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Introduction

This third volume of the Kansas Working Papers in Linguistics covers a diversity of topics which range from general linguistic theory to child language. To provide coherency, we have, therefore, grouped the papers into a number of major sections as reflected in the Table of Contents. What follows is our attempt to capture the major point of each paper, organized according to those sections.

The first paper is Ken Miner's "On the Notion 'Restricted Linguistic Theory': Toward Error Free Data in Linguistics." Miner maintains that linguistic theories must be more firmly grounded on secure data bases. He contends that the attempt to construct theories based on limited data from a few languages leads to serious errors. Rather than seeking to construct general theories, Miner advocates that we should limit ourselves to "restricted theories" which may be confined to one language family.

The Phonetics-Phonology section contains four very different papers. Geoff Gathercole's research demonstrates that instrumental evidence can play a crucial role in phonological analysis. His instrumental research on strong and weak stops in Kansas Potawatomi clearly indicates that the underlying contrast between these series is preserved even in final positions, not neutralized as heretofore supposed. In addition, the paper provides evidence for the interaction between stress and the syntactic structure of Potawatomi.

Mehmet Yavas' paper on the implications of borrowing for Turkish phonology provides a modus operandi for the analysis of languages which have lexicons replete with loan words. In the case of Turkish, previous analyses, though recognizing the importance of loan words, have neglected to incorporate them into their descriptions. Drawing evidence from borrowing, Yavas proposes that current treatments of vowel and consonant harmony should be drastically revised: consonant harmony plays the pivotal role in determining the vowel choice, not conversely. By so analyzing Turkish, he is able to account for a wide range of data unaccounted for by treatments which assume the primacy of vowel harmony.

Robert Rankin's study of Quapaw as a dying language supports the evidence from child language acquisition, aphasia, and comparative linguistics that there exists a universal hierarchy of sound-type complexity. As Quapaw functioned less and less as a native language, principled changes occurred in its phonology: the types of series lost and the order in which they were lost were determined by their relative complexity, with the most marked being lost first.

Code-mixing is the topic of Maria Dobozy's paper. Taking a letter written by a bilingual American-Hungarian as her data, Dobozy describes the phonological rules that are operating in such a code-mixing, with special emphasis on vowel harmony. She demonstrates that vowel harmony is an important process in the system and plays a central role in the rendition of English words by such speakers.

The first paper in the Syntax-Semantics section is Gerald Denning's, "Meaning and Placement of Spanish Adjectives." Denning attempts to clarify the problems of the differences in the meaning and treatment

of restrictive adjectives in three dialects of Spanish. He argues that a strict generative semantic approach will not handle the data and suggests an analysis within the framework of pragmatics.

Virginia Gathercole provides a cross-linguistic study of the use of the deictic verbs "come" and "go." She formulates the uses of "come" and "go" in eleven languages by extending Talmy's (1975) model for verbs of motion to include a presuppositional component. Gathercole divides the contexts in which "come" and "go" are used into (a) immediate deixis and (b) extended deixis. Her goal is to characterize the use of deictic verbs of motion in the eleven languages studied by a limited number of assertional and presuppositional components and thus suggest a possible universal framework for such verbs.

Whereas Denning and Gathercole focus on language related issues, Juan Abugattas takes a more general, philosophical approach in his discussion of speech acts. He claims that previous speech act analyses used the sentence as the basic unit. Abugattas believes, however, that we must go beyond the sentence: "social reality" dictates that we categorize sets of sentences into speech acts, which he calls "complex acts."

Kurt Godden's paper, "Problems in Machine Translation Between Thai and English Using Montague Grammar," brings us to a specific language oriented concern: how to mechanically translate sentences, in particular those containing restrictive relative clauses, from one language to the other. He enumerates the problems related to such a task and proposes a solution involving meaning postulates and context within a Montague framework.

Historical and Comparative Linguistics is represented by Karen Booker's "On the Origin of Number Marking in Muskogean." Booker reconstructs two proto-Muskogean number markers, one dualizer and one pluralizer which were first used with intransitive verbs of location and then generalized to locative transitives. Later these markers spread to intransitive non-locatives. Booker maintains that the highly complex suppletive verb system of Muskogean arose when these markers lost their original meaning.

Three papers, Esther (Etti) Dromi's analysis of the acquisition of locative prepositions by Hebrew children, Gregory Simpson's study of children's categorization processes, and John More's review of relative clause research, constitute the Child Language Acquisition section of the working papers. Dromi's study, which is one of the few published works in the acquisition of Hebrew, compares the order of acquisition of Hebrew locatives with Brown's (1973) order for English and also with Slobin's (1973) universals. Among her findings, Hebrew al ("on") is acquired later than English on. Her findings for Hebrew locatives are particularly interesting in that they allow a comparison of the acquisition of prefixes with that of full prepositions. Her conclusions point to the pivotal role that morphological complexity plays in the order of acquisition of locatives in Hebrew.

Gregory Simpson's major concern has to do with the process by which children form conceptual categories. He argues, on the basis of experimental data, that overextensions should not be taken as evidence

for category formation. His data suggest a distinction between concept formation and object naming, a distinction not made in previous studies. "Function," what objects can do or what can be done to them, determines how that object is conceptualized, but an object's perceptual properties may determine the name given to it. Therefore, "the child may know that two objects don't really belong together, but gives them the same name until he has more evidence."

The acquisition of relative clauses has been a topic of great interest among psycholinguists. John More presents a valuable critical review of the recent literature with special emphasis on the debate between Dan Slobin (1971), Amy Sheldon (1974), Michael Smith (1975), Tavakolian (1977), and deVilliers et al. (1976). The Minimal Distance Principle, the Noun-Verb-Noun Strategy, the Parallel Function Hypothesis, and Slobin's operating principles are compared, along with the formulations of deVilliers and Tavakolian.

Five major topic areas are represented in this third volume of the Kansas Working Papers in Linguistics. Each paper in its own way is a contribution to linguistic scholarship: some provide evidence in new areas of inquiry, others bring new evidence to bear on old questions, while still others suggest future courses of research.

Anthony Staiano and Feryal Yavas

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THE UNMARKING OF QUAPAW PHONOLOGY:
A Study of Language Death.

Robert L. Rankin

The Quapaw language is a member of the Siouan family of American Indian languages. Within Siouan it is most closely related to the other languages of the Dhegiha subgroup, Omaha and Ponca, spoken in Nebraska and Oklahoma, and Kansa and Osage, spoken in Oklahoma. In late pre-historic and early historical times the Quapaws lived along the Mississippi River near the mouth of the Arkansas, south of Memphis.

They were soon forced to move and made their way to the Indian Territory, later the state of Oklahoma, where they have lived both on the Osage Reservation and on their own lands in the northeast corner of the state.

The Quapaw language is no longer spoken. The last person able to make up sentences died in 1975, so that the language is now, to all intents and purposes, extinct. I began field work on Quapaw in 1973 and was privileged to work with the last fluent speaker as well as several other persons who had been exposed in varying degrees to the language during their lives.

Younger interviewees who could recall sentences, isolated phrases, or words they had heard from their elders showed systematic and interesting reductions in the inventory of Quapaw phonemes. Some of these reductions can be described as simple acculturation--that is, they result in a more English-like phonology. Others however, can not be described purely in terms of acculturation, hence the title of my paper "The unmarking of Quapaw phonology."

The Quapaw phoneme inventory (phoneme in whatever sense you care to define it) is given below.

Glottalized:		t ^ʔ	k ^ʔ	ʔ (<*pʔ)
Aspirated:	p ^h	t ^h	k ^h	
Tense:	pp	tt	kk	
Lax. (vl.):	p	t	k	
Glottalized:		s ^ʔ	x ^ʔ	
Tense:		s	x	h
Lax:		z		
Resonants:	m (m~b)	n (n~d)		
	w			
Vowels:	i	o	i	u
	e	a		ə

The phonological inventory is fairly rich in consonant distinctions, containing as it does a four way voiceless distinction among stops and a three way distinction among fricatives. The palatal frica-

tives are also phonetically retroflexed, a characteristic shared with several other southeastern Indian languages.

My sources for the complete Quapaw inventory are three: (1) Texts and vocabularies collected between 1827 and 1930 by several scholars and amateurs, (2) Comparative data from my field notes on the closely related Omaha and Kansa languages, and (3) Two speakers of the Quapaw language, both women. I was able to work for a short period with one before she suffered a stroke in 1974. The other had died shortly before I began my work, but her voice was preserved on tape by her grandsons. Numerous examples and comparison with philological materials show that both speakers had good command of the entire inventory and accompanying clusters and rules.

All other Quapaws I interviewed possessed truncated systems lacking one or more series of phonemes. These other speakers fall naturally into three groups.

Group I, only one member, a woman in her 70's who had known the language well as a child, and who remembered numerous phrases, several hundred words and a short prayer.

Group II, consists of three people in their 50's and 60's whose parents had been fluent. These people remembered between 150 and 300 words each along with a few short sentences.

Group III, consists of all the rest, mostly grandchildren of fluent speakers. One of these had written down in an English based orthography about 250 words spoken by his grandmother.

The total sample unfortunately is quite small -- only thirteen people -- so that in order to retain some sort of statistical validity, I am forced to confine my comments to phenomena which were very widespread. There are, however, a number of isolated phenomena which may take on significance as we learn more about language decline.

Turning to the earliest non-fluent generation we find the following modifications in the Quapaw segment inventory:

- (1) Glottalized fricatives have deglottalized and have everywhere merged with their voiceless plain counterparts:

Group I		Fluent Speakers	
wašáge-hí	<	wašʔáke-hí	'very big'
waxó	<	waxʔó	'woman'

- (2) Glottalized stops appear to vary, but examples are few:

wikkí~wikʔí	<	wikʔí	'I give' (sic) ('I give you')
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- (3) Aspirates are intact:

íšpahà nìkháše		'you pl. sitting understand'
mìkhé		'I'm the one, sitting'
tekhé~dekhé		'that one, lying'

- (4) Retroflex sibilants vary, even with successive pronunciations of the same morpheme:

šŷke	'dog'	but	šŷkeágnj	'sit-on-dog = horse'
žó	'flesh, skin'	but	žožitte	'red skin, Indian'
aččéẓ̌a	'goodness!'			
ažŷ	'sleep'			

- (5) Dental stops often palatalize and affricate before i.

ǰíe	<	díe	'you'
akǰíni	<	akdé nj	'I returned'
ščítte	<	stétte	'tall'

This frequent palatalization may be due to interference from Osage however, since one group of Quapaws lived among and inter-married with the Osages over a period of several generations. The Osage palatalization products are assibilated chi, cʔi, cci (where c = ts).

- (6) Nasal vowels are intact:

šŷke	'dog'
ǰdé	'ache'
sátt̩a	'five'
ažŷ	'sleep'

- (7) Voiceless tense unaspirated stops are intact.

kkattappá	'football'
sátt̩a	'five'
níkka	'man'
ppahí	'head'

- (8) Lax stops, while tending to remain voiceless, sometimes voice, not surprisingly, when following nasal vowels. But I will deal with the lax stops in greater detail below.

Children of fluent speakers, who may not have mastered the language in their youth, were able to recall only words and short phrases. Their segmental phonology shows further reductions, but equally interesting are their retentions.

- (1) Glottalized fricatives have, of course, merged with their plain voiceless counterparts, except for the velars xʔ, x which have become h.

wesá	wes-á	<	wesʔá	'snake'
wahó		<	waxʔó	'woman'
mekkáhe		<	míkkáxʔe	'star'

Having given 'star' as mekkáhe one speaker volunteered that "The Osage word is míkkáxʔe," producing without difficulty the ejective kʔ. He and all younger speakers had lost all glottalized stops in their Quapaw examples however.

- (2) Ejectives merge with the corresponding voiceless tense, unaspirated stops.

wíkki	<	wíkʔí	'I give you'
tte	<	tʔe	'dead'

- (3) This generation has also merged the aspirates with the tense, unaspirated series.

jppá~jpá	<	ophá	'elk'
wáttə	<	wathá	'melon'
wattəse	<	watházi	'corn'
wattíška	<	wathíška	'river'
kkáge	<	kháke	'third son'

The phonetic products of the reduced glottalized and aspirated stops seem to defy description purely in terms of phonological acculturation. This is especially true of aspiration which was lost even in those environments where English would show strong allophonic (phonetic) aspiration--initially and before stressed vowels. This English phonetic rule failed to apply in the Quapaw vocabulary of those speakers whose command of the language in their later years was limited to word lists. Merger of glottals and aspirates with the least marked Quapaw series, rather than the nearest English series, was the rule.

- (4) Retroflexed shibilants appear most frequently as clusters of alveolar sibilant followed by r.

zro	<	ʒo	'flesh'
srúke	<	ʒúke	'dog, horse'
sróté	<	ʒótte	'smoke'
māsrō	<	māžū	'land'
ppóšī	<	ppóšī	'screech owl'
šíšta	<	šíšta	'quail'

- (5) Some dental stops are palatized and affricated, as with the older generation, but their capricious distribution and the complete lack of intermediate stages such as the tʃ, dʃ found in Kansa lead me again to suspect an Osage source for the affricates.

	wiččígo, wiccígo	<	wittíko	'grandfather'
	mŋxči	<	mŋxti	'one'
	čekažíze	<	?	'lightning'
but:	nŋt̥tiud̥iši	<	nŋt̥te od̥iši	'trousers', etc. (lit. 'covers buttocks')

(6) Nasal vowels, again, are largely intact:

	i	<	i	'rock'
	sr̥ŋkə	<	ʂŋke	'dog'
	s̥ŋkə	<	s̥ŋka	'squirrel'

(7) Tense, unaspirated stops are preserved intact:

	šáppe		'six'
	sátt̥a		'five'
	šákká		'nine'

(8) Whereas most instances of the lax stops were voiceless for fluent speakers, this first non-fluent generation voices the majority of them. Labials are the most affected, velars the least:

<u>p</u>	n̥p̥be	<	n̥p̥é	'hand'
	h̥p̥é	<	h̥p̥é	'shoe'
	bah̥t̥t̥	<	pax̥t̥t̥	'sweat'
	n̥p̥b̥e~n̥p̥ə	<	n̥p̥á	'two'
	bag̥t̥	'fiddle' <	pak̥t̥te	'accordion'
<u>t</u>	ibad̥ó	<	ipax̥tó (?)	'fork'
	šed̥ó	<		'get away!'
	kkóda	<	kkóta, kkóda	'friend'
	wad̥é-	<	wet̥á-	'index (finger)'
	dákka	<	tákka	'hot'
but:	tóba	<	tóba	'four'
	tátt̥a	<	tátt̥a	'what'
	tan̥ŋba~dan̥ŋba	<	tan̥ŋpa	'smoke, pipe'
<u>k</u>	gah̥ŋge	<	kah̥ŋke	'chief'
	t̥t̥ŋka	<	(same)	'big'
	sr̥ŋkə~s̥ŋge	<	ʂŋke	'dog'
	t̥t̥i kəhé	<	t̥t̥i-káxe	'carpenter'
	hin̥ŋke	<	(same)	'leggings'
	s̥ŋkə	<	s̥ŋka	'squirrel'

While voicing of the lax series in Quapaw has become predominant only after contact with French and English and may thus be viewed as acculturation, it is a trend that was established in Dhegiha Siouan languages before contact with Europeans. These Proto-Siouan lax stops had voiced in the closely related Omaha-Ponca language in prehistoric times and have become voiced in the Kansa language within the last 100-150 years. The James Owen Dorsey papers show that there was considerable fluctuation in Kansa in the 1880's, but voicing is complete in the speech of the last four or so speakers of Kansa today.

The Dorsey papers also reveal sporadic voicing of the lax bilabial stop in Quapaw in the 1800's, and Albert S. Gatschet also recorded voiced stops in Quapaw at about the same time.

The point here is not really to argue the source of Quapaw voicing, but rather to show that by the time the glottalized and aspirated stops simplified, the systematically least marked stop series in the language was the voiceless tense unaspirated series. The lax series had already acquired voicing.

It is impossible to tell whether the Quapaw speakers of these intermediate generations simply failed to acquire the necessary phonological oppositions in infancy, thus reducing the inventory to the two less-marked series, or whether the more marked glottals, aspirates, etc. were, for the most part, acquired early and subsequently lost. Several of the older Quapaws mentioned however, that they had spoken the language with their parents and grandparents in their youth and that in fact the latter had spoken English badly.

It is safe to say in any event, that the generation born just before and during World War II failed to acquire the more marked series, learning only the few words and short phrases that they were exposed to.

In this third group whose mastery of Quapaw is limited to memorized words and phrases, acculturation apparently takes over and the phonology and phonetics are highly Anglicized. There are of course no glottalized fricatives or stops, and no retroflex fricatives. The English aspiration rule applied to words uttered in isolation, although one speaker who read me a list of about 250 words he had written down, lost his Anglicized consonants and vowels as he "got warmed up."

The lax stops again tended to be voiced, and again the labials were completely voiced while the velars show considerable fluctuation. Lack of nasalization of vowels is also prominent:

to	<	ttu~tta	'town'
makáša	<	maḱkáša	'coffee'
ówič(č)i	<	owičh̥j	'I hit him' (sic) ('I hit you')
žop(p)é	<	žappe	'leaves'
tšta	<	jštá	'ax' (sic), ('eye')

The velar fricative \underline{x} (from \underline{x} and $\underline{x}^?$) generally appears as \underline{h} . This is not unexpected, since \underline{it} is not an English sound. In a few cases, far

too few to be anything but suggestive, assimilation to place of articulation of a following obstruent has occurred.

ogá <u>f</u> pa	<	oká <u>x</u> pa	Quapaw
θ <u>t</u> á	<	<u>x</u> tá	skinny
m <u>ř</u> ə <u>k</u> š <u>č</u> i	<	m <u>ř</u> <u>x</u> ti	one

These are about all the generalizations I feel I can safely make about the decomposition of Quapaw phonology.

The types of reductions and the order in which they occurred in Quapaw correlate well with our understanding of relative phonetic complexity of segment types, their relative frequency of occurrence in the world's languages, and the order of acquisition and loss during first language learning and aphasia.

This study of language death confirms the relative hierarchy of sound types found by Greenberg (1966, 63-66) in several languages including Chiricahua Apache, which has a somewhat similar three-way contrast of glottalized, aspirated and plain stops, along with nasal vowels. The Quapaw progression suggests a few minor additions and refinements. Proceeding from most to least marked Quapaw consonant series, that is, from first lost, to last lost, to retained series, we arrive at the following ranking:

- (1) Glottalized fricatives were lost first.
- (2) Glottalized stops were retained sporadically by those who had lost the fricatives.
- (3) Aspirated stops were retained by those who had lost all glottalization.
- (4) Lax stops voiced; labials affected first, velars last.
- (5) Retroflex shibilants were retained as clusters by those who had lost all aspiration.
- (6) Nasal vowels were still common in the pronunciation of speakers who showed no glottalization, aspiration or retroflexion at all.
- (7) Tense voiceless unaspirated stops remained the least and last affected by changes in the system.

If I had begun my study of Quapaw ten years earlier, perhaps interesting observations on grammatical and morphophonemic decline might have been forthcoming along with my treatment of inventory. The moral is clear and was, in fact, drawn by Dressler (1972) in his excellent paper on phonological decline in Breton. If we are to understand the facts of language decline, the field linguist researching dying languages must obtain material from non-fluent speakers of several generations as well as from fluent speakers.

With respect to the subject of this paper, it would be interesting to know whether or not, between the fluent generations on the one hand and the acculturated generations on the other, there are normally speakers whose phonological inventories become less marked without necessarily moving in the direction of phonetic accommodation to the dominant tongue.

Footnotes

1 I wish to express my appreciation to all those Quapaws who helped me in various ways with this study: Mrs. Pat Allen, Mrs. Alice Gilmore, Mr. Hayes Griffin, Mr. and Mrs. George McWatters, Mrs. Mary Redeagle, Mssrs. Bill, Charles and Kugee Supernaw, Mrs. Maude Supernaw, Mr. and Mrs. Leroy Watson, Mr. Robert Whitebird.

2 Field work on Kansa cited in this study was supported by the University of Kansas and by the Phillips Fund of the American Philosophical Society.

3 It is interesting that Dorseys' Kansa Texts (c.1880) show (among the lax stops) that the velars were voiceless more often than the dentals (few cases) or labials (nearly all voiced).

References

- Campbell, Lyle. 1976. Language contact and sound change. William Christie, ed. Current Progress in Historical Linguistics. North Holland pub.
- Dorsey, James Owen. 1890. The Čegiha Language. CNAE VI, 1-783.
- _____. c. 1890. Quapaw-English Vocabulary. Unpub. MS. NAA, Dorsey Collection: Quapaw 3.2.4 (16).
- _____. c. 1890. Kansa-English Vocabulary and Texts, Unpub. MSS. NAA, Dorsey Collection (4800).
- Dressler, Wolfgang. 1972. On the phonology of language death. PCLS-8. 448-57.
- Greenberg, Joseph H. 1966. Language Universals: With Special Reference to Feature Hierarchies. Janua Linguarum, Series Minor, 59. The Hague.
- Hadley, Lewis. 1882. A Quapaw Vocabulary and the Quapaw and Ponca Compared. Unpub. MS. National Anthropological Archives (NAA) (No. 918?).
- Hamp, Eric P. 1968. Acculturation as a late rule. PCLS-4.103-10.
- Rankin, R. L. 1973-. Unpublished field notes on Quapaw, Kansa, Omaha languages.