Communication: I. Analysis of Verbal Interaction. Baltimore: Report No. 88,
Center for Social Organization of Schools, The Johns Hopkins University, 1970.
A Theory of Speech Errors

The most recent treatment of slips of the tongue is that of D.B. Fry in Erno Studies in English (1969). Fry is clearly right in maintaining that errors throw light on internal processes, but his view that spoonerisms merely show mistakes in selecting and arranging sounds is questionable. A general typology of errors should recognize at least three types: wrong words, such as goldsmith for goldfinch, blends and spoonerisms such as s-generic for sad and tragic and snowelling snow, and skips such as Postier for Post Toasties. All three types of error suggest a central message center, in which the nervous system assembles an internal utterance which is perfected before being articulated. The instances of wrong words occur when the nervous system is making a word-search in response to some stimulus internal or external, immediate or distant. The word-search process would seem to make use of the kinds of word-characteristics investigated by Roger Brown in his tip-of-the-tongue experiments, and responses to stimuli can continue occurring at any time. When they occur during the utterance of an internal message, they result in blends, simple as in s-generic or multiple as in spoonerisms, where the intrusive stimulus blends with two forms from the proper message. Skips are like eye-skips in copying, and are good evidence of the prior existence of the internal message. Finally one can agree with Fry that spoonerisms show the reality of sounds, though they are abstracted from words by the nervous system, not the building blocks the system uses to build up words.

Linguistic interpretation of dead language texts is frequently beset, especially in the case of religious and other culture-valued literature, by the problem of separating bona fide linguistic characteristics from pseudo-linguistic stylizations and normalizations ("Schematisierung") at the hands of redactors and scribes. This is an area where linguistics is particularly equipped to be of service to philology, a service which has every prospect of growing in scope and accuracy as our criteria for recognizing linguistic universals become more sophisticated. This paper utilizes Aramaic texts of the Onkelos and Jonathan Targums to exemplify two diametrical cases of such application of linguistic theory: (1) The isolation of pseudo-Aramaic vowel lengthening, attributable to stylizing on the basis of Hebrew. (2) The vindication of certain vowel alternations as bona fide Aramaic, through they have traditionally been viewed as Hebraicizing. The chief linguistic criteria employed involve the critical study of rule environment (1) and rule ordering (2).
The Isolation of "Schematisierung": A Service of Linguistics to Philology

| TABLE 1 |
|-----------------|-----------------|-----------------|-----------------|
| (A) | (B) | (C) | (D) |
| Orthographic transcription | Prima facie phonetic interp. | Phonetic norm for OJA | Select comparative Aram. spectrum in support of |
| | | | (B) |
| 1) <yit:n:m> | yittanāḥ | yittanāḥ | Syr. [nettsēḥ] |
| 'let him give it' \( (G 23:9)^{**} \) | [yittanāḥ] | [yittanāḥ] | [RA var. yittanāḥ] |
| 2) dB:ba:ri:nu:n > | dawartānā | dawartānā | Syr. [dawartānā] |
| 'you led us away' \( (E 1:11) \) | [dawartānā] | [dawartānā] | |
| 3) c:d:bara:ni:nu:n > | [dawarinnūn] | [dawarinnūn] | ESyr. [taddārānā] |
| 'he led them away' \( (G 32:23) \) | [dawarinnūn] | [dawarinnūn] | [taddārānā] |
| 'he'll put them on' \( (E 29:30) \) | [yilba:innūn] | [yilba:innūn] | |
| 'we said' \( (G 26:28) \) | [?emār:n] | [?emār:n] | |

*Capitals denote letters with dagesh (mark of occlusion/gemination); "i" denotes orthographic schwa.

**References are to A. Berliner's ed. (1984) of Sabbioneta's Targum Onkelos (1557).

| TABLE 2 |
|-----------------|-----------------|-----------------|-----------------|
| (A) | (B) | (C) | (D) |
| OJA phon.interp. | Hebrew orthography | Heb. phonetic interp. | |
| OJA ortho. \( ('non-schematized') \) \( ('schematized') \) | | | |
| 1) <yit:n:m> | yittanāḥ | yittanāḥ | yittanāḥ |
| \( \langle \text{yit:n:m} \rangle \langle \text{yit:n:m} \rangle \langle \text{yit:n:m} \rangle \) | [dawar-tn] | [dawar-tn] | [yittanāḥ] |
| 2) dB:ba:ri:nu:n > | dawartānā | dawartānā | dawartānā |
| \( \langle dB:ba:ri:nu:n \rangle \langle dB:ba:ri:nu:n \rangle \langle dB:ba:ri:nu:n \rangle \) | [dawar-tn] | [dawar-tn] | [dawar-tn] |
| 'you informed me' \( (E 31:12) \) | [hawda:Ta:i:n] | [hawda:Ta:i:n] | [hawda:Ta:i:n] |
| 4) dawar-innūn | dawar-innūn | dawar-innūn | dawar-innūn |
| \( \langle dawar-innūn \rangle \langle dawar-innūn \rangle \langle dawar-innūn \rangle \) | [yilba:innūn] | [yilba:innūn] | [yilba:innūn] |
| 5) yilba:innūn | yilba:innūn | yilba:innūn | yilba:innūn |
| \( \langle yilba:innūn \rangle \langle yilba:innūn \rangle \langle yilba:innūn \rangle \) | [yilba:innūn] | [yilba:innūn] | [yilba:innūn] |
| 6) s:ar-nt | s:ar-nt | s:ar-nt | s:ar-nt |
| 'the out' \( (E 4:25) \) | [s:ar-nt] | [s:ar-nt] | [s:ar-nt] |
| 'I came forth' \( (E 4:25) \) | [n:pa:ni:y] | [n:pa:ni:y] | [n:pa:ni:y] |

*Page references are to G. Dalman, Grammatik des jüdisch-palästischen Aramäisch.

If *a > ə* is hypothesized as being the result of direct Hebrewizing Schematisierung, appeal must be made to an attendant remorphophonemisation (rule reordering) at the hands of the schematisers. But such a revamping could have no effect but to make the resulting forms less like their putative Hebrew models. Moreover, it is likely that such an operation would have been beyond the competence of the schematisers in the first place. Therefore "pauyal lengthening is posited to be a bona fide process (if residual) OJA development, a hypothesis which has both philological and comparative linguistic support."
SUBCATEGORICAL DIFFUSION

It is assumed in the theory of lexical diffusion that sound changes proceed gradually, a few lexical items being changed at a time. In a 'subcategorial diffusion' these lexical items form a subcategory or subcategories of the phonological category A undergoing the change A → B, but in a 'non-subcategorial diffusion' these lexical items do not form a subcategory or subcategories.

A lexical diffusion consists of three periods: inception, progression and termination. Each of these periods may involve either subcategorial or non-subcategorial diffusion. Generally, non-subcategorial diffusion will create a certain degree of irregularity in a change but subcategorial diffusion will lead to changes that are regular in the sense that the conditions for change can be stated roughly or strictly in terms of the subcategories of the phonological category subject to change. Sound changes from Chinese will be used to illustrate these two types of lexical diffusion.

Hypercorrection (or hyperurbanism) is a sociolinguistic term, i.e. it refers to the social function of certain linguistic phenomena, not to those phenomena themselves. It is impossible to determine whether hypercorrection has taken place unless we know the status of the speaker's dialect relative to the accepted standard of the community. Rule generalization, on the other hand, is a linguistic term, the linguistic aspect of hypercorrection.

Sociolinguistic theory relates linguistic phenomena to social contexts. It thus makes certain empirical claims, to be validated by both linguists and sociologists. This paper examines one such claim: All hypercorrection is a function of rule generalization. The converse, however, does not hold. Examples from English, Creole, Polish, and Chinese validate these claims.
Theo Vennemann, University of California at Los Angeles
RECONSTRUCTION OF PHONEMES VS. RECONSTRUCTION OF RULES: CH VOWEL LENGTH IN GOTHIC

The traditional goal of the neogrammatically or structurally oriented philologist working in historical phonology has been the reconstruction of phonemic systems, i.e. inventories of phonemes plus constraints on their patterning (lexicon). Transformational generative grammar (Morris Halle), by contrast, teaches that linguistic reconstruction has to be reconstruction of grammars. Specifically, the historical phonologist has to reconstruct the morpheme-structure constraints (lexicon) and the phonological component (the system of ordered morphophonemic and phonetic rules) of (a stage of) a language not spoken any more.

I show in this paper that this difference in historico-linguistic orientation involves more than a terminological quarrel but can lead to factually different claims about the reconstructed languages. My example is the old problem of vowel length in Gothic. The neogrammarians had posited a length contrast. Certain structuralists (J. Marchand, O. Jones, E. Hamp, W. Bennett, and also R. Buckalew who followed them in this matter) correctly pointed out that no evidence other than etymological had been given for this assumption. Since the assumption could not be proved on the basis of the orthography alone, they, therefore, rejected it and reconstructed a Gothic vowel inventory without a length contrast, this being the "simplest" inventory agreeable with the orthographic data which had to be adopted for reasons of "logic" and "consistency".

I show that, while simplifying the "phonemic" description of Gothic, the assumption that vowel length had been given up entails great complications for the grammar of Gothic, specifically with regard to the following rules: Lowering before /r h h^w/, Sievers' Rule, the Abliatus rules, Loss of nasal before /h/, and Monophthongization. No evidence has ever been produced for these complications. Therefore, the claim that vowel length had been given up in Gothic must be rejected from a transformational-generative point of view.

The two approaches lead to radically different vowel inventories and are thus incompatible.

I show further that my grammar-oriented description of Gothic vowels accounts for fundamental regularities which in the phoneme-oriented approach cannot be handled (and have, in fact, never been handled). The former is, therefore, the superior description and supports the transformational-generative approach to linguistic reconstruction.

It also follows from my analysis that Gothic was, phonologically, a more conservative language than the structuralists would have us believe.
HANDOUT
Reconstruction of Phonemes vs. Reconstruction of Rules:
On Vowel Length in Gothic

(1) Gothic vowel graphemes (transliterated):

<table>
<thead>
<tr>
<th></th>
<th>- back</th>
<th>+ back</th>
<th>High monophthong or falling diphthong:</th>
</tr>
</thead>
<tbody>
<tr>
<td>+high</td>
<td>i, e, o</td>
<td>u</td>
<td></td>
</tr>
<tr>
<td>-high</td>
<td>ai, e</td>
<td>a, au</td>
<td></td>
</tr>
</tbody>
</table>

(Some scholars also claim diphthongal values for some ai, au.)

(2) Traditional interpretation:

<table>
<thead>
<tr>
<th>short</th>
<th>long</th>
</tr>
</thead>
<tbody>
<tr>
<td>i  u</td>
<td>i  u</td>
</tr>
<tr>
<td>e  o</td>
<td>e  o</td>
</tr>
<tr>
<td>ai  a</td>
<td>a  a</td>
</tr>
</tbody>
</table>

In addition:

ai OR e  ai
au OR  o  au
iu OR  u  iu


(3) No vowel length in Gothic:


(4) Generative grammarians adopting position (3) uncritically and trying, unsuccessfully, to accommodate it in a rule grammar of Gothic:

(a) Ronald E. Backus, A generative grammar of Gothic morphology (Diss. Univ. of Illinois, 1964), Ann Arbor, Michigan, University Microfilms.

(5) Marchand's (tentative) system: /i I e e o o u/. Arranged by Hamp:

\[ i \quad u \]
\[ e \quad o \]
\[ a \]
\[ e \quad o \quad au \]
\[ ai \quad o \quad a \]

Alternative arrangement, considered by Hamp but rejected:

\[ i \quad u \]
\[ e \quad o \quad au \]
\[ ai \quad o \quad a \]

(6) Hamp's phonemic system:

Hamp's phonetic system ("possible"): ei i, u, eu au

\[ [i] \quad [u] \]
\[ [i] \quad [u] \]
\[ [e] \quad [o] \]
\[ [e(a)] \quad [a] \quad [o(a)] \]

(7) All scholars agree that i and ei represent different phonemes: i [-F], ei [+F].

Corresponds to Pâm. /i/ : /I/. Ablaut differences correlated with it:

greip : greip BUT mita : mat, etc.

(8) binda : band BUT baira : bar steiga : stigant BUT beiba : beihans

leihva : laihmans

(9) \[ i \sim \sim ai \sim (\sim f \quad \sim F) \] BUT ei \sim \sim ai \sim (\sim f \quad \sim F) \]

(10) \[ + [+ low] / ____ (segments low relative to i: \sim F \quad \sim F) \]

(11) binda : bundum : bundus BUT wairps : waurpins : waurpins

nims : numans BUT baira : baurans

-buida : -budum : -budas BUT tiuba : tahuam : tahuans

No examples with \sim F exist.

(12) Foreign words: aurkle, Lat. aurculus; Saur, Lat. Surus; paursaurai, paurspurai, paurspuradai, Lat. purpura.

(13) Unstressed i, u do not lower: nih, -uh, fidur; Foreign: speikulatur.

\[ ur \] in urreisam, urreisian, urrista, ur rigidia is /u/ changed by a sandhi rule \[ n \rightarrow \sim F \quad ____ \sim F \]. Sandhi rules apply after word level rules.

(14) Words with /I/ or /u/ in Pâm.: 

(a) Pâm. /I/: Gothic brohte (brukian), akura.
(b) PGmc. /uh/: Gothic biuhts, biuhti, uhtils, uhtwo.
(c) PGmc. and Gothic /uh/: huhta, -huhta, uhtus (bugoman); huhrus (hugogram); uhuhsa (ugogram).

(15) (a) -budans, baurans, tautans: [-F].
(b) rules, skuru, uhtwo, huhta: [+ F].

(16) Lowering Rule:

\[
\text{V} \quad \text{[high]} \quad \text{[stress]} \quad \text{[low]} \quad \text{[low relative to high vowels: I b b]} \]

(17) briegan : branta, beggan : gehta, bugman : -uhta. Minimal assumption: a and u parallel; otherwise an additional merger rule (for [-F] a and [+F] a) or a complication of (18) would have to be proved.

(18) Nasal loss with compensatory vowel change: \( V [+ \text{nasal}] h \Rightarrow \frac{1}{2} 2 \frac{3}{2} 3 \)

(19) The feature F in the extreme vowels of Gothic:

<table>
<thead>
<tr>
<th>[-F]</th>
<th>[+F]</th>
<th>reconstruction status</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>I</td>
<td>undebated because graphically and phonologically reflected</td>
</tr>
<tr>
<td>u</td>
<td>ü</td>
<td>debated but proved because phonologically reflected</td>
</tr>
<tr>
<td>a</td>
<td>å</td>
<td>debated and not phonologically reflected; but an assumption to the contrary requires a complication of the grammar of Gothic for which there is no evidence</td>
</tr>
</tbody>
</table>

(20) F not a height feature; Lowering would be a strange process in such a system:

\[
\text{I} \quad \text{e} \quad \text{u}
\]

(21) (a) /draŋkhyiθ/ → drangkyēθ, cf. drangkiaθ.
(b) /-sliŋyiyt/ → gasleipēθ, cf. gasleipēθ.
(c) /brukkyiθ/ → brukēθ, cf. brukēθ. Cf. the unlowered u in brukha.
(d) /vēŋkyiθ/ → vengēθ, cf. vengēθ.
(e) /boidiyiθ/ → boidēθ, cf. boidēθ.
(f) /huŋgyiθ/ → hugēθ, cf. hugēθ.
(g) /stōŋyiθ/ → stōŋēθ, cf. stōŋēθ.

(22) Evidence for F = Length:

Phonological Analysis by universal principal.

\[
\text{Change by rule (23)} \quad \text{Phonetic representation, with universal principal}
\]

/ dredkyiθ/ → drangkyiθ, drangkiθ, [dræŋkiθ] (21a)
/kænkyiθ/ → kan-niθ, kan-niθ, [kanθ] (21i)
/-slŋyiyt/ → slŋyiyt, slŋyiyt, [slŋiθ] (21b)
/brukkyiθ/ → brukkyiθ, brukkyiθ, [brukθ] (21c)
/vēŋkyiθ/ → vēŋkyiθ, vēŋkyiθ, [vēŋθ] (21d)
/sōŋkyiθ/ → sōŋkyiθ, sōŋkyiθ, [sōŋθ] (21e)
/bōŋkyiθ/ → bōŋkyiθ, bōŋkyiθ, [bōŋθ] (21f)

(23) Sievers' Law in Gothic:

\[
\text{[- cons]} \quad \text{[+ high]} \quad \text{[+ voc]} \quad \text{[+ high]} \quad \text{[+ high]} \quad \text{[+ high]} \quad \text{[+ high]}
\]

Note that #oyi does not occur either, while #oyi, or #oyi, does.

(25) Keuter F-forms and masculine n-forms never show #tii = ti:

relīθ, khąbīθ, bandūθ. Small classes with analytical leveling. The large classes permit no exceptions to rule (23).

(26) Explanation: Rule \( \{y \} \rightarrow \{+ \text{cons} \} \), i.e. [j v]. Additional evidence from syllable division (although the MGS are, of course, of a later period):

viŋ, fe-dreinīθ BYT fe-dreinīθ, ip-hro-ja, bmsug-iθ, waurst-wa, uasug-wa.

(27) If PGmc. /av ay/, Gothic spelling ai, eu, were monophthonged in Gothic, these monophthongs were [+ F], i.e. /œ ë/: staiθīθ, cf. staiθ̩; hausaib, cf. hausaib.

(28) Evidence from ablaut rules; here not presented.

(29) [i o] in [+ Foreign] words: There phonemic, /i o/. Gainnesareiθ, Fauniti, apasautaun.

(30) [e o] in [+ Foreign] words not phonemic. Occur only before /r h h'/, where they are simply /i u/; and in reduplicative prefixes:

\[
\text{[e] before /r h h'/} \quad \text{[e] before other consonants and V}
\]

[96]

[97]
However, these \( [\varepsilon] \)’s are not phonemic either. They are conditioned by their occurrence in reduplicative prefixes, and reduplication is itself predictable from lexical \( \{ \text{+ Strong Verb} \} \) and syntactic information present in the grammar independently of the question of reduplication, and "any item which is completely conditioned or predictable is non-phonemic" (Marchand quoting K.L. Pike).

(31) Systematic phonemic vowels of Gothic:

\[
\begin{array}{ll}
[- F], \text{i.e. short} & [+ F], \text{i.e. long} \\
i & ü \\
u & û \\
ä & ë \\
ë & ë
\end{array}
\]

For \([\text{+ Foreign words add } /\varepsilon \circ U û/\). * Or \(/i\text{w my mu nû}/.

(32) Systematic phonetic vowels of Gothic:

\[
\begin{array}{ll}
[- F], \text{i.e. short} & [+ F], \text{i.e. long} \\
i & ü \\
u & û \\
ä & ë \\
ë & ë
\end{array}
\]

For \([\text{+ Foreign]} \text{ words add } [U] \text{ and } [û]. * \text{ Or } [i\text{w}].

(33) The graphemic representations of the systematic phonetic vowels of Gothic:

\[
\begin{array}{ll}
[- F], \text{i.e. short} & [+ F], \text{i.e. long} \\
i & ü \\
u & û \\
ä & ë \\
ë & ë
\end{array}
\]

For \([\text{+ Foreign]} \text{ words add } \text{w (for both } [U] \text{ and } [û]).

---

45. Johanna Nichols, University of California at Berkeley

THE INTERNAL SYNTAX OF UBALIC INFLECTED NOUNS

The Uralic languages present discrepancies in the ordering of noun inflectional suffixes: in some languages the case suffix precedes the possessive suffix, in others the opposite order prevails, and in many both orders occur depending on the case used. The word-final position of several case suffixes reflects their recent development from postpositions. Of the remaining word-final case suffixes, the positions of all but the external local series are due to either semantic or phonological regularization. The form of regularization found in the Permian languages shows that word-final position was not originally limited to the external locals, however. Reconstruction of case suffixes preceding possessive suffixes in Proto-Uralic is indicated by comparison of the Baltic Finnic, Lapp, and Samoyed systems. An overall reordering of suffixes occurred in the Ugric languages, motivated either by semantic considerations or by the influence of neighboring Turkic languages. Inglieses can be drawn to show the westward spread of this order switch, a tendency which weakened and became centered on the external locals as it spread. The ordering innovation must have occurred in Proto-Ugric between the dates of the split of Uralic into Samoyed and Finno-Ugric (ca. 3000 BC) and the departure of the ancestors of the Hungarians (ca. 200 AD).
The Internal Syntax of Uralic Inflected Neums

I. THE URALIC LANGUAGES

II. SCHMATIC MAP

III. Case terminology

Grammatical: Nominative, Genitive, Accusative, Dative

Semi-

Possessive 'as'

Partitive '{amount, number) of'

Translative '{turn) into'

General local:

Locative 'in, on, at'

Separative 'from, out of'

Lative 'to, toward'

Internal local:

Inessive 'in'

Relative 'out of'

Illative 'into'

External local:

Adessive 'on, at'

Ablative 'away from'

Allative 'to'

Upper local:

Superessive 'on top of'

Sublative 'off from'

Superlative 'onto the top of'

Perlative 'along, via'

Superterminative 'up to the top of'

Others:

Egressive 'away from' (direction)

Prolative 'along, through'

Approximative 'toward' (direction)

Terminative 'up to'

Comparative 'than'

Preclusive 'except'

Absessive 'without'

Instrumental 'with, by means of'

Comitative 'together with; and'

Causative 'for, because of'

Processive 'according to, following, along'

Circumstantial a general (outer) locative

IV. Examples (Case suffixes are underlined)

Cheremis kid-em-1N 'to my hand' allative
kid-em-1I 'into my hand' illative

Votyak surnate-d-ilie 'from your husband' ablativ'e
sinay-d'-em 'from my eye' elative

Komi ki-eg-yd 'from your hand' elative
pl-yd-lye 'from your son' ablativ'e

Lapp oabai-d'am-piel 'with my sisters' comitative plural
viva-ilana-m 'with my son-in-law' comitative singular

Turak janga-d 'from the sea' separative
janga-haa-d 'from the two seas' separative dual

[101]
### VII. CASE SUFFIXES OF PERMIAN AND VOLGAIC LANGUAGES (PARTIAL LIST)

| Nödvin | Cheremis | Votyak | Permjak | Komi | Finnish cognate | Proto Baltic
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal local</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Inessive | so | este | yn | yu | yu | asa | *asa*
| Elative | sto | ke(o)n | ýs | is | ýs | sta | *sta*
| Illative | s | o(ka) | e, y | e | e | seen, hyn | *seen*
| **External local** | | | | | | |
| Adessive | len | von | len | lla | *lla*
| Ablative | do, to (lec) | les | *vys | *lta | *lta*
| Allative | neñ; ndi | lan | li | vo | *lov | *lva*
| **Upper local** | | | | | | |
| Superessive | (v)yyn | | | | | |
| Sublative | (v)yis | | | | | |
| Superlative | (v)yne | | | | | |
| Parlative | (v)yot | | | | | |
| Superterminative | vyeq | | | | | |
| **Other** | | | | | | |
| Aggressive | ydın | aan | `an' | | | |
| Prolative | va, ga, ka | yki, yi | et | ed, ti | | |
| Approximative | lan | van | lan | | | |
| Terminative | o(d, o) | eg | e§, eg | | | |
| Preclusive | | | | | | |
| Ablative | (v)tom | to | tek | tøg | tøg | (tta') | *ttak*
| Instrumental | en | en, yn | en | en | | |
| Comitative | ko | ket | ket; myd | (Other Baltic) | | |
| Causal | | | | | | |
| Processive | ja | | | | | |

---

### VIII. UGRIC POSTPOSITIONS (fossilised case suffix underlined)

- Ostyak luv xoŋ-ø-ol 'to him' lative
- Vogul suŋ-ø-øm 'above me' locative
- Hungarian mellet-ø-øm 'beside me' unproductive locative
- Nödvin melle-ø-øm 'on my chest' superessive

[101]
In his pioneering book *Negative Zinnen* (Hilversum, 1966), Albert Kraak proposes that the Dutch indefinite article *een* should be analyzed as the surface reflex of two elements: a "true" indefinite article and a "categorial" article. Sentences such as (1a) *Er blafft een hond*, 'there's a dog barking,' refer only to specific entities and are accordingly viewed as containing only indefinite *een*. Sentences such as (1b) *Een hond blafft*, 'a dog barks/is barking,' may be either specific or generic and are therefore considered homophonous, as potentially containing either *een*.

Though Kraak's analysis describes the facts, it does not account for them insightfully. The postulation of homonyms fails to explain why an indefinite article and a categorial article should happen to be realized as the same form. The crucial role of *er* in (1a) is left unelucidated: Kraak's programmatic suggestion that *er* derives from an existential statement -- e.g. "there is a dog and it is barking" -- accounts neither for such sentences as (2) *Er gebeurde een ongeluk*, 'an accident occurred,' nor for the non-generic interpretation of (1b).

A more adequate treatment of the various interpretations given *een* is provided by a detailed consideration of the meaning of *er* and its use both in referring to specific situations and in diminishing the degree of focus normally accruing to the subject of the verb. Subjects introduced by *er* are seen to lack the high focus usually associated with emphasis, contrast, sudden appearance on the scene, or agency of an action. Since it does not resort to homonyms, the present analysis is able to capture the basic similarity of the *generic* interpretation of (1b) to the *definite* interpretation of (3b) in such pairs as (3a) *Er gaan veel meisjes mee*, 'many girls are going along,' and (3b) *Veel meisjes gaan mee*, 'many of the girls are going along.'
EXAMPLES

1. a. atearen giltsa 'the key of the door.'
   b. asteke giltsa 'the key of the door,' 'the key to the
doors,' 'the door-key.'

2. a. mendiko bidea 'the mountain road,' 'the road in the
    mountains.'
   b. menditikako bidea 'the road from the mountain.'
   c. mendirako bidea 'the road to the mountain.'
   d. *mendiaren bidea.
   e. *mendi-ko
   f. mendi-tik-(a)ko -(e)tik, elative 'from,'
   g. mendi-ra-ko -(e)ra(t) allative 'to, toward,'

3. cf. 1.b. and 2.a.
   a. giltsa astean dago, 'the key is in the door,'
   b. bidea mendietan da, 'the road is in the mountains,'

4. a. Iaincoac guregana duen charitatea, 'charitatei quas
   habet Deus in nobis.' John's First Epistle 4, 16.
   b. Iaincoaren gureganaico charitatea, 'Charitas Dei in
   nobis.' John's First Epistle 4, 9.

5. a. famak kurritu zuen jin zela. 'The rumor was running
    about that he had come.'
   b. jin zelako famak kurritu zuen. 'The rumor that he
    had come was running about.'
   c. entxeatu da jatera 'He tried to eat.'
   d. ez dut utzi zure ikustera. 'I didn't let him see
    you.'
9. ko-Complementation

cure ikusterako (aphailuak) 'The preparations for seeing you.'

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El lenguaje vasco San Sebastián.

Elaine K. Ristinen, Bloomington, Indiana
A COMPARISON OF THE SUBJECTIVE AND OBJECTIVE CONJUGATIONS IN THE SAMOYEDIC LANGUAGES

The ways in which the usage of the so-called "objective" and "subjective" conjugations in the Samoyedic languages vary are illustrated by a set of examples. Some interferences are made about the historical development of these forms. The discussion and examples should provide those already familiar with a similar distinction in other Uralic languages (such as Hungarian) with useful material for comparison.
Turkish has two relative clause constructions, the so-called "simple participle" (mektepe giden oglan "the boy who goes to school") and "relative participle" (ölglenin gittiği mektep "the school which the boy goes to"). The conditions under which these constructions are used have only been vaguely formulated, and for each traditional formulation there is a traditional set of counterexamples. Solution of this problem requires recognition of a number of phenomena which have not previously been recognized for Turkish. These include the importance of definiteness, and the existence of a word-order transformation ("scrambling rule") which applies at a higher level than scrambling rules are normally thought to apply.

1. mekteb-e gid-en oglan school go boy -dat -part
   'the boy who goes to school'

2. oglan mekteb-e gid-er boy school go -dat -pres
   'the boy goes to school'

3. oglan-ın git-tig-i mektep boy go school -gen -part -3s
   'the school which the boy goes to'

4. ogl-u mekteb-e gid-en adam son school go -3s -dat -SP man
   'the man whose son goes to school'

5. adam-ın ogl-u mekteb-e gid-er man son school go -gen -3s -dat -pres
   'the man's son goes to school'

6. ogl-un-un mekteb-e git-tig-i adam man school go -3s-gen -dat -0P -3s
   (in the same sense as 4)

7. oglan-ın mekteb-in-e git-tig-i adam man school go -gen -3s-dat -0P -3s
   'the boy whose school the boy goes to'

8. oglan adam-ın mekteb-in-e gid-er man school go -gen -3s-dat -pres
   'the boy goes to the man's school'

9. oglan mekteb-in-e gid-en adam man school go -3s-dat -SP
   (in the same sense as 7)

10. üst-ün-de şarap dur-an masa top wine stand table -3s-loc -SP
    'the table that wine is standing on'

11. masa-nın üst-ün-de table top -gen -3s-loc
    'at the top of the table on the table'

12. alt-ın-dan su ak-an kapı bottom water flow door -3s-abl -SP
    'the door that water is flowing out from under'

13. oda-sın-da bir lamba yan-an adam room a light burn man -3s-loc -SP
    'the man in whose room a light is burning'

14. adam-ın oda-sın-da man room -gen -3s-loc
    'in the man's room'
13. Östün-də Şərab-ın dur-dug-u masa top wine stand table 3s-loc gen -0p-3s
14. alt-ın-dan suy-un ak-tég-e kapaş bottom water flow door 3s-abl gen -0p-3s
15. oda-sän-da lamba-nın yan-dig-A adam man room light burn -3s-loc gen -0p-3s
16. su kapaş-nın alt-ın-dan ak-iyor water door bottom flow 'the water is flowing out from under the door' gen -3s-abl prog
17. kapaş-nın alt-ın-dan su ak-iyor 'water is flowing out from under the door' gen -0p-3s
18. lamba adam-ın oda-sän-da yan-iyor light man room burn 'the light is burning in the man's room' gen -3s-loc prog
19. adam-ın oda-sän-da bir lamba yan-iyor 'a light is burning in the man's room' gen -0p-3s
20. adam suyu oğlan-a at-ti man water boy throw obj dat past
21. adam oğlan-a su at-ti man boy water threw
22. suyu oğlan-a bir adam at-ti water boy a man threw
23. oğlan-a bir adam su at-ti boy a man water threw
24. dana-lar bostan-a gir-iyor calf garden enter -pl dat prog 'the calves are entering the garden'
25. bostan-a dana-lar gir-iyor garden calves enter
26. (20) adam suyu oğlana atti adəm oğlana suyu atta suyu adəm oğlana atta suyu oğlana adəm atta suyu adəm atta oğlana suyu atta adəm oğlana atta oğlana atta adəm suyu (etc.)
27. oğlan mektebe gider (cf.2) mektebe giden oğlan
28. (25) bostan-a dana-lar gir-iyor calves are entering the garden' gen calf enter -pl -prog
29. dana-lar gir-en bostan calf enter garden -pl -sp (in the same sense as 30)
30. dana-lar-ın gir-dig-i bostan calf enter garden -pl-gen -0p-3s
31. bostan-ın iğ-in-e dana-lar gir-iyor calves are entering into the garden in calf enter -gen -3s-dat -pl prog
32. iğ-in-e dana-lar gir-en bostan in olaf enter garden -3s-dat -pl -pair 'the garden into which calves are entering'
33. Ahmed-in şapka-si A. hat gen -3s
34. Ahmed-in gel-me-si A. come -VN-3s
35. Ahmed-in gel-dig-i belli A. come obvious -gen nom-3s
36. Ahmed-in gel-dig-i ev A. come house gen -0p-3s
37. masnän Östündə Şərap duruyor (cf. 10) Östündə Şərap duran masa
38. (25) bostan-a dana-lar gir-iyor calves are entering the garden' gen calf enter -pl -prog
Traditional grammars of Hindi describe the conditions on the use of *apnāə* in the following way: all personal possessive pronouns must assume the same form, *apnāə*, when the subject and the possessor are the same person and are in the same clause.

However, severe difficulties arise with this view in assigning a referent to *apnāə*, as the following sentences show:

1. Raam nee winood koo apnāə ghar saaf karne kee liyee hukm diyaa
   "Ram pst. Winod to his house clean making for order gave."
   (Ram ordered Winod to clean his house.)

2. Raam nee winood koo apnāə ghar meen deekhāa
   "Ram pst. Winod to his house in saw."
   (Ram saw Winod in his house.)

3. Raam nee winood koo apnāə ghar saaf karne kee liyee maanagaa
   "Ram pst. Winod to his house clean making for asked for."
   (Ram asked for Winod to clean his house.)

4. Raam nee winood koo apnāə ghar dikhāayaa
   "Ram pst. Winod to his house showed."
   (Ram showed Winod his house.)

In (1) and (2), *apnāə* may, in fact, refer to Winod as well as Ram. Sentences (3) and (4), on the other hand, satisfy the traditional description. They are unambiguous: *apnāə* may refer to the subject only, Ram.

In offering an explanation for these facts, and other related ones, I will show the following: 1) The traditional description for the treatment of *apnāə* is inadequate; 2) Of the two competing views in current linguistic theory, dealing with the problem of semantic interpretation and what mechanisms are necessary to accomplish this, one is to be preferred on the basis of the data presented; 3) The evidence from Hindi *apnāə* can offer insights into such diverse phenomena as presupposition, and the nature of direct discourse.
HANDOUT

On Disjunctive Connectives

1. non-interrogative constructions with (either)...or:

AMHARIC: (weyim) set weyim wend 'either woman or man'

ENGLISH: (either) John or Mary is coming

HUNGARIAN: (vagy) John vagy Mary jön 'Either John or Mary is coming.'

JAPANESE: ano hito wa Igirisujin ka Amerikajin ka desu 'He is either English or American.'

MANDARIN: jēige (bēsēr) hāngde huōshēr bdāshr hāngde 'It is either red or no red.'

2.a. yes-no questions with either/whether...or:

ENGLISH: dependent question: I wonder whether he is coming or not

HUNGARIAN: independent question: vajon jön vagy nem jön 'Is he coming or is he not coming?'

dependent question: kíváncsi vagyok, vajon jön vagy nem jön 'I wonder whether he is coming or not coming.'

JAPANESE: independent question: Osaka desu ka, Kobe desu ka 'Is it Osaka or Kobe?'

dependent question: Osaka desu ka, Kobe desu ka wasurenashita 'I have forgotten whether it is Osaka or Kobe.'

MANDARIN: independent question: jēige huōshēr/bāsēr hāngde huōshēr/bāsēr bdāshr hāngde 'It is red or not red?'

dependent question: wō yāu jēdāu jēige huōshēr/bāsēr hāngde huōshēr/bāsēr bdāshr hāngde 'I want to know whether it is red or not red.'

2.b. yes-no questions with ethod/ithedt...et:

AMHARIC: independent question: mōkkam nēt weyim kifu 'Is he good or bad?'

MANDARIN: independent question: mēdāg alemadāgēn alēnegrim 'doing-my not-doing-my-object-marker I-will-not-tell-you' 'I will not tell you whether I will do it or not.'

MANDARIN: independent question: jēige shēr hāngde bdāshr hāngde 'It is red not-is red' 'Is it red or not red?'

dependent question: wō yāu jēdāu jēige shēr hāngde bdāshr hāngde 'I want to know it is red not-is red' 'I want to know whether it is red or not.'
In meaning-structure grammar (Chafe, *Meaning and the Structure of Language*, 1970) the sentences of a language are viewed as derived from semantic structure, the rules of which determine grammaticality. A semantic structure may be regarded as a conceptualization of the world of experience. Since different languages are capable of encoding the same messages about the world of experience, a given semantic structure is potentially capable of being mapped into the surface structure of any language. But this potentiality is subject to the limitations inherent in the available surface structures. Thus, while English has a single verb *stand*, other languages (e.g., Spanish, Delaware) distinguish 'stand from a sitting position' and 'stand from a reclining position'. Two interpretations are possible. We could claim that English semantic structure contains the same distinction even though it is not symbolized explicitly in surface structure. This approach would lead to a language-universal semantic scheme—but at a cost of positing distinctions the monolingual speaker may never require. The alternative is to maintain that verbs and their accompanying nouns are, in general, specified up to the point of lexical insertion by language-universal rules but that the lexical items available in different languages frequently lead to surface structures different enough in content to raise questions about their mutual translatability. This approach, while less satisfying from the standpoint of universality, seems more in keeping with the actual facts.

Studies of sentences involving the interaction of logical predicates (quantifiers, conjunctions, and negatives) reveal a wide range of dialects (or idiolects) that do not seem to correlate with any socio-logical characteristics of the informants. Investigating two examples, we find that the observed variations can be accounted for by an analysis in which the dialects differ in order of transformations. Three main dialects appear:

<table>
<thead>
<tr>
<th>Dialect A</th>
<th>Dialect B</th>
<th>Dialect C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not-Transportation</td>
<td>Tag-Question</td>
<td>Not-Transportation</td>
</tr>
<tr>
<td>Tag-Question</td>
<td>Not-Transportation</td>
<td>Quantifier-Lowering</td>
</tr>
<tr>
<td>Quantifier-Lowering</td>
<td>Tag-Question</td>
<td></td>
</tr>
</tbody>
</table>

One informant has a 4th dialect with order Quantifier-Lowering, Tag-Question, Not-Transportation; the analysis is supported when we find independent evidence confirming that he has the unusual rule order Quantifier-Lowering before Not-Transportation.

It is well known that linguists have difficulty finding a solid argument showing that one transformation is ordered before another; it is reasonable to suppose that the language learner has the same problem. In cases like those discussed here, it is likely that children will not have any data indicating that one rule order is preferred to another, so that they will tend to acquire these rules in random order. Thus rule-order becomes a particularly plausible explanation for these apparently-random dialect variations.
Rule Order and Syntactic Idioblect Variation

1. All the boys didn't leave.
   Neg-Q Reading: \( \neg (\forall x \in \text{the boys})(\text{leave}(x)) \)
   Neg-V Reading: \( (\forall x \in \text{the boys})(\neg \text{leave}(x)) \)

(la) Derivation for Neg-Q Reading:

(lb) Derivation for Neg-V Reading:

Interaction of the Tag-Question Rule and Quantifier Lowering:

2. All the boys didn't leave, did they?
3. All the boys didn't leave, didn't they?

Dialect I: (2) is unambiguously Neg-Q.
Dialect II: (2) has both Neg-Q and Neg-V readings.

Dialect I

Tag-Q

Quantifier-Lowering

Dialect II

Tag-Q

Quantifier-Lowering

Interaction of the Tag-Question Rule and Not-Transportation:

4. You don't think Mary caught the train until 1 PM, do you?
   (la) You think Mary caught the train.

(la) You think Mary caught the train.

Dialect III: (4) is grammatical.
Dialect IV: (4) is starred.

Dialect III

Not-Transportation

Tag-Q

Dialect IV

Tag-Q

Not-Transportation

* Tree diagrams are much simplified and omit structure that is not relevant to the points being discussed. For example, the appearance of NEG as a feature on verbs and quantifiers does not represent a claim about the underlying structure of negation.
### Interaction of All Three Rules

<table>
<thead>
<tr>
<th>Dialect</th>
<th>Data Set</th>
<th>(2)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Neg-Q</td>
<td>OK</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Neg-Q</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>ambig.</td>
<td>OK</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>ambig.</td>
<td>*</td>
<td></td>
</tr>
</tbody>
</table>

5. John doesn’t think that all the boys will catch the train.

- **Neg-Q Reading:** John thinks that not all the boys will catch the train.
- **Neg-V Reading:** John thinks that all the boys will miss the train.

#### References
5. Lakoff, Robin (1969) "A Syntactic Argument for Negative-Transportation," in *Papers from the Fifth Regional Meeting of the Chicago Linguistic Society, Department of Linguistics, University of Chicago*
Traditional definitions of linguistic competence as "the speaker-hearer's knowledge of his language", and performance as "the actual use of language in concrete situations" (Chomsky, Aspects, p. 4)—assuming in effect that all internalized linguistic knowledge belongs in competence and that performance is limited to real language behavior—fail to account for most important facts of inter- and intraspeaker language variation. Among the items to be explained by a comprehensive, valid competence/performance theory are: why speakers of different dialects are usually mutually comprehensible but 'sound different'; what are the differences between learning a second language and learning a second dialect; on what levels of language universals appear; what adults acquire, and what they fail to acquire, when learning a second language (and why native speakers can often understand them anyway); and what is the relationship between competence/performance on the one hand and deep/surface structure on the other.

In the paper I presented at last year's LSA I suggested that the type of registral variation and rule optionality characterizing Southern Child Black English, and the occasional similarity of its utterances to those of General Shared English, can best be explained by postulating another rule-governed level of language, on which both categorical and contingent rules appear. The present paper extends and develops this notion into a system I call Contingency Grammar, a general theory of competence and performance in which language is seen as tri-rather than bipartite, and in which such currently puzzling facts about language acquisition, comprehension and variation as those indicated above can be systematically explained. The system provides for several types of quantifiably described variable rules, and demonstrates the precise tie-ups between these rules and actual phonation.
Some Sample SP-I Rules

1. **Consonant aspiration (General)**
   \[
   \begin{align*}
   [ +\text{cons} -\text{voc}] & \rightarrow [ +\text{ aspirated} ] / [ -\text{voice} -\text{contin}] \\
   \text{P}_0
   \end{align*}
   \]

2. **Diphthongization (General; but further rules change its output)**
   \[
   \begin{align*}
   &\phi \rightarrow [ -\text{cons} +\text{voc} +\text{hi} +\text{back} +\text{back}] / [ -\text{cons} +\text{voc} +\text{hi} +\text{tense} +\text{round}] \\
   \text{P}_0
   \end{align*}
   \]

3. **CBE/Fla Nasal Loss (Local)**
   \[
   \begin{align*}
   [ -\text{cons} +\text{voc}] & \rightarrow [ +\text{naso}] / [ +\text{naso}] \\
   \text{P}_0
   \end{align*}
   \]

4. **New England "Broad 'a'" (Local)**
   \[
   \begin{align*}
   [ -\text{cons} +\text{voc} +\text{hi} +\text{back} +\text{lo}] & \rightarrow [ +\text{back} ] / [ +\text{back} ] \\
   \text{P}_0
   \end{align*}
   \]

5. **CBE indirect question (Local; this is a simplified version)**
   \[
   \begin{align*}
   \text{SD: } & \Sigma \text{Ask} + (N+) \Sigma \text{If} + \Sigma \text{NP} + V - \text{Aux} + \Sigma \text{NP}_2 \\
   1 & 2 & 3 & 4 & 5 & 6 & 7 \\
   \text{SC: } & \Sigma \text{Ask} + (N+) \Sigma \text{If} + \Sigma \text{NP} + V - \text{Aux} + \Sigma \text{NP}_2 \\
   1 & 2 & 3 & 4 & 5 & 6 & 7 \\
   \end{align*}
   \]

6. **Some lexical rules (Local; probably simplified. The first two are Southern; the third, Midw.)**
   \[
   \begin{align*}
   \text{a)} & \Sigma \text{Hit} \rightarrow h\text{wap} / N_an (+X) \rightarrow +N_an \\
   \text{b)} & \Sigma \text{Take} \rightarrow k\text{eri}y \\
   \text{c)} & \Sigma \text{Resemble} \rightarrow f\text{eyvar} / N_an (+X) \rightarrow +N_an \\
   \end{align*}
   \]

**NOTE ON 6:** These three 'rules' depend on definition of lexicon as part of General Shared English, deriving dialect forms from GSE core forms. Possibly only lexicon-lookup method be part of GSE and lexicon contents belong in Systematic Performance; if so rules such as #6 above probably not needed, and dialect forms merely listed without GSE alternants.
Genesis of an Utterance

"The lion he was UH he was trai- he was tame"

I. Competence

1. Tree:

   S
   /    \
  NP    VP
  /  \
 Art N V Adj

   #the#lion#be#Past#trained

2. Surface structure:

   {{ [ [ #the# ] [ #lion# ] ] [ [ #be# ] #Past# ] [ #trained# ] ] } [ S NP Art N N NP VP V V Adj Adj VP S ]

3. Phonetics: ḏālān- wātēztrān

II. Systematic Performance (SP-I)

1. SD: Art # 

   +N
   +animate
   +masc
   -fem

   # V

   1  2  3

   SC: 2 → [2]  # 

   +Pro
   +animate
   +masc
   -fem

2. (Phonology)


   (Notes: # is roughly 'word boundary' - is phonological phrase boundary.)

III. From Systematic Performance to Actualized Performance (SP-II)

1. \[ \{ W_1 \# W_2 \} \rightarrow \{ W_1 \# W_2 \}_a \# Pause \# W_3 \]

   NOTE: # = word boundary (nonessential boundaries omitted here); and \{ \}_a enclose items in same phonological phrase.

   Output of this rule: 'the#was#Pause#trained#'

2. \((C_o V_o) C \rightarrow (C_o V_o) C V (\_ ) \# Pause\#\)

   Output of this rule: 'the#was#Pause#trailed#Pause#'

3. SD: W_3 # W_2 # W_1 # Pause (# W_4 #)

   SC: Pause → (UN)_{\alpha} ( W_3 #) W_2)_{\beta}  Condition: either \alpha or \beta or both

   SC: W_3 → \{ W_3 \}

   \{ W_3 \}

   Output of this rule: '#trailed-the#was#tame#'

   NOTES: W_k is defined as \[ \begin{bmatrix}
       +word \\
       \Sigma_{p_k} \\
       \Sigma_{s_k}
   \end{bmatrix} \]

   and W_k, is defined as \[ \begin{bmatrix}
       +word \\
       \Sigma_{p_k} \neq \Sigma_{p_k} \\
       \Sigma_{s_k} \neq \Sigma_{s_k}
   \end{bmatrix} \]

   W* = an interrupted word: output of Rule III-2 above.

4. Final Actualized Performance Phonetics:

   ḏālāː- hīywāz- ṭāː- hīywāz-trē- hīywāz-teː
A certain syntactic form in English, Subject-Verb-Object-Adjective (alternatively, S-V-A-O if the object NP is longer or more complex than a simple single NP, e.g. a conjoined NP, or a NP with postnominal modifiers or relative clauses) as discussed in Green (1970), may represent one or more of several logico-semantic constructions. Although English sentences may often be translated word for word into French, the French counterpart of this sentence adjective form (S-O-V-A or S-V-A-O) may not be used to encode such "instrumental causatives" 'shoot someone dead', 'sweep something clean', 'hammer something flat'. French does permit causative verbs in this syntax (e.g. rendre quelqu'un heureux, faire quelqu'un malade), but none of these are remotely instrumental, so the difference between English and French seems to be that French has no rule for forming instrumental causatives, and that as a result of this lack, has no instrumental causative verbs to fit in this syntax.

If this is the correct analysis, it bears out the prediction in Morgan (1968) that the lexical inventories of languages will differ in systematic ways because one language will have pre-lexical rules which the other lacks. It appears that whatever incorporation or deletion rule permits these constructions in English is reinforced by the presence of transitive Verb-Particle constructions with similar surface syntax, which are frequently of an instrumental causative nature (e.g. take away, bring in, file off). French, which apparently lacks this rule, also lacks Verb-Particle constructions, both transitive and intransitive, which might reinforce such a rule.

In dissyllabic English words stressed on the initial syllable, the final syllable sometimes reduces (e.g. method, seraph, haddock, [ser'ok], etc.) and sometimes does not (e.g. Ajax, latex, nomad, wombat, [er'mb], etc.). The explanation for these facts is that secondary stress is applied to the final syllable just in case the first syllable is "strong" (C1W1 or C0W1). This secondary stress (which ultimately becomes tertiary stress) suffices to prevent the final vowel from undergoing reduction to shwa. This rule, however, does not apply in case the final vowel is followed by a sonorant consonant (m, n, r, l). If the sonorant consonant ends the word, no stress is applied and the vowel reduces (titan, Newton, idol, velum, lemur, angel, urban, arbor, etc.). If a second consonant follows the sonorant consonant, only if it is [-coronal] is (secondary) stress applied (by a different rule), thus preventing reduction (oolong/Raymond, Ozark/coward, napalm/severn, Adolf/Arnold, cucumber/carpenter, icing/Roland). Other apparent exceptions to the first rule will also be discussed and explained.
HANOUT

Why Arab May Rhyme with Scarab or Abah, but not Dare Grab or May Rub.

STRESS AND REDUCTION IN BISYLLABLES (with a lax second vowel)

V₁ = vowel of first syllable
V₂ = vowel of second syllable

Strong cluster here is any syllable with a tense vowel, or a syllable with a lax vowel followed by two or more consonants.

A. If the first syllable is strong, then V₂ is unreduced; if the last syllable is weak, then V₂ is reduced ("weak" means precisely -C₁V₂):

<table>
<thead>
<tr>
<th>I</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arab</td>
<td>[sræb]</td>
</tr>
<tr>
<td>epoch</td>
<td>[ẹpək]</td>
</tr>
<tr>
<td>Suez</td>
<td>seraph</td>
</tr>
<tr>
<td>orchid</td>
<td>method</td>
</tr>
<tr>
<td>cognac</td>
<td>spingh</td>
</tr>
<tr>
<td>wombat</td>
<td>spigot</td>
</tr>
<tr>
<td>apex</td>
<td>facet</td>
</tr>
<tr>
<td>matrix</td>
<td>modest</td>
</tr>
<tr>
<td>incest</td>
<td>provost</td>
</tr>
<tr>
<td>comrade</td>
<td>ballad</td>
</tr>
<tr>
<td>Dunlop</td>
<td>scallop</td>
</tr>
</tbody>
</table>

Thus, we need a rule (the ARAB rule) to assign secondary stress to the second syllable where the first syllable is stressed and strong.

B. If the vowel of the final syllable is -u-, the ARAB rule does not apply:

- August (cf. Augústus)
- Venus (cf. Vëndsay; also, penís, with a different vowel in the final syllable)
- locust (cf. locústal)
- fetus
- Jesus
- eunuch
- nimbus
- Malthus (cf. Malthústian)

---

C. If the second syllable has a [sonorant] consonant (m, n, ñ, or l) after the vowel V₂, the ARAB rule does not apply:

velum
Abel (cf. Abélian)
Muslin
nasal (cf. nasállity)
Vergil
Akrón

I. There are several types of explainable exceptions:

a. -on "suffix": boron, poron, Argon, Tetón, cownón, argón, Ion, nylon, Legón (cf. lign, pergon, Newtón, etc.) Also -ol affix (pronounced [-1], [-ẹl], or [ẹl]): lysol, bromol, phenol.

b. tense final syllables: 'fur, mool, e.g. shows we need another rule (the TURMOIL rule) retracting primary stress to the initial syllable, if the initial syllable is strong. (cf. cìğer, po'lice, De'troit, etc.) Note also the non-standard pronunciations ['aI, gær, 'pq, IIs, 'd'é, troyt], with tense vowels in the first syllable. This retraction also occurs in 'ra, dar, 'd'é, van, 'pe, cas, 'Tar, zan, etc. (some of these latter cases undergo a late a ' rule).

II. There are also of course true exceptions, although these are rare and generally infrequent words.

C. If the second syllable ends in a [sonorant] consonant followed by one or more consonants, the consonant after the sonorant determines whether the second syllable reduces: reduction occurs if the consonant is [coronal] (Col. II), not otherwise (Col. I):

<table>
<thead>
<tr>
<th>I</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>ọicing</td>
<td>cylinder</td>
</tr>
<tr>
<td>Podunk</td>
<td>moment</td>
</tr>
<tr>
<td>Plutarcon</td>
<td>Herbert</td>
</tr>
<tr>
<td>Denmark</td>
<td>Robert</td>
</tr>
<tr>
<td>iamb (cf. iambic)</td>
<td>Edmund</td>
</tr>
<tr>
<td>rhubarb</td>
<td>buzzard</td>
</tr>
<tr>
<td>futurc</td>
<td>Oxford</td>
</tr>
</tbody>
</table>
Thus, the F拘THORC rule says that the second syllable gets stressed if it ends in a sonorant consonant followed by a [-coronal] consonant.

The strong verb ablaut series of Old English can be generated by concise rules when the tense vowels are considered to have two underlying phonological segments. As the language changes into Middle English and, with the addition of vowel shift rules, into Early Modern English that same analysis of the tense vowels simplifies the generation of the newer diphthongs. Finally, by retaining double underlying segments for the tense vowels of contemporary English, glide insertion rules become unnecessary for generating today's tense vowel complexes.
Superficial observations have been made about the alternations /æz/, /z/, /s/ and /æd/, /d/, /t/ for English plural and past tense. These alternations have been described in terms of ordered statements such as the following:

1. /æz/ → strident
   a. Plural

2. /z/ → voiced

3. /s/

1. /æd/ → dental stops
   b. Past

2. /d/ → voiced

3. /t/

Such observations miss important generalizations, in particular that a.1 and b.1 are actually instances of a.2 and b.2, the /æ/ being voiced, that a.1 and b.1 are the same phenomenon, and that a.2 and b.2 are the same phenomenon.

The rules which actually govern these alternations are not a and b but two others, much simpler and more general. The first inserts /æ/ under easily stateable conditions, hence accounting for the shared parts of a.1 and b.1. The rule is easy to state because together the environments of a.1 and b.1 form a natural class as do the forms of the endings. The second rule describes the progressive assimilation. This rule accounts for a.2,3; b.2,3; and the parts a.1 and b.1 not accounted for by the schwa-insertion rule. What these rules do for plural and past tense, they also do for the third singular, the possessive, and the past participle.

The rules just discussed apply only across a # boundary; i.e., they are rules of external sandhi. Many of the "exceptional" past tenses are the result of applying the rules of internal sandhi, given the same endings as input. It can be shown, for example, that the past tenses of verbs like bite, cleave, and hit are derived regularly by rules needed in the grammar to state internal phonology if these verbs are assumed to have + rather than # before the ending.
HANDOUT
The Inflectional Morphology of English

A. Plural

b. /s/

2.a. Preterite

b. /d/

c. /t/

3. $\rightarrow$ [a] / [sonorant +distributed +strident] 

4. [Voiced] $\rightarrow$ [Voice] / [-Voice] #

a. cat # [poss]

b. dog # [poss]

c. rose # [poss]

3. voice

4. voice

d. pick # [pret]

e. pen # [pret]

f. pet # [pret]

3. [cor]

4. [cor]

B. 1. burn/burnt, dwell/dwelt, learn/learnt, smelt/smelt, spell/spelt, spill/spilt

2. creep/crept, deal/dealt, dream/dreamt, feel/felt, keep/kept, kneel/knelt, leap/leapt, mean/meant, sleep/slept, sweep/swept, weep/wept

3. beat, bed, bid, burst, cast, cost, cut, fit, hit, pet, rid, set, shed, shut, sit, spit, spread, sweat, thrust, we'd, wet

4. bite/bit, bleed/bleed, breed/bred, feed/fed, hide/hid, light/lit, meet/meet, read/read, shout/shout, slide/slid, speed/sped

5. bend/bent, build/built, lend/lent, lend/rent, send/sent, spend/spent

6. cleave/cleft, leave/leaf, lost/lost, bereave/bereft

C. Tensing $[+syllabic] \rightarrow [+tense] / [-syllabic] +

Intervocalic Voicing $[-sonor] * [+voice] / [+syllabic] +

Augment $[+syllabic] \rightarrow / [+voice]

Cluster Lexing $[+syllabic] \rightarrow [-tense] / [-syllabic] +

Stop Deletion $[-sonor] + [+nas]

Intrusive Stop $\rightarrow [voice]

Cluster Simplification $[+syllabic] \rightarrow [\text{not }] / [-syllabic]

Regressive Assimilation $[+voice] \rightarrow [-voice] / [-sonor] +

b. 1. /br/ + /e/ /br/ + /e/

2. /b/ + /e/ //b/ + /e/

3. /br/ + /e/ /br/ + /e/

4. /br/ + /e/ /br/ + /e/

5. deep/deepth, contain/contain

6. bomb, long/long

7. bombard, kinder, longer

8. bends (/d/ + /l/), length (/g/ + /l/)
9. length (\text{len}+\theta \rightarrow \text{lep}+\theta), tenth ([tɛntθ]), warmth ([wɔrmpθ])

10. fence, sense

11. /wed+t/ \rightarrow /wed/

12. twelve/twelfth, broad/breadth ([bretθ])

E.

1. \begin{tabular}{lccc}
   & burnt & crept & bet & bit \\
   Cluster Lax & \text{-} & \text{krep+t} & \text{-} & \text{bɪt+t} \\
   Intrus. Stop & burnt+t & \text{-} & bet & \text{bɪt+t} \\
   Cluster Sim. & burnt & \text{-} & \text{-} & \text{-} \\
\end{tabular}

2. \begin{tabular}{lcc}
   & bent & built \\
   Stop Delet. & /bent/ & /bild+t/ \\
   Intrus. Stop & bent+t & bɪt+t \\
   Cluster Sim. & bent & \text{-} \\
\end{tabular}

3. \begin{tabular}{llll}
   & left & lost \\
   Vowel Tens. & /lɛf+c+t/ & /lɔst+c+t/ \\
   Intervoc. Voic. & lɛf+c+t & lɔst+c+t \\
   Augment & lɛv+t & lɔz+t \\
   Cluster Lax. & lev+t & lɔz+t \\
   Regr. Assimil. & left & lost \\
\end{tabular}

F.

life, thief, shear, beef, loaf, elf, shelf, scarf, dwarf, wharf, knife, wife, leaf, half, calf, wolf, boon, roof, path, moth, mouth, youth, truth, oath, lath, cloth, bath, house, handkerchief

The following conditions are designed to strengthen the claim that there exists a close relationship between phonetic and phonemic representations. They deal with the ways in which various types of features may be used.

1) \textbf{The phonetic features condition} prohibits the complete neutralization of a phonetically based distinctive feature and is thus a weak version of Kiparsky's alternation condition. By virtue of this condition, an opposition such as the frequently proposed tense – lax opposition for Spanish vowels must be reformulated in terms of an abstract feature which is not phonetically based. It is probable that a greater cost should be associated with these non-phonetic features. This condition should be interpreted to allow use of the feature \text{[round]} to distinguish Spanish \text{k} (which undergoes velar softening) from h\text{\textsuperscript{v}} (which does not) since this feature does appear in some realizations of h\text{\textsuperscript{v}} (e.g. in the \text{g} of \text{perseguir}.

2) \textbf{The syntactic features condition} stipulates that although syntactic features may be referred to in phonological rules, they do not constitute a part of any phonemic representation. That is, if two segments are to be considered distinct, it must be by virtue of a phonological feature (phonetic or abstract), not a syntactic feature. If French \text{dormirai} and \text{dormiras} are both phonologized \text{dormiras}, the \text{g} of the former being converted to \text{i} by a rule which makes reference to the feature \text{[l]. pers. sg.}, then this feature is a part of the phonemic representation of the \text{g}, and the phonetic basis of the systematic phonemic level is weakened considerably.
(1) Postal 1968:

(a) 'The relation between phonological and phonetic structures is a natural one ... the categorization of lexical items given by phonological structure, i.e. required to state morphophonemic and phonological rules, needed to state constraints on sequences of phonological elements, needed to state phonological universals, etc., is not, from the point of view of phonetic structure, an arbitrary code. Rather this representation is closely related to the representations needed to state the phonetic properties of the sequences which represent individual lexical items.' 56.

(b) 'With a few specific exceptions (to take care of universal kinds of boundaries), the features used in the systematic or categorial matrix are exactly those countenanced by the correct universal phonetic theory.' 60.

(2) poder ~ puedo
come ~ como

(3) Kiparsky 1968:

(a) 'The present theory of generative grammar allows phonological distinctions which are never realized on the phonetic surface to appear in the lexical representations of morphemes.'

(b) 'The theory of generative phonology must be modified to exclude the diacritic use of phonological features and the phonological use of diacritic features.'

(c) 'The [strong] alternation condition categorically forbids absolute neutralization.'

(4) features applied to an entire lexical item

(1) syntactic features (e.g. noun, verb)
(11) diacritic features (e.g. foreign, minus rule 1)

(b) features applied to individual segments

(1) abstract features (e.g. [-D])
(11) phonetic features (e.g. tense)

(5) Foley 1969:

'Our phonological parameters should not be based on phonetic data, but rather on phonological relationships exhibited by phonological rules.'

(6) Schane 1968:

(a) first person singular second person singular
dora + 1 + ra + s #
dora + 1 + ra + s #

(i) dora + 1 + ra + 1 #
(ii) dora + 1 + ra #
(iii) ----

(1) first person vocalization
(ii) e conversion
(iii) singular person deletion

(b) 'The first singular marker /s/ becomes /l/ when preceded by /a/.

(c) s ----> i / [lgt sg.]

[142]
In a recent paper ("Some tonal systems that come close to being pitch accent systems but don’t quite make it", read before the Sixth Regional Meeting of the Chicago Linguistic Society), McCawley tries with varying degrees of success to show that various languages fail to fit either his definition of "tone language" or of "pitch accent language". He makes the claim that tone languages can have "accent reduction rules" and proposes a new typology based on the ordering of accent reduction rules in the grammar. The present paper argues 1) that the original definition, stated in terms of the amount of information in lexical representations, was misguided and that a restatement of the definition in terms of the form of lexical entries is more accurate, and 2) that tone languages may not contain "reduction rules". The term "reduction rule" is also redefined; however, it is argued that the tone languages alleged by McCawley to have reduction rules do not, even under his definition. With the above modifications, the definitions of tone language and pitch accent language correctly distinguish between the set of tone languages and the set of pitch accent languages.

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Personal pronouns cannot be adequately described without reference to their deictic aspects. At the same time, however, current generative grammar does not provide a formal or theoretical foundation upon which such a characterization can take place. This paper makes some suggestions for providing such a framework. The feature matrices of lexical entries in current theory are restricted to three possibilities -- semantic features, syntactic features, and phonological features. These three are incomplete at a very basic level for describing pronouns and many other aspects of language involving deixis. It is suggested that a fourth feature be introduced, the deictic feature. It is argued that such a feature is qualitatively distinct from either semantic or syntactic features. Given the need for a deictic feature (in this case a person deictic feature), a formalism for deixis is proposed, along with a person deictic unit that can be combined with current semantic and syntactic features to approximate an adequate representation of personal pronouns.

The -mu suffix in Quechua has two functions: cislocative and translative. Syntactic restrictions demonstrate that the cislocative function should be derived from a directional-goal-proximate noun phrase in association with a motion verb, while the translative function should be derived from a locational-goal-nonproximate noun phrase in conjunction with a nonmotion verb. These two derivations of what seems to be the same suffix are sufficiently similar to suggest a single general rule using features and the 'alpha convention' to require identical specification for the verbal feature 'motion' and the nominal feature 'proximate'. In order to capture this generalization, however, two assumptions about case in a generative grammar need to be made: a single category underlies both directional and locational, and a case-like feature specifies the notion 'goal'. Furthermore, if a case-like nominal feature is used to distinguish directional and locational, it becomes possible to define motion verbs on the basis of selection rather than subcategorization. Such observations indicate that the use of case-like features is a worthy area of exploration in syntactic theory.
HANDOUT
The Quechua Directional Verbal Suffix

1a. kuti-mu-nqa. He will return (come back).
1b. kuti-nqa. He will return (go back).
2a. yayku-mu-nqa. He will enter (come in).
2b. yayku-nqa. He will enter (go in).
3a. t'anta-ta apa-mu-nqa. He will bring the bread.
3b. t'anta-ta apa-nqa. He will take the bread.
4a. mik'hu mu nqa. He will go eat.
4b. mik'hu-nqa. He will eat.
5a. pufu-mu-nqa. He will go sleep.
5b. pufu-nqa. He will sleep.
6a. t'anta-ta ranti-mu-nqa. He will go buy the bread.
6b. t'anta-ta ranti-nqa. He will buy the bread.
7. kay-man kuti-mu-nqa. He will come back to here.
8. *kay-man kuti-nqa. (He will go back to here.)
9. *haqay-man kuti-mu-nqa. (He will come back to there.)
10. *kay-manta kuti-mu-nqa. (He will come back from here.)
11. haqay-manta kuti-mu-nqa. He will come back from there.
12. haqay-manta kay-man kuti-mu-nqa. He will come back to here from there.
13. When a motion verb occurs in association with a directional-goal-proximate noun phrase, the cislocative -mu suffix is added to the verb.
14. haqay-pi mik'hu-mu-nqa. He will go eat over there.
15. *kay-pi mik'hu-mu-nqa. (He will go eat here.)
16. haqay-pi mik'hu-nqa. He will eat over there.
17. When a non-motion verb occurs in conjunction with a locational-goal-nonproximate noun phrase, the translocative -mu suffix is added to the verb.
18a. llaqta-pi mik'hu-nqa. He will eat in the town.
18b. *llaqta-man kuti-nqa. (He will eat to the town.)
19a. llaqta-man mik'hu-nqa. He will return to the town.
19b. *llaqta-pi kuti-nqa. (He will return in the town.)
20. (kay-man) puri-mu-nqa. He will walk to here.
21. (haqay-pi) puri-mu-nqa. He will go walk (over there).
22a. para-mu-nqa. It will rain (here, on me).
22b. para-nqa. It will rain (there, outside).
23. SD: X [+V, oMotion] Y [+Place, +Goal, oProximate] Z
SC: 2 + 2 + -mu
24. SD: X [+V] Y [+Place, +Goal, oDirectional, oProximate] Z
SC: 2 + 2 + -mu
"CONTRAST" AS A SEMANTIC CATEGORY IN RUSSIAN

On basis of A Solženitsyn's "Dla pol'zy dela" a semantic analysis of the conjunctions i, a, no, and da is proposed, proceeding from the Prague School assumption that linguistic units can be analyzed in binary privative oppositions.

It seems then that i is unmarked, denoting juxtaposition or even contrast; a is marked vis-à-vis i and signals that a new element follows which is not related to the preceding. No has the same meaning as a but in addition signals that the new element is seen or interpreted by the speaker only. Da indicates agreement with the preceding; the agreeing element is seen by the speaker only.

The meaning of the above conjunctions can then be described by three semantic distinctive features: newness (a and no), subjectivity (no and da), and agreement (da).

No allegedly expresses contrast, but so may the other conjunctions. It is shown that the type of contrast depends on the meaning of each conjunction. "Contrast" then appears not to be a linguistic category and its different types can be shown to be combinatorial variants of the meanings of the above categories.

The sentences in the handout illustrate different types of contrast.

2.41 Načali ešče strojit' pervyj étаж—i vse sam jalos'.
They still made a start with the second floor, but then the whole thing slowed down.

3.12 ... stojala molodež, smotreła i ėzdala. A u samyx neterpelivyx vyrvalos' sperva potişe: ... young people were standing, looking and waiting. But then the more impatient burst out, at first still rather quiet ...

3.51 kakoj-to mal'čička let devjatnadcati ... razvenil po vsej doske čertezh, vystavil na stol kakoj-to reguljator-indikator-kalibrator, kotoryj sam že on i zdelal. Indikator škot poščelkivat', pomizat', a paren' xodit, paloškoy po čertezam pomaxivat' i tak ēto česat, mne prosto zavidno stalo.

A boy of about nineteen ... has hung his drawings all over the board, he has put some kind of a regulator-indicator-calibrator of his own making on the table, that indicator keeps clicking and blinking, and that boy walks around, waves with his stick over the drawings and behaves in such a way, I really became envious.

4.11 Po Literature i russkomu jazyku on tjanulja, pravda, nezhu dvojkoj i trojkoj, no ešče s pionerskich let sam sobiral priemniki ... 

In Literature and Russian his grade was barely passing, but ever since he was a cub-scout he had been putting radios together ...

4.131 "A ja ved' vam dva raza zvonil segodnija!" obradovano ulybalaja Fedor Mixeevič Kabalyginu ...

"You know, I tried to call you twice today," Fedor Mixeevič told Kabalygin with a joyous smile ...

4.13 Segodnja s utra užu dvaždy Fedor Mixeevič zvonil Kabalyginu ... No oba raza emu otvetili, čto Vsevolod Borisovič net.

This morning he had already twice tried to call Kabalygin ... But both times he was told that Vsevolod Borisovič wasn't in.
4.15 Ona šla yške, razdvigaja studentov. Lico se bylo morčenisto, no podvižno i školilos' k rešitel'nomu podborodku.

She went up the stairs, pushing the students aside. Her face was wrinkled, but lively and ended in a decisive chin.

4.23 "A što ty za leto pročel?"
"Da počti ničega, Lidija Georgieva," ...
"No počemü že," rasstroilas' Lidija Georgieva. "Začem že ja tebja učila?"

"And what did you read over the summer?"
"Well, almost nothing of course, Lidija Georgieva," ...
"But why?" Lidija Georgieva was upset. "What did I teach you for then?"

4.25 Ivan Kapitonovič Grašikov ne ljubil vosennyh vospominanij, a svoe-nosobennho.........................
No segodnja on izmenil svoemu pravilu.

Ivan Kapitonovič Grašikov did not like war memories, and especially not his own.........................
But today he made an exception.

4.25 No Grašikova ne toliko ne uvedili i ne pribili ego frazi ...
... on počšvartoval podstup odnoj iz tex rešajuščix minut žizni, kogda niki ego sami vrastali v zemlju, i on ne mog otojti.

But Grašikov was not only not convinced nor nailed down by his sentences..., but rather he felt that it was going to be one of those decisive moments, when his legs grew into the ground and he simply could not yield.
The theory of transformational grammar presented in Katz and Postal's *An Integrated Theory of Linguistic Descriptions* and Chomsky's *Aspects of the Theory of Syntax* constituted the first major step beyond Chomsky's original systematic statement of transformational theory in *Syntactic Structures*. The work of McCawley, Gruber, Lakoff, Postal, and their followers which has appeared recently under the title "Generative Semantics" claims to be the second major advance in the development of transformational theory and to supersede the first. Often this claim has been presented to the linguistic public in the style of a sales campaign to establish the product as superior to the "old brand x". The paper I will present tries to show that this new product, like many "new" commercial products today, is new in advertising and packaging only. I will argue that generative semantics defines grammars that are fully equivalent to those defined in the interpretive theory of Katz and Postal's *Integrated Theory* and Chomsky's *Aspects*, and therefore, that the former theory amounts to a notational variant of the latter in the sense that it says nothing different from the latter about the nature of language.

This paper will be concerned with the comparison of alternative theories of grammar and thus must invoke a neutral framework for comparing such alternatives, in this case, systems of (possibly non-local) constraints on a sequence of labeled trees (a 'derivation'). While the neutrality of this framework will undoubtedly be contested, it is appropriate here since (i) Chomsky and Katz appear to concede the point (implicit in the framework) that semantic structures can be taken to be labeled trees, (ii) there is no known alternative which lets one make explicit the interaction which Chomsky sees between semantic interpretation rules based on deep structure and SLR's based on a derived syntactic structure (i.e., a SLR based on a derived syntactic structure $P_j$ is a constraint on how $P_{i-1}$ may differ from $P_{i-1}$ if such-and-such conditions are met in $P_j$, where $P_{i-1}$ is the approximation to semantic structure which forms the real 'input' to the SLR and $P_{i-1}$ is what results from $P_{i-1}$ by 'correcting' it on the basis of the indicated characteristics in $P_j$), and (iii) other controversial aspects of this framework (e.g., that the analogue to a base component must be a set of node admissibility conditions rather than a system of rewriting rules) seem to have no bearing on the issues involved.

This paper will defend the principal claims of generative semantics, namely that semantic structure must be a labeled tree, that a descriptively adequate grammar must contain a system of *generative* rules (i.e., positive constraints on a specific stage of a derivation such that every node at that stage must meet one of the constraints) for semantic structure but not for any other stage of the derivation (except that 'output constraints' might be generative in this sense), that that system is (with two qualifications) universal, and that interpretive rules (constraints on how different stages of a derivation may differ) form a homogeneous system as regards restrictions on their application (e.g., Ross's movement constraints) and their form.
INDEX

Aarsleff, Hans 78
Ballard, W.L. 35
Bell, Alan 69
Bever, Thomas G. 54
Beynes, G. Kooleman 150
Bills, Garland S. 147
Bird, Charles S. 43
Cardia, Guy 119
Chapais, Paul G. 153
Chen, Matthew 34
Clark, Eve V. 57
Cohen, David 114
Cook, Walter A. 42
Cressey, William W. 141
DeCamp, David 91
Dingwall, William O. 59
Downing, Bruce T. 25
Drachman, Gaberrell 58
Fassol, Ralph W. 37
Fidelholtz, James L. 131
Francis, E.D. 11
Fraser, Bruce 47
Fulmer, Daniel H. 135
Garvey, Catherine 83
Green, Georgia M. 130
Guentherodt, Ingrid 80
Hemp, Eric F. 12
Harris, James W. 48
Hass, Wilbur A. 73
Hill, Archibald A. 86
Hoard, James E. 139
Houston, Susan H. 124
Hsieh, Hsin-I 90
Ingran, David 146
Jenkins, Charles M. 33
Kerrtronen, Lauri 71
Katz, Jerrold J. 156
Kimbal, John P. 77
Kirsner, Robert S. 104
Labov, William 53
Langendoen, D. Terence 79
Larson, Jerry 145
Malkiel, Yakov 7
Malone, Joseph L. 87
Mathies, Gerald B. 75
McCawley, James D. 157
Messing, Gordon M. 17
Moravcsik, Edith A. 115
Moskowitz, Arlene L. 56
Naeser, Margaret A. 55
Naro, Anthony J. 20
Nichols, Johanna 99
Partee, Barbara H. 52
Pearson, Bruce L. 118
Rea, John A. 38
Ristinen, Elaine K. 109
Robson, Barbara 22
Schwartz, Arthur 26
Seropian, Hasmig 134
Shibatani, Masayoshi 65
Sloat, Clarence 136
Smith, Timothy S. 64
Taham, Marcel A.A. 68
Tunik, Galina 59
Underhill, Robert 110
Vanderalice, Ralph 60
Vennemann, Theo 92
Wall, Robert 74
Wilbur, Terence H. 105
Wolfe, Pat 32
Zimmer, Karl W. 39

[159]
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