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BORROWING AND VARIATION IN A PHONOLOGICAL DESCRIPTION OF KURDISH

by
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A dissertation submitted in partial fulfillment
of the requirements for the degree of
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(Linguistics)
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Doctoral Committee:

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به جرد
"قربانت"

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To Movlude Mohammedi I would like to express my awe at his astonishing ability as language assistant in the field. His rapid mastery of sub-phonemic notation in Latin script was amazing.

To my Kurdish friends - Fawzia, Aisha, Perixan, Faxriya, Sayid Musa, Sayid Haji - I say 'zor,zor mæmnunɪm'. Their interest in me and my work, their unfailing hospitality and understanding made all the difference.

I also want to thank J.C. Catford and Kenneth Pike for their careful readings and constructive suggestions on various versions of the dissertation. I am also grateful to Penny Eckert for her comments and encouragement.

There is a Kurdish proverb, "Kurds have no friends." Recent events (see the Pike Committee Report*) seem to bear this out. Despite their oppression in the twentieth century, the Kurds whom I met were as friendly a group as any field worker or traveller could hope to find.

*Village Voice, February 16, 1976, pp.87-88

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CHAPTER 1

INTRODUCTION

Rasto be, pir zu be. [Speak the truth for you will soon be old]. Kurmanji proverb (Lescot, 1940, p. 217)

Between seven and sixteen million[1] people in the Middle East speak Kurdish as their native language. The Kurds occupy a cohesive region which includes parts of Iran, Iraq, Turkey, Syria, and the Soviet Union (see map on Figure 2a). Kurdish, a northwestern Iranian language, is a sister language to Persian. Although some finer dialect groupings have been proposed (see MacKenzie, 1961) Kurdish may be roughly divided into two groups: Sorani or Southern, and Kurmanji or Northern. The term "Kurdish" as it is used here includes only Sorani and Kurmanji, but not related Iranian languages such as Luri and Bakhtiari. The dialects of Sorani and Kurmanji are quite different from each other on all linguistic levels (see Chapter 2). Because of the mobility of the Kurdish population formerly, as a result of a nomadic way of life, and more recently, due to political upheavals, mutual intelligibility between any two speakers of Sorani or Kurmanji is usually possible with some adjustment on both sides. However, it is increasingly likely, with forced settlement of Kurds within national borders, that this mutual intelligibility may decline in the future.

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[1]Short and McDermott's Minority Rights Group report on the Kurds gives both of these figures. They comment (p. 6), "The unreliability of statistical information is, unfortunately, paralleled by the unverifiable nature of much of the material available to us about the contemporary condition of the Kurds in these countries."

The subject of this dissertation is the phonology of Iranian Northern Kurdish, hereafter referred to as Kurmanji. The last published descriptions of this dialect appeared in 1880 (Rhea) and 1900 (Makas). Unfortunately these analyses are of limited value for the following reasons: they do not label speakers so that they can be identified a century later after extreme population movement in the area; in each work the corpus is quite small; and the transcriptions used are inconsistent and idiosyncratic. There is a small body of modern linguistic works on certain other Kurdish dialects - see MacKenzie (1961a) and McCarus (1958) for a phonemic analysis of Iraqi Sorani, MacKenzie on Iraqi Kurmanji, Bedir-Khan and Lescot's (1970) grammar of Turkish Kurmanji, and Kurdoev (1960), Bakaev (1957), and Sokolova (1953) on Russian Kurmanji. The phonological analyses of these modern investigators are more valuable since the authors use more modern linguistic terminology as well as more consistent transcriptions. However, some of these studies are problematic for another reason. They describe Kurdish (or labeled geographical dialects of the language - cf. MacKenzie and McCarus) as if it is spoken by a uniform speech community. In some cases, areas of variation are alluded to, but never do these discussions form a central part of the analysis. This is incongruous since only in the case of Iraqi Sorani and Russian Kurmanji do established standard dialects of Kurdish exist. In the case of Iraqi Sorani, current published texts show that the standard, even in orthographical representation, is still evolving. In the case of the Turkish and Syrian dialect of Kurmanji, although it has been described by Bedir-Khan and Lescot and others as a uniform entity, it is unlikely that it has ever existed in a generally recognized standardized form. Most of these attempts at the standardization of Kurmanji were preceded by the rise of Ataturk and the subsequent outlawing of Kurdish language and culture in Turkey.

Besides the tacit standardization of Kurdish, the

modern linguistic works on Kurdish leave out another rather central aspect of the language. Before the rise of modern nation states in the Middle East, the Kurds, who occupied a large portion of the Zagros Mountains, were somewhat immune from the various political forces that ruled over their area (i.e., Turks, Persians, and Arabs). Presumably, in the past, tribal and natural geographical divisions were primary in determining linguistic dialects. However, even then, the surrounding languages exerted considerable influence on Kurdish as early loan forms from Arabic, Persian, and Turkish attest. However, following the collapse of the Treaty of Sèvres which called for Kurdish self-determination at the close of the first world war, the national borders became increasingly restrictive for Kurds. The Kurdish language came under natural as well as planned pressure from the different prestige languages with which it was (and is) in contact. At the same time that widening educational and economic opportunities were encouraging the Kurds to learn these languages, the governments were discouraging the old identification with clan and tribe or even the old identification as "Kurds" (cf. the appellation 'Mountain Turks'). Thus, for example, MacKenzie's treatment of the Kurdish dialects of Iraq seems somewhat anachronistic because it shows little regard for the effects of contact with other languages or dialects spoken in the area. We will comment further on how we dealt with these problems in the course of presenting a general synopsis of the dissertation in terms of what is intrinsically and extrinsically interesting about Kurmanji phonology.

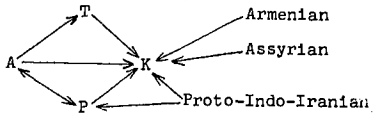
As we have suggested, Kurdish is at the center of a rapidly evolving political situation with influences from diverse languages. Besides these traditionally "extrinsic" factors (although they are intrinsic to our discussion), Kurmanji is interesting by virtue of such exotic phonetic features as pharyngealization and four manner series of stop consonants. Although we separate these two aspects of

Kurmanji - the internal description of the phonology and the external description of the social context - for the purpose of writing an introduction, it is a false dichotomy. There is simply no Kurmanji language apart from the social reality in which it is spoken. As we state in Chapter 2 and Table 2 where our sources are documented, there appear to be few Kurmanji monolinguals. In Iran there is no Kurmanji standard.

A concept of langue versus parole in the Saussurian sense does not seem easily applicable to a language such as Kurmanji. Although we would not deny that there is a psycholinguistic distinction between competence and performance within individual speakers of a language, there is no way to empirically establish the existence of a "langue" that Kurmanji speakers agree on whether they be rich or poor, male or female, Herki, Sayid, or Shikak, mono-, bi-, or trilingual. If we discard the variation, we discard the actual language and substitute a standard which exists nowhere.

As we noted above, Kurmanji phonology has some unusual sounds. In Chapter 3, four manner series at each stop-affricate articulation are posited. Chapter 3 introduces and discusses the phonetic and phonological behavior of pharyngeal(ized) segments in Kurmanji. Chapter 4 continues this discussion reanalyzing the pharyngeal series as derivable from a single underlying ʕ. This analysis is based on evidence of surface phonetic constraints, a defective distribution, phonetic realization, and alternations with aspiration that are peculiar to the behavior of pharyngealization in Kurmanji.

Less exotic but interesting phonological phenomena are a flip-flop rounding rule given in section 3.3.2 and morphologically conditioned stress and cluster simplification rules presented in Chapter 5. Pharyngealization and flip-flop rounding are also extensively discussed in terms of loan word assimilation (Chapter 6) and socially conditioned variation (Chapter 7).



(Time dimension not shown)

The above diagram gives some indication of the complexity of the loan situation in the areas where Kurmanji is spoken. All of the languages in the diagram - Arabic (A), Turkish (T), Persian (P), Armenian, and "Assyrian" (i.e., Aramaic - see Chapter 2) have influenced, and, except for the latter two are continuing to influence Kurmanji (K). The five loan languages are from three language families and, over the course of time, have also influenced each other. Thus, for example, Kurmanji may have Arabic loans in common with Turkish and Persian, Turkish loans in common with Persian, or Persian loans in common with Arabic and Turkish. The latter example of Persian loans is the most difficult to document. Some Kurdologists (cf. Justi, 1872) have been led to posit the majority of Indo-Iranian forms in Kurmanji as Persian loans rather than independent cognate forms. This approach seems rather extreme. In our treatment of loans we have chosen to study only those forms which are obvious documentable loans - mainly from Arabic and Turkish. However, it has been possible to document the effects of Persian phonology and cognates on Kurmanji, especially current effects. In the past, Kurmanji appears to have absorbed pharyngeal(ized) segments from Arabic, and, perhaps, a consonantal weakening rule from Azero Turkish. In the present, different types of modifications of the system can be traced to Persian (Chapter 7).

It would have been ideal to have studied Kurmanji within all of the nations where these speakers reside. Then it might have been possible to substantiate our hypothesis

that the newer influences of standard languages may be taking precedence over older dialect (tribal) divisions. However, due to restrictive government policies either towards Kurdish or towards American researchers, it was only possible to study Kurmanji in Iran. An earlier study of one Kurmanji speaker from eastern Turkey leads us to suspect that the Turkicization of Turkish dialects of Kurmanji have already made them quite different from neighboring dialects just over the border in Iran. However, to some extent, the continual movement of Kurdish refugees and smugglers back and forth across these borders has slowed the diversification.

Variation appears to be fundamental in Kurmanji. This is not surprising considering the rapid social change that has occurred in the area. My informants told me that highway robbery was common thirty years ago. Armed Kurdish insurrections occurred perhaps twelve years ago. The year I was in Iran, 1974-75, saw the first paved roads connecting Rezaiyeh to nearby cities, the first inter-city telephone service, and the first all-free public school system. Perhaps the change which will ultimately have the biggest impact on the future of Kurdish is the crushing of the Kurdish revolutionary movement in Iraq in 1975. The expansion of Kurdish language and culture in the Kurdish areas of that country in the last two decades was a model for Kurds in the surrounding countries where Kurdish culture had been increasingly repressed.

In the brief description above we have characterized Kurmanji as a nonstandard Iranian language historically subject to influence from five other languages which independently were influences on each other. Kurmanji has no recognized orthography and is banned in written form by the Iranian government. Speakers of Kurmanji do not recognize a standard dialect. They do not appear to regard one dialect as more prestigious than another. "Prestige" seems to be reserved for the standard languages. In the environment of rapid political and technological change where opportunities

are expanding for those who can speak the standard language and represent themselves as members of the standard culture, the pressures on both language and speakers are enormous.

Kurmanji has been termed "morphophonemically uninteresting" by several linguists. It is true that it has nothing comparable to the Arabic system of triliteral roots, the vowel harmony of Istanbuli Turkish, or the alternations of stress and vowel quality in the Latinate derivations of English. However, the Kurmanji loan situation is of a degree of complexity that has rarely been discussed in the literature (see section 6.1). There is no reliable lexicon for Kurmanji beyond what we could collect in the field, no confident native speaker judgments. We had to rely on what we could observe people producing. There is very little documentable history more recent than evidence from dead languages such as Avestan on which to base claims of change.

The challenge was to use inductive methodology and linguistic theory to describe some of this diversity insightfully and clearly. A single theoretical approach would have been unequal to the data. Thus, the reader will find excerpts of traditional phonemic, generative, natural phonological and ad hoc theory where it is appropriate. The unifying concept was a commitment to represent the language as it is actually spoken. Although it seems a modest goal when compared to some of the "universal" theories phonology that have been proposed, it is a goal rarely addressed, much less achieved in the literature. Following Labov (1971, p. 415), by our criterion a successful analysis "will fit the characteristics of the language used in every-day life when the linguist is not present."

CHAPTER 2

SOURCES

"Throughout the history of Kurdish dialect studies it has been notoriously difficult to find trustworthy informants...."

D. N. MacKenzie (1961a, p. xvii)

"The Kurds of this [Turkish] border area are a taciturn people - reserved and quiet. Their conversation is as cryptic as that of the classic Vermonter."

William O. Douglas (1951, p. 75)

2.0

The introduction indicated that the analysis found in Chapters 3-7 of this dissertation is based on data collected in the field. This chapter sketches the methodology and chronology of the collection of that data. Demographical information relevant to the linguistic situation (illustrated by Figures 2a and 2b) is given in conjunction with descriptions of the four villages and characteristics of the approximately thirty speakers used in this study (see Table 2). Finally, the procedures used in measuring data sampled both from the texts and from acoustic analysis are specified.

2.1 Chronology

The field portion of the investigation began in Fall 1974 in Rezaiyeh, Iran. The researcher had some prior experience with the other main dialect of Kurdish, Sorani, as well as with a Kurmanji dialect of Turkey. The initial problem was to locate one speaker of Kurmanji native to the Rezaiyeh area. I planned to work with this speaker

intensively while at the same time collecting data from a variety of other speakers. At first this task proved more difficult than expected. Rezaiyeh is primarily an Azeri Turkish city located in the province of West Azerbaijan. In general, the cities in this province from Rezaiyeh north are dominated by Azeri Turks (see Figure 2b). The surrounding villages, particularly to the west of the Rezaiyeh-Tabriz highway are mainly Kurmanj. Kurds and Turks are long-time enemies. The Azeri Turkish language, although not the official language in Azerbaijan (Persian is the single official language of Iran), is spoken in most daily commerce, in government offices, and even "off the record" in public schools in Rezaiyeh. Also present in the Rezaiyeh area are native Persian speakers (usually professionals or army recruits from southern, northern, or central Iran), Armenian speakers, Assyrian speakers (two dialects of neo-Aramaic - one Christian, one Jewish), and speakers from south of Rezaiyeh of the other main dialect of Kurdish, Sorani.

Despite the seemingly cosmopolitan nature of the city, there is strict separation between the above groups. Turkish neighbors of mine claimed they did not know any local speakers of Kurmanji. At the local college, not a single student was a speaker of the Kurmanji dialect of Kurdish, although numerous Sorani-speaking students from Kurdish cities were enrolled. Kurmanji speakers, located for the most part outside the cities, have had, in the past, little access to any preparation for college admission (see Chapter 7 for a discussion of how this situation may be changing).

Initially, data was gathered in person from broadcasters working at the local radio station. These broadcasters, native speakers of Kurmanji, prepared a nightly hour and a half program in Kurmanji. Since it later became apparent that broadcast Kurmanji is not typical Kurmanji, that data is analyzed separately in Chapter 7. After several months, I was able to find a Kurmanji speaker related by marriage to a Sunni Turkish student at the college. One of the radio broadcasters also introduced me to several

local Kurmanji households.

A two-part investigation proceeded through the winter. The major part involved speaker MM with whom I collected and analyzed texts, extracted and collected lexical material, and constructed a grammar. Further input to this analytic process was obtained from the female speakers of the households mentioned above. The core of Chapter 3 and the transcription used in this dissertation are the result of the initial work with MM (verified by work with rural relatives of his). Metalinguistic discussions during field work took place mostly in Kurmanji.

Following Stage One of the analysis, Stage Two began in the spring when roads to the villages became clear of snow and flooding. Tapes were made in the villages of relatives of the Kurmanj city dwellers using a Sony TC-800 B recorder with a cardiod dynamic microphone F-265 and an eletret condenser microphone ECM - 18N at speeds ranging from 7 1/2 down to 15/16 (most often 3 3/4). Four villages (see Chart 2 and Figure 2b) were the main sources of speakers. Primarily fables, anecdotes, and long fairy tales were recorded. Some informal conversation was collected as well as interviews on the subject of Kurdish history, marriage customs, prophetic dreams, and narrow escapes from death. Due to the political sensitivity of taping and data collection in this area of the world, the investigator refrained from using the interview technique to a greater extent. The collected stories, although slightly more formal than conversation or interviews, were always told in the company of other Kurds and presumably were free of artificially careful forms that might have occurred if only the investigator had been present to give feedback.

The difficulty of finding a speaker of Kurmanji was partially attributable to the fact that only an hour south of Rezaiyeh a very different dialect of Kurdish (Sorani) is spoken. Figure 2a indicates the location of major concentrations of Kurdish speakers showing the two dialect divisions (Northern-Kurmanji and Southern-Sorani) as well as

national borders and some surrounding languages. The following differences between Sorani (S) and Kurmanji (K) have been noted (see MacKenzie, 1961a, p. 225): K has a contrast for aspiration and pharyngealization in all voiceless stops where S has a two-way, rather than a four-way contrast for its stops; K and S have different forms for verb inflections (K drops person-number inflection in the past tense of transitive verbs); K has gender and number marked in the ezafe (morpheme which links nouns with following modifiers) while S has no gender and does not indicate number in the ezafe. Key lexical difference are: 'big' S gewrə /K mæzın; 'say (stem)' S -ie- K -ž-; 'man' S pyaw/ K mırof.

Cultural differences between Kurmanji and Sorani are probably fewer than linguistic ones.

Kurds have different types of cultural affinity with both Iranian and Arab peoples. In the first case, the Kurdish language is Indo-Iranian. Kurds share seasonal holidays such as næw řož (the new year) with the Persians as part of a common Zoroastrian heritage. On the other hand, Kurds are Sunni Muslims, placing them closer to Arab Muslims, most of whom are Sunni, than to Iranians who are Shia. Azeri Turks are also primarily Shia unlike Osmanli (Istanbuli) Turks who are Sunni. A small group of Sunni Turks are also found in West Azerbaijan. These Turks inhabit villages that were once Kurdish and intermarry with Kurds more often than other Azeris. They are probably Kurds who assimilated to the dominant culture of the area.

2.2 Speakers' Tribes and Villages

Four groups of Kurmanji speakers figured in this study - two tribes, Herki and Shikak, Sayid, a tribe-like group, and a fourth group of assorted urbanized Kurds. The Herki are located to the west and south of Rezaiyeh (see Figure 2b for the locations of groups and villages used in this study) as well as in Iraq. The Herki are one of the last large groups of pastoral nomads in Kurdistan. Until the defeat of the Kurds in the 1974 war, the Herki had been

allowed to cross the Iran-Iraqi border with their flocks twice yearly. The Shikak, reputed to be the largest Kurmanji tribe in Iran, are located to the north of Rezaiyeh on the poorest (most mountainous, least fertile) land in the area. The third group, the Sayids, trace their ancestry back to the prophet Mohammed, but more recently (twelfth century) to a famous Sufi order in Baghdad and, in the last two centuries, to an illustrious group of Kurdish revolutionary leaders (Eagleton, 1963). The Sayids have lived at various times in Turkey, Iraq, and Iran. The fourth group, the urbanized Kurds, are functionally de-tribalized although all Kurmanji speakers encountered by this investigator, as opposed to Sorani speakers, could identify themselves as affiliated with some tribe. The last group includes the radio broadcasters as well as the younger sons of some village sheikhs. These men reside more or less permanently in cities.

All of the groups noted above have had and continue to have extensive contact with speakers of other languages. Village schools have been set up in the last decade which give instruction strictly in Persian. The Herki, split between Iran and Iraq, have considerable contact with Arabic. Sayids have firm cultural ties with Arabs as well as past experience (some within the living memory of the speakers in this study) of residing in Turkey and Iraq. The Shikak, located along the Turkish border, regularly engage in smuggling (as do Kurds further south along the Iraqi border). Some Shikak villages are located quite close to Sunni Turkish villages. In the past the same type of contact situation existed, with the exception of schools in Persian and with the addition of the Assyrians and Armenians as powerful forces in the area. The Tergawar district, now settled mostly by Herki, was once all Assyrian. Past massacres and migrations of these Christian peoples have left them as only a nominal force in the area. In the past, however, they seem to have had great linguistic influence on Kurmanji. According to MacKenzie (personal communication)

Kurmanji borrowed its unaspirated stop series from Armenian ejectives. Another source of contact for the Kurmanji speakers of the Rezaiyeh area is the periodic flow of Kurdish refugees across the borders. In the more distant past some fled from repressions and collapses of rebellions in Turkey. More recently (and at the time of this investigation) the refugees have come from Iraq. Many are bilingual in Arabic and Kurdish as well as bi-dialectal in the standard Kurdish of Iraq and either northern or southern colloquial.

Beginning with Rezaiyeh, brief descriptions of the villages and city where the principal speakers used in this study were located are as follows (see map, Figure 2b):

Rezaiyeh - population approximately 160,000 (includes Azeri Turks, Persians, Kurds, Assyrians, Armenians); location of radio and television station; designated location (along with outlying areas where camps were set up) for Iraqi refugees

Village A - approximately 30 kilometers west of Rezaiyeh (regular bus service, good dirt road); population 150 households; comparatively wealthy (good grain harvests, mechanized farm equipment, good water supply): located in predominantly Kurdish area; mainly Sayid

Village B - 60 km by road from Rezaiyeh (some bus service, fairly good dirt road connection to city); population 200 households; wealthiest village visited (good harvest, sizable wooded areas, farm equipment, motorized grain mill, plentiful water supply, government-built hospital); predominantly Kurdish area (formerly Assyrian), mainly Herki

Village C - 60 km by road from city (no bus service to village, very poor road); population fewer than 75 households poorer village (mountainous lands not good for grain growing, small water supply, no mechanized farm equipment); primarily Shikak, located near Sunni Turkish villages

Village D - approximately 100 km northwest of Rezaiyeh, 40 km west of Shapur (smaller Azeri Turkish city); minimal bus service, fairly poor roads; population approximately 100 households; poorest village visited (small water supply, little topsoil, one tractor); exclusively Kurmanji area; mainly Shikak

All villages are within a day's walking distance of the Turkish border. The speakers shown on Table 2 are designated

according to village of origin as well as current residence elsewhere. Most of the speakers who formed a part of this study had resided in one of the above five places for at least ten years, usually longer. Although the investigator spoke with Iraqi refugees, one speaker of Kurmanji from Khorasan, and Kurds in Turkey, the analysis given here is not based on data from those sources. Information regarding degree of education, social status (wealth), fluency in other languages, and age is presented on Table 2 to illustrate major, not minor distinctions. Each speaker should also be considered in the context of his or her origin relative to the information given. For example, a servant from a richer village has more status than one from a poorer village. A speaker who has resided both in Rezaiyeh and in a village has less contact with the city if his or her village is remote than a similar speaker who was born in a village more accessible to Rezaiyeh.

2.3 Corpus and Details of Analysis

A total of ten hours of recorded speech was collected, including more or less extended examples from twenty-five different speakers. All ten hours of taped speech were transcribed into roughly phonemic form by MM, a native speaker of the Shikak dialect of Kurmanji, and checked by the investigator. At first, and occasionally later, both the investigator and MM transcribed a section of tape and compared forms. MM showed excellent ability to accurately transcribe pronunciations that differed from his own and he used several subphonemic symbols, especially when transcribing speakers of other Kurdish dialects.

A two thousand word lexicon was established from the transcribed texts. For many lexical items, two or more dialectal variants were recorded, either from the texts or by elicitation, and each entry listed a Persian and a Turkish translation as well as any Persian or Turkish cognates that were obvious to MM. Gender was established for all nouns and every entry was checked by SH, a Sayid speaker,

and most were checked by SM, another Sayid speaker. Before doing the segment counts reported in Chapter 7, all of the transcriptions involved were re-checked for accuracy. Any doubtful cases that were decidable by further analysis were submitted to such analysis (e.g., mingographic traces for determining presence of aspiration or independent auditory judgments of vowel quality).

2.4 Instrumental Procedures

Mingographic. Mingograms from an Elema-Schönander Mingograf Cardirex 24 were primarily used to determine voice onset in relation to consonant release. Tapes were run at half speed with the mingograph running at 50 mm/sec; this gives traces with the same amount of detail as if the mingograph were run at the maximum speed of 100 mm/sec but much more legible than the faint ink traces recorded at high speed. Traces representing linear amplitude, logarithmic amplitude and the envelope of the speech wave itself formed the output on three channels of the mingograph. To analyze the voice onset timing (VOT) or extent of aspiration of a given consonant, first the syllable concerned was located (usually on the wave envelope) and then the vertical variations in the amplitude trace were read for indications of voicing and aspiration. For unvoiced stops, the lag in voice onset was indicated on the amplitude trace by the interval between a smaller jump representing the noise-burst of the consonant release and the larger jump representing the voicing in the vowel.

Each stop or affricate was considered individually by looking at the jump in the linear and logarithmic amplitudes in conjunction with modulations in the sound envelope (see Figure 2c). For unvoiced stops, voicing lag was usually indicated by co-occurring peaks or humps in the linear and log amplitudes with fewer or higher frequency vibrations in the sound envelope. Voicing in stops was indicated by a smaller peak or hump in the amplitude traces with an increase of low frequency vibrations in the sound

envelope. For affricates the pattern was somewhat different since the burst of noise from the aspiration was seen as higher amplitude, higher frequency vibrations in the sound envelope relative to voiced affricates. In cases where a hump or peak did not occur prior to the release of a stop or affricate between voiced segments, unbroken voicing was assumed.

Spectrographic. Vocalic portions of speech were spectrally analyzed to measure vowel quality and consonant properties, mainly pharyngealization. Vowel segments extracted for spectral analysis were usually in stressed position. Normal broadband spectrograms were made on a Sonagraph 6061B for adult male speech. Because the spectrograph filters are designed for male voices, female voices were analyzed by running tapes at half speed and doubling the measurements from the regular 500 Hz interval scale. This tends to remove harmonic interference (see Fant 1968, p. 181). For plotting vowel formants, only male voices were measured. Both male and female voices were used in the quantitative analysis of formant bending caused by pharyngealization. The formant measurements for vowel quality norms were taken in the middle of the 'acoustic vowel shape' as illustrated in Figure 2d. Formants of vowels following pharyngealized or pharyngeal and non-pharyngeal (glottal) segments were measured from the release of the consonant as closely as could be determined by the following criteria: beginning of the voice bar, discontinuity of formants, and/or the end of glottalization (for glottal stops and pharyngeal approximants). The formants are compared linearly following Labov (1972, p. 31) rather than logarithmically. However, F_1 measurements were not weighted in relation to F_2; this is because F_2 is the more important indicator of pharyngealization (see Kahn 1975). Further details are given as necessary in the main text.

CHAPTER 3

PHONETICS AND SEGMENTAL PHONOLOGY

"Just as musical form cannot be abstracted from the sound matter it organizes, so form in phonemics is to be studied in relation to the sound matter which the linguistic code selects, readjusts, dissects and classifies along its own lines. Like musical scales, phonemic patterning is an intervention of culture in nature, an artifact imposing logical rules upon the sound continuum."

Roman Jakobson and Morris Halle (1968, p. 421)

3.0

Kurmanji has a phonemic inventory considerably larger than any of its neighbors. In fact it appears to have absorbed a number of distinctions from those neighbors. On the other hand, there is synchronic evidence that some of the distinctions may be in the process of collapsing. Some contrastive series - notably pharyngealized and unaspirated stops - appear in a limited number of environments.

In the introduction we indicated that morphophonemic alternation is a minor process in Kurmanji. The second chapter documented that the speakers of this study form a widely varied group in terms of social status but were uniformly under considerable pressure from surrounding dominant languages. This chapter presents the system that has resulted and is still in the process of evolving from those contrasts and pressures. Before focussing on the nature and sources of this variation, we should view the system as a whole. Consonants and vowels are described contrastively as they operate within systems and individually as phonemes and member allophones. Following the description of systems and segments two types of essentially allophonic rules or

surface phonetic constraints are given. These palatalization and labialization rules are conditioned by classes of consonants and vowels and thus are written in terms of the features which define those classes. More context-sensitive rules are given in Chapter 5 on stress and phonotactics. The purpose of the present chapter, as we indicated above, is to locate problematic areas against the background of the whole system. These unresolved portions of the analysis will be re-considered in later chapters which go beyond the essentially taxonomic phonemic framework used here.

Since this chapter is the foundation for further analysis, only if the data presented here are accurate and complete can further analysis be justifiable or interesting. In order to draw accurate conclusions about the phonological structure of Kurmanji, we have submitted the phonetic data to as careful and as objective an examination as possible. The judgments of native speakers and of an experienced phonetician[1] were solicited in order to verify the accuracy of the author's transcriptions. Acoustic measurement was used where appropriate, but due to limitations of time and space and the quality of some tape recordings made in the field, large scale statistical analyses were not feasible.

In general, a loosely interpreted phonemic level can account for most alternations in Kurmanji. In the case of pharyngealization, a generative solution is posited which draws on evidence from loan assimilation and socially correlated variation (see Chapter 4). Since this is an empirical study, we may state straightforwardly that no really economical set of rules could account for all of the data we gathered. For example, one of the most perplexing questions raised in this study is, 'What is the place of pharyngealization in the Kurmanji sound system?' We analyze this contrast here phonemically, in the next chapter morphophonemically, and in the last two chapters as it is assimilated in

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[1]I would like to thank J. C. Catford for his expert help in checking the accuracy of some of the transcribed data.

loan words and reproduced variably by different speakers. All of these analyses tell us something about the way these unusual sounds work in Kurmanji; but no unified set of rules could account for all speakers' production of these sounds, generating from an underlying structure to phonetic reality. At an earlier stage in the language that might have been possible. At a later stage in Kurmanji, if the pharyngeal contrast totally disappears from the surface, leaving behind a set of somewhat puzzling vowel contrasts, linguists may be able to posit underlying abstract pharyngeals that map neatly on to the surface. For now, we must deal with a language that appears to be in flux.

3.0.1 Transcription

Despite a commitment to complete empirical adequacy, the data had to be limited initially to enable us to bring some order out of chaos and to provide a basis for comparison. This was accomplished by basing the description on one dialect - Shikak, the most phonologically conservative - using the maximum number of distinctions produced by any speaker for any lexical item. For example, some speakers in our study merged pharyngealized C̲ and unaspirated C or even C̲,C, and aspirated Cʰ in certain words. These manners are kept separate in the basic transcription. This resulted, essentially, in a transcription that reflects the speech of the two Shikak monolinguals in the study. The transcription is roughly phonemic. Where alternate types of transcriptions from phonemic Shikak are used as lexical examples, these other forms are appropriately symbolized by brackets (phonetic form) or slashes (phonemic form) and labeled (e.g., Herki dialect or Persian language). For unenclosed, unlabeled forms, the reader may assume we are referring to the phonemic level in Shikak unless otherwise specified (e.g., as underlying forms in Chapter 4 or as borrowed forms in Chapter 6).

Although, in the following chapters, we suggest a more abstract solution to the problem of pharyngealization in Kurmanji, we will continue to represent this feature in the series of pharyngealized phonemes given in Table 3a. We prefer to stay close to the phonetic level, because it is on that level that we may be most aware of the variation and borrowing in Kurmanji. In general we do not want to move too far from our phonetic data; although this may give the phonetic data a somewhat disordered appearance, it may prevent hidden false generalizations.

Table 3a indicates the consonant and vowel phonemes of Kurmanji. The consonants are discussed in section 3.1 and the vowels in section 3.2. Stress and phonotactic rules are given in Chapter 5. For the time being, in lexical examples given here and in the next chapter, stress may be presumed to be on the last syllable of the word unless otherwise marked.

3.1 Consonant System

As Table 3a indicates, Kurmanji contains four contrasting types of stop-affricates as well as three contrasting types of sibilant and glottal fricative-approximants. The category of coronal articulation which we will take to include dentals, alveolars, and palatals (see Table 3a) is used later in the specification of environments for flip-flop rounding of vowels (see section 3.3). Two of the contrastive consonant manner types - unaspirated stops and pharyngealized stops - appear in limited environments, although they do not stand in complementary distribution to any other segment. Neither contrast is considered phonemic in the grammar of Kurmanji by Bedir-Khan and Lescot (1970). The present author, after some preliminary work with a Turkish Kurmanji speaker, suspects that the unaspirated and pharyngealized stops that are found in Iranian dialects of Kurmanji have mostly merged with the voiced and voiceless aspirated series in the Turkish dialects. Since there is also

evidence of merger for some speakers covered here, we will first establish the phonetic validity of separating these contrasts.

Since we are dealing with four contrasting consonants for every one point of articulation, we will symbolize the consonant at each place of articulation as a set - e.g., {T} = /d/, /t/, /tʰ/, and /ṭ/. Besides two other stops and an affricate articulation, two fricative sets are also established; {S} = /s/, /z/, /ṣ/, and /ẓ/ and {H} = /h/, /ḥ/, /ʔ/, and /ʕ/.

3.1.1 Aspiration and Pharyngealization

Voice Onset Time

Lisker and Abramson (1964) in a cross-language study established voice onset time (VOT) as a consistent phonetic criterion for separating traditional contrasts between voiced/unaspirated/aspirated categories of stops. Some stops, usually called voiced, were shown to be pre-voiced where voicing preceded the release of the stop, and some stops, usually called voiceless, showed voicing lag, where a discrete amount of time intervened between release of the consonant and voicing of the following vowel. Although Kim (1971) has challenged voicing lag as the phonetic basis for aspiration (substituting wide glottis), his data showed a linear relationship between width of glottal opening and voicing lag. The use of VOT as an indicator of the patterning of phonemic stop categories in a language has not been challenged. For that reason, we have measured the VOT of stops in Kurmanji to verify our impression that the phonetic categories are distinct.

The data presented in Table 3b and Figure 3a were taken from measurements of mingograms (see section 2.4). Besides the categories of voiced, voiceless aspirated, and aspirated stops, we have also measured pharyngealized stops. The results indicate that the VOT values for this category were not very distinct from the voiceless unaspirated

series. This corresponds to the investigator's impression and is compatible with Odisho, Barber, and Scully (1975) who found that pharyngealized and aspirated consonants in Neo-Aramaic share the feature 'closed' (really narrowed) glottis.

In Figure 3a we have compared VOT values for Kurmanji with Lisker and Abramson's values for Eastern Armenian and English stops. Lisker and Abramson's data from non-initial stops in read sentences seemed to correspond most closely to the Kurmanji data from connected spontaneous speech. Eastern Armenian, a neighboring Indo-European language, was chosen for comparison because it has a somewhat similar system of stops and affricates. It has been suggested that Kurmanji borrowed its unaspirated stop series from Armenian. English values were used as a substitute for Persian values which were unavailable but were mentioned by Lisker and Abramson (p. 403) as patterning in a way similar to English. The lack of an aspirated/unaspirated contrast in Persian appears to be a major influence on the collapse of the unaspirated/aspirated stop distinction in Kurmanji (see section 7.2.2).

Figure 3a indicates that Kurmanji exhibits greater voicing lag in its aspirated stops /pʰ/ and /tʰ/ than either English or Armenian. In general, the patterning of the Armenian system of three-way contrast is similar to Kurmanji while the English two-way contrast differs markedly.[2] Examples of /q/, a uvular stop that is usually voiceless in Kurmanji but voiced and lenis in Persian, appear to be evenly divided between pre-voiced and voicing lag values. Otherwise, the unaspirated and pharyngealized members of each set are not differentiated. To summarize, the acoustic data mirrors, the clear phonological distinctions among

[2] J. C. Catford (personal communication) has commented that the extremely short VOT of Armenian unaspirated stops reflects the fact that they are often weak glottalic egressive stops with a release of glottal closure almost immediately after oral release.

voiced/unaspirated/aspirated stops in Kurmanji.

Pharyngealization

Abercrombie (1967, p. 62) defines the secondary articulation of pharyngealization as "the tongue low in the mouth and retracted towards the back wall of the pharynx." Secondary articulation itself is defined as "a stricture of open approximation of the articulators...." A number of acoustic investigations, including Al-Ani (1970), Delattre (1971), and Kahn (1975), attest to the slight raising of the first formant and marked lowering of the second formant in a vowel following a pharyngealized consonant.

In Kurmanji, all the consonantal stop-affricate sets {P}, {T}, {K} and {C} have pharyngealized members (if /q/ is considered systemically as a pharyngealized /k/). The four member sibilant set {S} has two pharyngealized members. Two other phonemes, /h/ and /ʕ/ (part of the set {H}) have their primary articulation in the pharynx. In Kurmanji, the gradience and variability of pharyngealization is seen to be similar to the way 'emphasis' (pharyngealized consonants) functions in Egyptian Arabic as described by Harrell (1957). An acoustic analysis (in section 7.2.1) of the difference between various speakers' contrast between /ʕɑ/ and /ʔɑ/ provides clear evidence of a variable contrast in Kurmanji.

Pharyngealization in Kurmanji is most perceptible in the quality of the following vowels which appear to be lowered and retracted. Although the feature of pharyngealization was presumably borrowed from Arabic, Kurmanji pharyngealization does not appear to be as strong as Arabic pharyngealization, particularly that of the Iraqi dialect. Furthermore, Kurmanji does not appear to differentiate actual pharyngeal consonants from pharyngealized stops and fricatives either in the effect on the following vowel (see Al-Ani) or morphophonemically (see Brame, 1970; Harrell, 1957). Brame (p. 16) and Harrell (p. 77) both indicate that so-called emphatics (pharyngealized consonants) and

pharyngeals /ʕ/ and /ḥ/ are phonetically and phonologically separate in Arabic. The fact that they are not treated as separate on a phonetic or phonological level in Kurmanji is reflected by their treatment in borrowings (see Chapter 6) where, for example CVʕ in Arabic may become CV in Kurmanji or Arabic CV may become Kurmanji CVʕ but Arabic CVʕ can only become Kurmanji CV or CVʕ, never CVʕ. This evidence will be considered in more detail in the next chapter on the phonological analysis of pharyngealization.

A number of lexical items with pharyngealized and non-pharyngealized consonants in identical vowel environments were extracted from tapes of spontaneous speech and analyzed spectrographically. Some of the results are contained in Figures 3b, 3c, and 3d. Both voiced and unvoiced members of the sets were compared to the pharyngealized members. In Figure 3b, the /t/of /tæe/ 'you' and the /tʰ/ of /tʰærbiyæt/ 'education, upbringing' contrast with /tæmɪrɪyæ/ 'extinguished' which shows a marked raising of F_1 and lowering of F_2. Rather than a clear two-way split of [tʰ] and [t] versus [ṭ], there appears to be a continuum where the unaspirated [t] falls between the other two members; the /æ/ of tæ exhibits some raising of F_1 and lowering of F_2 although not as much as in /tæmɪrɪyæ/. This may reflect the fact that the glottal narrowing for the unaspirated stop causes some pharyngeal contraction; the corresponding acoustic effect may be somewhat like pharyngealization.

In Figure 3c, the sets of sibilants also show a sharp contrast between pharyngealized and non-pharyngealized pairs. Both /sæd/ '100' and /zawa/ 'bridegroom' exhibit characteristic 'pharyngeal formant bending' (approach of F_1 and F_2) as opposed to /sæ(r)/ 'on' and /zaru/ 'children,' which show no similar bending in the formant transitions.

Figure 3d illustrates the contrast between /h/ and /ḥ/ in /wɪlahi/ 'by God' and /ḥilæbaz/ 'witch' with /hi/ having a lower F_1 and higher F_2 than /ḥi/.

Note on Variability

The pharyngealized and aspirated series described above show two types of variation: phonetically conditioned and socially conditioned. In the first case, consonants in Kurmanji tend to be neutralized or assimilated in voicing to following consonants or pauses, especially to following pauses. For example, the final stops in /thæb/ 'fever' and /dɪlop/ 'drop' often sound approximately the same in natural connected speech (although not in citation form where consonants are usually released). In the few instances of word-final pharyngealized stops, neutralization between C and C̲ does not occur; for example, the /p̲/ of /thop̲/ 'ball' is quite distinct from the /p/ of /dɪlop/. However, the distinction of C and Ch medially and finally is problematic. It appears that for many words, the aspiration contrast is lost in this position. This may be the result of rule borrowing from Azeri Turkish (see Chapter 6). In that language, a series of consonant weakening rules inhibit the production of [Ch] in all but initial position. However, [Ch] and [C]$^{-vd}$ do not contrast in initial position in Azeri as they do in Kurmanji.

The second type of variation - socially conditioned - will be discussed in detail in Chapter 7. It is only necessary to note here that for some speakers and some words, the distinctions between voiced/unaspirated/aspirated/pharyngealized merge into voiced/unaspirated/aspirated or even voiced/voiceless aspirated.

3.1.1.1 {P}

This series consists of four contrastive bilabial stops - voiced /b/, voiceless unaspirated /p/, a voiceless, unaspirated stop with secondary pharyngeal articulation /p̲/, and a voiceless unaspirated stop /ph/.

Some examples of these contrasts are:

bar	'load'	be	'without'
par	'last year'	pe	'to, with'
p̲an	'wide'	p̲ænɪr	'cheese'
pʰara	'money'	pʰe	'foot

bɪn 'under'
pɪšt 'back'
poṗɪn 'cowlick'
pʰɪntu 'dirty'

3.1.1.2 {T}

The articulation of this stop series is decidedly more dental than English /d/ or /t/. The Kurmanji sounds are a voiced /d̪/, a voiceless, unaspirated /t̪/, a pharyngealized unaspirated /t̪ˤ/, and a voiceless, aspirated /tʰ/.

Examples of these contrasts are:

dɪl	'heart'	dœr	'door'
tɪrɪ	'grapes'	tær kɪrɪn	'to wet'
t̪ɪvr	'radish'	t̪ærɪk	'hail'
tʰɪrašɪn	'to level'	tʰærzɪ	'tailor'

du 'yogurt drink'
tu 'mulberry'
t̪otɪ 'parrot'
tʰuk 'hair'

3.1.1.3 {K}

The third stop series combines velar and uvular articulations. The first member is /g/, a voiced velar stop; /k/ is unaspirated and voiceless while /kʰ/ is aspirated and voiceless. /q/ is a uvular stop which is usually realized as voiceless. Since /q/ involves a backward shift of the tongue in comparison to /k/, it is regarded here as a pharyngealized member of the set {K}. The identity of /q/ as a pharyngealized /k/ is reflected by the treatment of Arabic loanwords in Kurmanji (see Chapter 6). The rule that

prevents more than one pharyngeal segment from being realized in a borrowing includes /q/. In one respect, /q/ does differ from the other pharyngealized stops. It is rarely realized as /k/. For speakers who collapse /p/ and /p̲/ for example into [p], /k/ and /q/ remain quite separate phonetically. This is probably a result of influence from Persian; whereas Persian does not have any pharyngealized or pharyngeal consonants, it does have a post-velar stop/ approximant /q/.

Lexical examples of the velar-uvular series are:

gɪrɪk	'hill'	gæl	'with'
kɪtkɪt	'little by little'	kæl	'male oxen'
kʰɪtʰeb	'book'	dukʰæl	'smoke'
qɪtqɪdang	'tickle'	qælæm	'pen; splinter, thorn'
bazɪrganɪ	'commerce'		
sær kanɪ	'on a spring'		
wæ̀ræ khane	'come, let's see'		
nɪqab	'mask'		

3.1.1.4 {C}

A fourth pre-palatal series of occlusives although consisting of affricates rather than stops, shows a similar pattern of aspiration and pharyngeal contrasts to the first three sets. There is a voiced member /j/, a relatively unaspirated voiceless /c/, a pharyngealized /c̲/, and an aspirated /cʰ/.

Some examples of these phonemes are:

jɪnar	'neighbors'	jængæl	'forest'
cɪnɪk	'China dishes'	cæp	'left'
		c̲æng	'fistful'
cʰɪn	'China'	cʰænjur	'claw'

jan 'soul, dear'

peçan 'to wrap'
chandɪn 'to plant'

3.1.1.5 {S}

The next series to be examined are the sibilants /s/, /s̲/, /z/, and /z̲/, differentiated by voicing and secondary pharyngealization (the other palatal fricatives /š/ and /ž/ which have no contrast for pharyngealization will be covered in 3.1.2.1). The contrast /s/ and /s̲/ is productive and widespread for all three tribal dialects described here. In all Kurdish dialects /s̲/ is commonly found in /s̲æd/ '100' and /s̲æ/ 'dog' (although Kurmanji has many more lexical examples than this). In the literature on Southern Kurdish this s/s̲ contrast has been judged both phonemic (McCarus 1958, p. 22) and allophonic (MacKenzie 1961a, p. 4). Most of those dialects have far fewer pharyngealized sounds than Kurmanji does. [z̲] is not a phoneme in either Sayidi or Herki where it appears only rarely as a variant of /z/.

Some examples of the four-way contrast are:

xæsi	'mother-in-law'	sɪ̈ kɪrɪn	'to snub'
masi	'fish'	s̲ɪ̈k	'sugar beet'
qazi	'judge'	zɪ̈kʰet	'bee'
bazi	'(type of) bird'	z̲ɪ̈	'glittering (eyes)'

sabɪt kɪrɪn 'to prove, demonstrate'
s̲abun 'soap'
zahɪr 'surface appearance'
z̲abɪd 'holy man'

3.1.1.6 {H}

The glottal and pharyngeal set {H} consists of four phonemes, plain glottal fricative /h/, pharyngeal fricative /h̲/, glottal stop /ʔ/ and voiced pharyngeal approximant /ʕ/.

The distribution of /h/ and /ḥ/ is exemplified by the following lexical items in which they appear:

hokš	'whoa'	ḥokm	'order'
hæžmartɪn	'to count'	hæž kɪrɪn	'to like, love'
?æhɪl	'tame'	?ɪḥtajɪ	'necessity'

The phoneme /ḥ/, like the pharyngealized consonants discussed earlier, is probably a loan from Arabic. As such it often appears in Arabic loans; however, it may also replace an original /h/ in Arabic loans (see Chapter 6) or an etymological *h in Kurmanji. For example: /ḥæwt/ 'seven', /ḥæšt/ 'eight', and /bɪḥæšt/ 'heaven'.

Although the occurrence of /?/ is quite limited, it is considered here to be a phoneme.[3] In careful speech, words do not begin with vowels, they begin with /?/ plus a vowel. Loans from Arabic have introduced a large number of words beginning with /ʕ/. This /ʕ/ has been assimilated to such an extent that it often replaces /?/ in Arabic loans, and in some Kurmanji words as well. As the spectrographic measurements discussed in Chapter 7 indicate, there is a continuum in the phonetic realization of /ʕ/; for most speakers /ʕ/ is clearly different from /?/. For a few speakers /ʕ/ consists of a slightly more prolonged glotalization than /?/. For the other speakers there is marked formant bending in the vowel following /ʕ/ as compared to the vowel following /?/.

Examples of this contrast are the following

?æm	'we'	ʕænɪ	'forehead'
?æz	'I'	ʕæzɪz	'dear'
?æw	's/he, it'	ʕæwdɪlla	'Abdulla'

[3] Another possible analysis is to call [?] an allophone that appears non-contrastively before vowels which begin words. However, since it does contrast with /ʕ/ in this position we prefer to call it a phoneme here. In the context of the analysis posited in Chapter 4, we would probably call [?] an allophone.

The phoneme /ʕ/ may also appear in medial position as in /žaʕr/ 'poison' and /maʕænedan/ 'to mean.' In certain words, in medial or initial position, /ʕ/ may alternate with /h/ as well as /ʔ/. Some of these alternations are considered in Chapter 4 as part of a discussion on the underlying representation of pharyngealization in Kurmanji, and in Chapter 7, on socially correlated variation.

3.1.2.1 Non-Pharyngeal Fricatives

The phoneme /x/ is usually realized as a voiceless uvular fricative [χ]. Between two back vowels or next to a voiced cosonant /x/ becomes [ʁ], a voiced uvular approximant as in [šoʁoɬ kɪrɪn] 'to work', [aʁa] 'Mr.' and [saʁ bæ] 'be healthy'.

Lexical examples of /x/ are: /axɪftɪn/ 'to speak', /sæxɪr/ 'small child' and /xoda/ 'God.'

/š/ and /ž/ are respectively voiceless and voiced palato-alveolar fricatives. Voicing can be distinctive in all positions although in the lexicon /ž/ tends to predominate next to voiced consonants and /š/ is more common in word final position.

Examples are:

řož	'day, sun'	řæš	'black'
næškara	'without measure, incredibly'	bæžnobaɬ	'height'
méše	'to the flies'	mežɬ	'brains'
šužɪn	'long sewing needle'		

The phoneme /f/ is a single labiodental fricative that has no phonemic voiced counterpart. It may be viewed as in contrast to /w/ which is realized as [v] by Persianized speakers (/v/ and /w/ were probably separate phonemes at an earlier stage of Kurmanji).

In a few words, /w/ alternates across dialects with /f/ as for example in Sayidi/Herki/Shikak /mɪrof/ 'man' as opposed to Northern Shikak /merɪv/; Herki /dɪraw/ 'money' versus Shikak/Sayid /dɪraf/. Persian /kanva/ (from French

canvas) is borrowed into Kurmanji as /kanfæ/ 'worsted yarn.' Examples of /f/ are: /khæfæn/ 'shroud', /fænd kɪrɪn/ 'to outwit', and /thænæf/ 'hanging rope.'

3.1.2.2 Flaps and Trills

/r/ and /ř/ are respectively an apical flap and an apical trill. /ř/ has a somewhat limited distribution. That is, /ř/ appears mainly in word initial or word final position. When it appears medially, it is usually in an onomatapoeic word. These two r's contrast in Kurmanji unlike Persian where /r/ becomes [ř] initially and finally in words pronounced carefully.

Examples of the Kurmanji contrast are:

řɪwi	'fox; intestines'	rɪžɪ	'charcoal'
sær fɪřandɪn	'to behead'	fɪrɪštæ	'angel'

In Kurmanji, a flapped /r/ which appears intervocalically is often reduced to a very lenis approximant (rather like American English /r/, but never rounded). In final position, the flapped /r/ often disappears altogether, e.g., /wæzɪr/ 'minister' is realized as [wæzɪ], /mænsur/ (masc. proper name) is realized as [mæ̃su]. This never is the case with the rolled /ř/ which, even in very fast speech, is minimally realized as a flap (see Chapter 5 for distinction of /ř/ from a possible geminate /rr/).

3.1.2.3 Nasals and Laterals

/m/, /n/, and /l/ are similar to their English counterparts - Kurmanji /n/ and /l/ being alveolar rather than dental like {T}. The phoneme /n/ partially assimilates to following stops as for example in /janphæɪjan/ (proper name) which is realized as [jamphærijan] and in /ræng/ 'color' /n/ is realized as velar nasal [ŋ]. (The evidence for the non-contrastiveness of the alveolar nasal and velar nasal is given in Chapter 5.) /janphærijan/ is analyzable

as a case of assimilation, because /jan/ is an independent morpheme meaning 'dear; soul.' There were no instances of /m/ assimilating to the position of a following consonant. For example in /pʰæɬæjæmk/ 'mythical featherless bird' and /cʰumko/ 'because' /m/ is realized as [m] not [ŋ]. In fast speech the vowel preceding either /n/ or /m/ is nasalized and then the nasal consonant is dropped. This may be part of the general tendency of the language to separate clusters (see Chapter 5).

/l/ has clear and dark variants like English, although in Kurmanji these allophones are conditioned by the position of contiguous vowels rather than the position of /l/ itself in the word - e.g., [læz ɫæz] 'hastily', [ʕælɫ] (proper name) versus [mæɬə] 'mullah' and [ɬəm] 'cheek'. In Southern Kurdish these two sounds are phonemically contrastive. In Kurmanji, /l/ may also be de-voiced preceding a voiceless consonant - e.g., [tʰasl̥k] 'airborn burrs'.

3.1.2.4 Glides

Kurmanji has two glides - a palatal /y/ and a bilabial /w/. Both of these phonemes may function either as consonants (word initially, intervocalically) or as vowels (as part of diphthongs). For example, /y/ appears as a consonant in /yánɪ/ 'that is to say' and /næyar/ 'enemy' and as a vowel in /sæyran/ 'picnic.' The phoneme /w/ is a consonant in /wɪlæt/ 'country' and /dawæt̲/ 'wedding' and a vowel in /ɪawžæ/ 'song'. Although we cannot offer a complete argument here as to what constitutes a vowel or a consonant in the borderline area of segments such as glides, in the context of Kurmanji these classifications seem to be valid. For example, there are no final three consonant clusters; therefore in a word like /bawšk/ 'yawn' /w/ must be a vowel. Some speakers of Kurmanji more in contact with Persian tend to realize /w/ as [v] in all positions except as part of a diphthong. Since this is a gradient change, phonetically /w/ may appear as anything from a bilabial or labiodental approximant or glide to a labiodental fricative. The phone

[y] sometimes appears non-distinctively as a glide between a word ending in a vowel and a suffixal inflection that consists of a single vowel segment, e.g., /ře/ 'road', /řeya wi/ 'his/her road' where /-a/ represents the ezafe morpheme that links modifiers to the noun while [y] is simply a glide between this /-a/ and the preceding /e/.

3.2 Vowels

The formant data presented in Figures 3e and 3f is based on measurements taken from connected fast speech of Shikak adult males (see Chapter 2 on methodology). The vowel chart on Table 3a referred to at the beginning of this chapter is based on articulatory information and is strictly phonemic. To avoid confusion, it must be emphasized that the decisions regarding the phonemic status of the vowels were made in the field from slow, careful speech as well as faster, more natural speech. The spectrographic values shown here are limited to a fraction of the total number of speakers in this study (due in part to the difficulty of taking spectrographic measurements of women and children). That the portions of speech measured were extracted from fast, connected narratives is in marked contrast to many acoustical studies which have measured vowel formants only from citation forms.

Most of the vowels measured here were stressed and not in proximity to distorting segments such as /r/. The vowel chart of Table 3-a more closely represents phonemic opposition than do the graphed formant values. Figure 3f is an attempt to correlate the phonetic and phonemic contrasts rather than relying solely on the investigator's ear and memory which, in the case of vowels, can be problematic (see Ladefoged, 1971, Chapter 8 on reliability of acoustic data for vowel specification).

Figure 3e presents all of the spectrographic values obtained for a sample of vowel phonemes of Kurdish plotted on two graphs, one for first versus second formant frequencies and one for first versus third formant

frequencies. Figure 3f compares the graph of the averaged F_1 and F_2 frequencies obtained for Kurdish vowels with a graph of Fant's (1973, p. 10) values for a set of vowels somewhat like the IPA cardinal vowels. The positioning of the various vowels in acoustic space agrees fairly well with the investigator's auditory impression in the field. The following descriptions of each vowel will clarify where acoustic data and auditory or articulatory impressions diverged.

Using phonological as well as phonetic information, the Kurmanji vowel system can be divided according to the following distinctions: rounded /u, o, ʊ, a/ versus unrounded /i, e, ɪ, æ/; front /i, e, æ/ versus central /ɪ, ʊ/ versus back /u, o, a/; high /u, i/ versus mid /e, ɪ, o, ʊ/ versus low /æ, a/. The central vowels seem to be of the shortest duration. However, vowel length is not phonemic in Kurmanji. Because length often marks juncture (especially in a narrative), it is difficult to characterize vowel length even as a phonetic characteristic of particular vowel segments.

3.2.1 /i/

This vowel is audible as front and high in its relation to the rest of the vowels. Labial and velar stops appearing before /i/ are nearly always palatalized (the acoustic data - F_2 high and F_3 maximally high - agrees with Fant's (1973:28) specification of pre-palatal position for consonant transitions). Pharyngealized consonants almost never appear before /i/. Examples of /i/ are: /khis/ 'purse', /dærphi/ 'underpants', and /kor phosidæ/ 'disappointed.'

3.2.2 /e/

Although the acoustic values for this phoneme seem to place it close to Fant's [ɛ], in general, the auditory impression of this sound is close to IPA [e], high-mid and

front. In slow speech, it is more clearly [e] like than Figure 3f indicates. In unstressed position, one allophonic variant is [ɪ]. Thus, in unstressed position, the contrast between /ɪ/, the next phoneme to be discussed, and /e/ is usually neutralized. However, in stressed position, these two sounds contrast; e.g., /tʰen/ 'heat' versus /tʰɪ́ne/ 'alone'. The contrast between /ɪ/ and /e/ is represented by /pʰɪs/ 'bad, disgusting' and /pʰešu/ 'mosquito.'

3.2.3 /ɪ/

This vowel is high to mid-central. The acoustic evidence suggests that it is close to schwa, but my overall auditory impression in the field places it somewhat higher. A frequent allophone of /ɪ/ is a backed [ɨ] which appears primarily under two conditions: (1) In the environment of a pharyngealized consonant - e.g., [mæz̲ɨn] 'big' (2) As an epenthetic vowel inserted to break up clusters - e.g., /sæbr/ 'waiting' is realized on the surface as [sǽbɨr]. In this latter instance, [ɨ] has no underlying status as a phoneme because it is inserted as part of the phonotactic rules of Kurmanji (see Chapter 5 for explanation). Examples of /ɪ/ are /kɪrɪn/ 'to do', /t̲ɪwr/: [t̲ɨ́wɨr] 'radish' and /cɪkcɪkok/ 'chickadee.'

3.2.4 /æ/

/æ/ is a low front vowel. According to a phoneme frequency count by this investigator as well as one by Bedir-Khan and Lescot (pp. 36-37), this sound is not only the most frequent vowel phoneme of Kurmanji, it is altogether the most frequent phoneme. Its distribution following both palatalized and pharyngealized consonants as well as its frequent occurrence in the lexicon and in texts suggest that /æ/ might be the result of a merger of two vowels in an earlier stage of the language. Whether /æ/ can in fact be analyzed as two underlying vowels is discussed in

Chapter 4 as a possible solution to the pharyngealization question.

3.2.5 /a/

/a/ is a low, back rounded vowel which sounds very much like Persian /a:/). Examples of this phoneme are: /sako/ 'jacket' /kʰopal/ 'cane' and /ʔanl/ 'brought.'

3.2.6 /ʊ/

/ʊ/ is a mid-central, rounded short vowel. It contrasts with /o/ and /u/ in the following examples: /kʊr/ 'boy', /kor/ 'blind', and /kurt/ 'short.'

3.2.7 /o/

This is a mid, back, rounded vowel. It may appear in the environment of pharyngealized consonants. /o/ in Shikak and Sayidi in some words corresponds to /u/ in Herki - e.g., /dot/ 'gold jewelry (Sh/S) and /dut/ (H); /tʰoman/ (Persian coin) (Sh/S) and /tʰuman/ (H); /kirošk/ 'rabbit (Sh/S) and /kirušk/ (H). Examples of /o/ are: /kon/ 'tent', /kʊ̊ro/ 'Boy.' /go/ 's/he said' and /ʔokhiva/ 'perfectly'. In Shikak, when /o/ is unstressed, it may be realized as [ʊ].

3.2.8 /u/

/u/ is a high back round vowel. As the rules in section 3.3.2 indicate, /u/ may be variably realized as rounding of the preceding consonant and /ɪ/ (C^{w}ɪ), as [ü], or as [ɪ]. This appears to be a change in progress that is the result of variable application of the rules of 3.3.2. The social conditioning of these rules is discussed in Chapter 7. Examples of /u/ are /bun/ (also [bün] 'to be', /mæsʃud/ [also mæsʃ̈d] and /mu/ 'hair'.

3.3 Two Rules

Two types of rules - palatalization and flip flop rounding - are included in this chapter on the segmental phonemes of Kurmanji, because they account for conditioned alternation (mainly of allophones) of related classes of consonants and vowels. The first rule - palatalization - appears to be an area phenomenon. Azeri Turkish phonology is the most extreme example of this. The velars in borrowings into Azeri from Persian and other languages are usually assimilated as palato-alveolar affricates while uvulars become palatalized velars; for example Azeri Turkish [gʸæšæč] 'pretty' borrowed from Persian [ʁæšæɳg]. Persian has a rule similar to the Kurmanji rule given below. For this reason (as well as other phonological similarity), a Kurd speaking Persian sounds more like a native speaker than a Turk does.

The second type of alternation does not appear to be of a stable allophonic kind, but rather some type of change in progress. For most speakers the flip flop of [ɨ] and [u] with an intermediate [ü] has probably resulted in at least a partial re-analysis of the underlying phonemes. However, only speakers who substitute [ü] for [ɨ] and [u] show a <u>systemic</u> change. The fact that /u/ is substituted for /ü/ in Turkish loans suggests that /u/ may still be an underlying representation for [ü] (see section 6.2.3)

3.3.1 Palatalization

The palatalization of all unpharyngealized velar stops before front vowels or word finally is quite noticeable in Kurmanji. Bilabial stops (excepting /p/) are also palatalized, although somewhat less noticeably. The rule for palatalization may be stated:

$$\begin{bmatrix} \{[+\text{labial}]\ [+\text{velar}]\} \\ \{[+\text{labial}]\ [+\text{velar}]\} \end{bmatrix} \rightarrow [+\text{palatalized}] \;/\; \underline{\quad} \begin{Bmatrix} [+\text{voc} \\ +\text{front}] \\ \# \end{Bmatrix}$$

Examples of the application of this rule are: /penj/ 'five': [pʸenj]; /daræke/ 'to a tree': [darækʸe]; /dɪkævɪn/ 'they fall': [dɪkʸævɪn]; /buk/ 'bride': [bukʸ].

3.3.2 Rounding/Unrounding

The vowel change in progress primarily for Herki and Sayid speakers causes /ɪ/ and /u/ to change places following coronal and non-coronal consonants. An intermediate output in the application of these rules is ü or Cʷi. For example:

kʰusæl	→	kʷɪsæl∿küsæl	→	kʰɪsæl	'turtle'
helin	→	helün	→	helun	'nest'
tɪž	→	tüž	→	tuž	'sharp'
kʰælpuc	→	kʰælpüc	→	kʰælpɪc	'brick'

A second, similar type of change appears to be in progress primarily for Shikak speakers. In those cases, a mid back rounded vowel becomes unrounded and the preceding consonant is labialized. For example:

xo	→	xʷə	'self'
cʰʊmko	→	cʰʊmkʷə	'because'
xoš	→	xʷəš	'pleasant, nice'

The direction of this change is evidenced by older forms in Indo-Iranian cognates as well as modern Persian cognates. For example, the Avestan tiži and Persian /ti:z/ 'sharp' and the Persian /xod/ 'self.' In some cases where the change has been completed for a given word, the investigator did not discover any variation as for example in Kurmanji /mɪšk/ 'mouse' as opposed to /muš/ in Sanskrit and Modern Persian. Further evidence comes from loanwords (see Chapter 6) where Arabic forms with initial /mu-/ have all had the vowel unrounded in the process of loan assimilation; e.g., /muhammad/ → /mɪhæmæd/ 'Mohammed' or /muʕallim/ → /mɪʕælɪm/ 'teacher.' In the case of /xo/ → [xʷə] and /xusk/ → [xʷɪsk] we may be witnessing the re-appearance of an

earlier phoneme */xʷ/, Bedir-Kahn and Lescot (1970, p. 21) cite "cet ancien group consonantique iranien xw" in *xwe 'salt,' *xwarɪn 'to eat' and *xwastɪn to want.' The current evidence suggests that in words where vowels following *xw retained rounding, *xw → x → xʷ, as for example in *xwarɪn → /xarɪn/ → [xʷarɪn]. In a case like *xwe, the labialization was lost and /xe/ is now a fixed form to which these rules cannot apply. On the other hand words like /xun/ 'blood' which probably did not originally have *xw (Avestan vohuni-, Modern Persian xun) have been re-analyzed as having xʷ (xʷɪn) in the dialects described here. In sum, [xʷ] may may now represent either a much earlier *xw in an Iranian form or an earlier *x either from a borrowing as [xʷanɪm] 'lady, Ms.' or a Kurmanji word that never had *xw. Alternations in rounding and backing of vowels has been noted for other Kurdish dialects by Minorsky (1933, p. 645), MacKenzie (1961a, p. 40) and Bedir-Khan and Lescot (1970, p. 49). In those analyses, these variants were seen as aberrant or incorrect forms rather than as representative of a general change in progress.

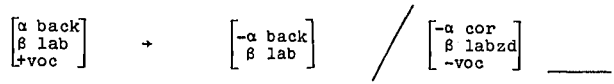
The following rules account for the types of changes that we have been describing. The application of the rules is variable. They apply in the order given (where applicable, except for rules 2 and 3 which are alternately ordered, see below), but they may stop at any point for any given speaker pronouncing a given word. Conditioning for the application is given in Chapter 7.

Note: Labialized (labzd) refers to C^{w} while labial (lab) refers to V^{round}

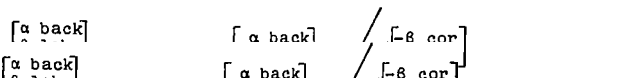
Rule 1 - Consonantal Labialization

$$\begin{bmatrix}-\text{cor}\\-\text{voc}\end{bmatrix} \rightarrow [+\text{labzd}] \;/\; \underline{\quad} \begin{bmatrix}+\text{high}\,(-\text{high})\\+\text{back}\\+\text{lab}\\+\text{voc}\end{bmatrix} \quad \text{(Shikak)}$$

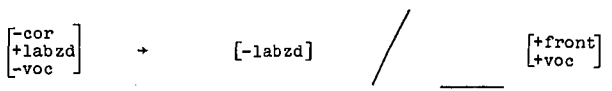
Rule 2 - Fronting/Backing of Vowels



Rule 3 - Rounding/Unrounding of Vowels



Rule 4 - Consonantal De-labialization



These rules express in a unified way the changes in rounding and backness of vowels in Kurmanji. Since they are applied variably, they may stop at any point in the output. For example, with the application of rule 1 on the word /xoda/ 'God' we get [xʷoda], rule 2 gives us [xʷœda] and rule 3, [xʷæda]. Any of these forms may be realized for the lexical item /xoda/, although, for this particular word, no outputs from rule 4 have been noted. If we apply rules 2 and 3 to the form /ʕæɫæšɫš/ 'turkey,' the outputs are *ʕæɫæšɯš and [ʕæɫæšuš]. In fact *ʕæɫæšɯš does not exist as a variant form for this word. Since this is a data-based study, 'false steps' such as those described by Zwicky (1974) should probably be disallowed. An actual variant [ʕæɫæšüš] and similar variant forms of lexical items where ɪ → ü following coronals indicate that rules 2 and 3 should be alternately ordered depending on whether β labial = +labial or -labial. In the case where β labial is equal to -labial, rule 3 applies first, and for +labial, rule 2 applies first. This will prevent outputs such as *kʰɯsæɫ in case the rules were ordered so that 3 applied first to

kʷisæl or *dwr in case 2 applied first to dur 'far.' Completed application of all four rules does occur as we see in examples like [xin] or /mɪšk/ or the assimilation of Arabic borrowings. However, more often we see partial applications where /buk/ → [bük] 'bride' or /mæxsus/ → [mæxsüs] 'special.' For some words and some speakers, the alternation looks like an unconditioned u → ü. However, there are enough other instances either of partial applications such as [xʷæ] 'self' and [xʷisk] 'sister' or of completed changes to place u → ü within a series of rules. Whether these rules exist in absolutely the same form for all speakers or all classes of lexical items is a problem we again discuss in greater detail in Chapter 7.

3.4 Conclusion

The intention of this chapter was to lay the groundwork for a further discussion of the roles of social pressures and borrowing in Kurmanji phonology. Part of this groundwork consisted of locating and exposing problematic areas. This discussion has focussed particularly on phonation and manner contrasts within the stop system and rounding within the vowel system. In Chapter 5, we present consonant clusters as a third problematic area in Kurmanji phonology. Chapter 4 reanalyzes the problem of pharyngealization in Kurmanji, deriving all the consonants p̲, t̲, c̲, h̲, s̲, z̲, and ʕ from a single underlying segment. In Chapters 6 and 7, we return to the entire group, rather than a single feature, for a discussion of the conditioning factors on the collapse of these contrasts.

CHAPTER 4

EVIDENCE FOR OTHER PHONOLOGICAL SOLUTIONS OF PHARYNGEALIZATION[1]

Pharyngealized consonants are considered to be unusual speech sounds. Not all languages use them and those that do have very few of them.

Delattre (1971, p. 131)

4.0 Introduction

A strictly segmental analysis of Kurmanji produces eight phonemes - /ʕ/, /h/, /s/, /z/, /ɒ/, /t/, /c/ (a pharyngealized palato-alveolar affricate), and /q/ (a voiceless uvular stop which behaves like a pharyngealized /k/). Since these phones all contrast with non-pharyngealized consonants in at least one environment, according to traditional phonemic principles, they must be separate phonemes.

In this chapter diverse evidence is presented regarding the behavior of pharyngeal(ized) segments in Kurmanji. This evidence is used to justify a different phonological solution from a strictly phonemic analysis. Before presenting this solution, which posits a single underlying pharyngeal segment, the problems of a phonemic solution are discussed. The advantages and disadvantages of two other possible solutions - a separate set of underlying vowels and a suprasegmental feature - are also considered. The final solution, an underlying ʕ, is seen as the most complete in that it addresses most of the evidence. However, even this solution leaves some questions unresolved.

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[1]Much of the material presented in this chapter appears also in Kahn (1976).

4.1 Problems With A Straightforward Phonemic Solution

The individual pharyngeal(ized) segments given in Chapter 3 and discussed here are: /ʕ/, /h̲/, /s̲/, /z̲/, /p̲/, /t̲/, /c̲/, and /q/. Consonants both of primary pharyngeal articulation and with secondary pharyngealization are considered together because their phonetic and phonological behavior in Kurmanji appears to be fairly undifferentiated. For example, both pharyngeal /ʕ/ and /h̲/ as well as pharyngealized /t̲/, /s̲/, /q/, etc., produce lowering and backing of a following vowel as revealed by raised F_1 and lowered F_2. Although the fricatives /s̲/, /z̲/, and /h̲/ are not contrasted for aspiration, the pharyngealized stops, /p̲/, /t̲/, and /q/ and the pharyngealized affricate /c̲/ each belong to a set of four consonants at each particular place of articulation. For example, the bilabial set includes /b/, /p/, /pʰ/, and /p̲/, and the affricate set includes /j/, /c/, /cʰ/, and /c̲/. A feature analysis of the stop-affricate system of Kurmanji is shown in the following chart:

	C[voiced]	C[-asp]	C[h]	C̲
voiced	+	-	-	-
aspirated	-	-	+	-
pharyngealized	-	-	-	+

Defective Distribution. The major problem with an individual segmental analysis of pharyngealization is the limited occurrence of most of the phonemes. All of these phonemes occur most often preceding a low vowel, usually /æ/ or /a/, sometimes /o/. Occasionally they occur word finally. Four of the pharyngealized phonemes /p̲/, /c̲/, /t̲/, and /z̲/, never occur before high front vowels. The segments /h̲/, /ʕ/, /s̲/, and /q/ rarely appear before high front vowels (fewer than two words apiece). For example, pharyngealized /c̲/ and unaspirated /c/ contrast in one environment - before /æ/. Pharyngealized /p̲/ and plain /p/ contrast in two environments, before /a/ and /ɪ/. In fact, especially for the

stop-affricate series, the pharyngealized members nearly always appear to be unaspirated obstruents conditioned by a following low vowel. However, each of the pharyngealized obstruents does occur contrastively in at least one environment so the traditional rules of phonemicization force us to posit them as separate phonemes.

Unstable Location. Another characteristic of pharyngealized segments in Kurmanji that makes a phonemic solution awkward is that pharyngealization sometimes alternates between two obstruents in a syllable. This may happen in a syllable C_1VC_2 where C_1 and C_2 are both members of any of the articulatory sets which have pharyngeal(ized) members. For example, 'sheep' may be [pæz] or [pæʒ]; a loanword from Arabic, meaning 'metal cup' may be [tas] or [taʃ]. Although, as we shall see below, /p/ is most likely to take pharyngealization above in the first case and /s/ is favored in the second example, there is considerable evidence that both pronunciations occur for each lexical item.

Surface Phonetic Constraint as Reflected by Loans. In incoming Arabic loans with more than one pharyngeal(ized) segment, Kurmanji drops the pharyngealization for all but one of the segments, e.g., Iraqi Arabic suhba(t) → K sɪbhæt 'conversation' or IA quutlyya → K qotl 'box.' A check of the Kurmanji lexicon reveals that no word excepting reduplications like tæntæne 'lace' and maɪmaɪok 'lizard' contains more than one pharyngeal(ized) segment. Although this structural condition is not as problematic as the defective distribution, the condition is not directly captured by a solution in several segments. That is, if we want to make this surface phonetic constraint explicit we must specify it separately; a phonemic solution does not imply it.

Alternation between Pharyngealization and Aspiration. A number of illuminating alternations between /ʕ/ and pharyngealized segments versus /h/ and aspirated segments occur between dialects that may be called K and F (K refers to

more monolingual speakers; F to more Persianized (Farsi-ized) speakers). For example:

	F	K
'snake'	mæhr	maʔr
'wide'	pʰæhn	pan

Although these alternations are limited to perhaps ten words in my corpus they express an antithetical relationship between pharyngealization both within the syllable (cf. pʰæhn/pan) and across dialects. This is especially visible in borrowings - e.g., fahm → faʕm 'understanding' where Iraqi Arabic /h/ is reanalyzed as /ʕ/. A related phenomenon is seen in the case of two speakers who pronounced /tʰærix/ 'history,' another loan from Arabic, as [tʰæhrix]. In this case the aspiration of the first stop was identified with the pattern CʰVhC. One other type of alternation has also been noted between pharyngeal and glottal segments in a number of words; this takes place word initially as in 'bone' [ʕæstɨ] ~ [ʔæstɨ] ~ [hæstɨ]. Although, again, the multi-segment solution will take care of the data by representing these variants differently in the lexicon, such a representation would not indicate this type of alternation.

Unity of Pharyngeal Segments in Variation. A last piece of evidence is related both to the distribution of the features in the chart of Kurmanji consonants given above and to the distribution of socially conditioned variation. All Kurmanji speakers produce aspirated obstruents where they are present in underlying form. This is not true of underlying pharyngealization; some speakers realize this as [h] or [ʔ] or simply absence of pharyngealization. In some cases this alternation takes the form described above in the alternation between CʰVhC and CVC and sometimes it is a three-way alternation between CVC, CʰVC, and CVC. In any case, every one of the pharyngeal(ized) consonants may be replaced by

plain counterparts in the pronunciation of some speakers. This is particularly true of stop-affricates (excepting /q/). In other words, we are dealing here not with a case of variation for individual segments, but rather variation for a class of segments. A multi-segment solution does not reflect the unity of the situation.

4.2 Two Alternative Solutions

The data given above are of varying degrees of importance in showing the inadequacy of a phoneme by phoneme segmentation of pharyngealization. Most of the evidence is of a different type than that used in traditional phonemic analysis. In traditional phonemic theory, the fact that all of these segments are contrastive in at least some environments is the central criterion. Additional evidence for the solution's validity comes from the 'system symmetry' that such a solution shows (e.g., there are no pharyngealized phonemes without plain counterparts).

The two alternative solutions given below primarily remedy the problems of defective distribution and the mobility of pharyngealization. Both types of solution have been used in the literature to account for phonological data similar to that found in Kurmanji.

Two Sets of Vowels. Hyman's (1970) data for Nupe shows a conditioned alternation between plain, labialized, and palatalized consonants; the last two categories appear only before back rounded and front unrounded vowels respectively. However, before one vowel, /a/, these three types of consonants appear to be contrastive. In order to avoid the partial redundancy of a separate series of labialized and palatalized consonant phonemes, Hyman posits three underlying vowels /a/, /ɔ/, and /ɛ/ which are all phonetically realized as /a/. Hyman argues that besides satisfying the simplicity criterion for a phonological solution, these vowels are "psychologically real" to the speakers. This latter claim is based on observation of the assimilation of

loans which contain /ɔ/ and /ɛ/ and from a morphophonemic process of reduplication where /a/ appears to be differentiated according to Human's three-way analysis.

If we posited a separate set of underlying pharyngealized vowels instead of consonants we would rectify the problem of defective distribution to some extent for Kurmanji; but not totally as Hyman was able to do for Nupe. Such a solution would also reflect the phonetic nature of pharyngealization which is often perceptually and acoustically more noticeable in the following vowel (see Kahn, 1975, p. 40) than in the consonant. Thus, the problem of consonant "jumping" on either side of a pharyngealized vowel would be a phonetic not a phonological variation.

The Kurmanji data does not correspond exactly to the Nupe model because in no cases do a pharyngealized and plain segment appear in complete complementary distribution. Furthermore, a vowel solution in Kurmanji does not result in increased systemic simplicity. Eight segments would still be required due to the fact that pharyngealized segments would still be required due to the fact that pharyngealized segments sometimes appear even before /ɪ/ and /e/. This would result then in another type of defective distribution - this time for /ɪ/ and /e/ rather than for p and c. Unlike Hyman's solution where the underlying vowels were neutralized on the surface, Kurmanji pharyngealized vowels are phonetically distinct. However, despite this phonetic reality the solution does not seem to be phonologically as valid as the one for Nupe. There is no powerful independent justification for representing pharyngealization in vowels rather than consonants.

Suprasegmental Pharyngealization. A second type of solution based on a suprasegmental analysis has been used to account for vowel harmony in West African languages (Stewart, 1967) and pharyngealization in dialects of Arabic (Harris, 1942). Stewart's solution for Akan is a combined separate vowel set and 'single prosodic feature' solution. He posits an

independent vowel feature, tongue retraction, which inheres in five vowels of the Akan system while the other five vowels are tongue-advanced. These vowels are all phonetically realized on the surface. However, all of the vowels in a one-morpheme verb stem containing only non-central vowels must be of one type. The solution posits vowel harmony based on the vocalic feature of tongue retraction.

Harris' 'long component' analysis of the pharyngealization in Moroccan Arabic eliminates two related problems of a segmental analysis: (1) a defective distribution for pharyngealized consonants that appear only in the environment of other pharyngealized consonants, and (2) the phenomenon which causes this - the supra-segmental phonetic effect of a pharyngealized segment in a word, (i.e., one pharyngealized segment can condition others across syllable boundaries). This suprasegmental solution also accounts for the alternation of front and back vowels following plain and pharyngealized consonants respectively; e.g., dær 'he built' vs. dar 'house.'

A comparable solution in Kurmanji would solve the problem of defective distribution much more completely than the double vowel set solution could. It would also account for the consonant jumping (e.g., CVC ~ CVC) as an unconditioned alternation. Furthermore, it would unify pharyngealization as a feature which may then vary for different types of speakers.

Kenneth Pike (personal communication) has suggested the following justification for the phonological behavior of pharyngealization (or tongue retraction) in languages: pharyngeal as opposed to buccal articulation may demand special morpheme structure conditions or suprasegmental treatment because speakers can not shift as rapidly to and from pharyngeal articulations as they can to and from segments articulated only in the mouth. This inertia causes slower moving features to "smear over" into (a) following segment(s).

The major drawback in a suprasegmental solution for

the pharyngealization in Kurmanji is that it does not explain why we find only one pharyngeal(ized) consonant in a word. This is quite different from the situation reported for Arabic. However, Pike's remark on the phonetic nature of pharyngeal articulation may also be used to account for the surface phonetic constraint which dissimilates pharyngeals in a word. In order to avoid or limit the "smearing" of contiguous segments, Kurmanji has limited pharyngealization to one segment per word. This does not explain why Kurmanji "chose" the surface constraint rather than a suprasegmental feature like Arabic has, but rather that both mechanisms are related to the phonetic and phonological "constraints" imposed by pharyngealization.

One additional piece of evidence (cited above) which a suprasegmental solution fails to account for is the alternation between pharyngealization and aspiration. We could propose alternating suprasegmental pharyngealization and aspiration to account for these particular examples, but then we would not be able to explain the separate existence of a series of aspirated stops which contrast with plain unaspirated stops.

4.3 Underlying Single Segment Solution

A check in the literature reveals three precedents for the use of underlying pharyngeal or laryngeal segments in phonological solutions. The first and most well-known is the laryngeal theory for Proto Indo-European (see Keiler, 1970). Abstract laryngeal segments are used to account for otherwise anomalous vowel correspondences. Keiler (1970, p. 68) uses the influence of Arabic emphatics on following vowels as an analogy for what happened in Indo-European, although the precise phonetic nature of these underlying laryngeals (or actual evidence of them) remains mysterious.

Two other solutions are used to deal with otherwise anomalous morphophonemic alternation for derivations in Papago (Hale, 1970) and stress in Maltese (Brame, 1972). Hale uses an underlying laryngeal and Brame uses a

pharyngeal. In neither case do these underlying segments ever appear phonetically. However, there is evidence for both languages that these laryngeal and pharyngeal segments existed phonetically at some earlier stage in the language.

Underlying ʕ in Kurmanji does not have the drawback of being phonetically unrealized. If we posit a sequence where underlying ʕ appears post-vocalically with preceding and following consonant unable to take pharyngealization, then ʕ appears on the surface as in:

maʕr	'snake'
baʕr	'sea'
šaʕr	'city'

However, if either C_1 or C_2 in the sequence $C_1VʕC_2$ is a member of the set of potentially pharyngealized consonants then it will in fact be pharyngealized and ʕ will be eliminated phonetically as in paʕn → p̲an 'wide,' paʕnɨ → p̲anɨ 'heel,' zæʕfæran → z̲æfæran 'saffron.' In very careful, slow speech this ʕ may reappear as in t̲æzɨ → t̲æʕzɨ 'cool, fresh.' In case both C_1 and C_2 belong to the set in question, pharyngealization is most likely to appear on one plain segment rather than another in this order: k > h > s > t > p > c > z. However, alternations such as [t̲as], [t̲aṣ] and borrowings such as IA s̲ohbat → sɨbḥæt 'conversation' but IA s̲obḥ → K s̲ɨbe 'morning' shows that there is variability in this hierarchy.

In the F dialect ʕ may either be Ø in some lexical items, as for example K [p̲ænɨr] 'cheese' but F [p̲ænɨr] or it may be realized as /h/. If ʕ is realized as /h/, the surface phonetic constraints are slightly different than if ʕ us realized as /ʕ/. This difference is mainly reflected by the fact that /h/ and C^h may be phonetically realized together. In other words $/C_1VhC_2/ \rightarrow C^hVhC$, if C_1 = stop/affricate but h ≠ Ø.

The other two differences are that only C_1 can be aspirated (while either C_1 or C_2 can be pharyngealized) and

it must be a stop or affricate. This results from the fact that in Kurmanji as in most languages fricatives are not contrasted for aspiration.

To summarize, these are the steps in a derivation from a sequence $C_1V\text{ʕ}C_2$

ʕ = /ʔ/ (Dialect K)

$/C_1V\text{ʕ}C_2/$

If C_1/C_2 = potential pharyngealized consonant

$/C_1V\text{ʕ}C_2/ \rightarrow \underline{C}VC$ or $CV\underline{C}$

not *$\underline{C}V\underline{C}$ or *$\underline{C}V\text{ʕ}C$ or *$CV\text{ʕ}\underline{C}$

ʕ = /h/ (Dialect F)

$/C_1VhC_2/$

If C_1 = stop/affricate

$\rightarrow C_1{}^{h}VhC_2$

There is a further stricture on the appearance of /ʔ/, /C/ or /h/, /Ch/ within a syllable. They cannot appear concurrently as shown in the following rules:

If /ʔ/, /h/ → ø

If /h/, /ʔ/ → ø

This solution seems to eliminate the anomalies caused by a straightforward phonemic solution. There is no defective distribution; the alternation between pharyngeal-(ized) and aspirated segments is formalized; the pharyngeal dissimilation rule is embodied by the solution. We are able, to some extent, to predict the consonant in which ʕ will be located if it does not appear as itself, although the hierarchy is still somewhat problematic.

4.4 Conclusion

An underlying pharyngeal segment which can be variously realized as pharyngeal or glottal, pharyngealized or aspirated, and in primary or secondary articulation seems to account for the phonological behavior of these segments in Kurmanji. The main remaining problem is that the occurrence of some pharyngealized segments is more common than others in social environments. We can distinguish two groups: /h, ʕ, s, q/ and /p, t, c, z/. In the first set /q/ is rarely changed to /k/ or /k^h/. The members of the first set are much less likely to be depharyngealized by F speakers than are the members of the second set. This is the only data we found that is not "captured" by the underlying ʕ solution.

Although this generative solution addresses more of the data than the traditional phonemic analysis of Chapter 3, it is rather less useful in representing lexical items and their variants. Because borrowing and variation can be treated as if they were sub-phonemic as well as phonemic processes, the representation of lexical items is not changed according to this underlying ʕ analysis. We continue to use the pharyngeal series of phonemes in our discussion of the dynamic processes encountered in borrowing and social variation. An important conclusion of our analysis here has been that generative solutions need not be abstract or non-phonetic.

CHAPTER 5

SYNTAGMATIC PHONOLOGY

"La génie du kurde se caractérise par une recherche constante de la concision.... Chaque mot kurde est conduit, par son évolution naturelle, à se condenser à l'extrême en s'allégeant progressivement du plus grande nombre de sons possible, jusqu'à devenir monosyllabique."

Djeledet Bedir-Khan and Roger Lescot (1970, p. 44)

5.0

At first glance the syllable structure and stress placement in Kurmanji seem straightforward. Stress, for the most part, is on the ultimate syllable of either a monomorphemic word or a stem, except when marking a particular morpheme or syntactic class that might be logically emphasized. The optimal syllable in Kurmanji is either CV or CVC although other less common types exist. The most noticeable aspect of syllable structure in Kurdish is an apparent low tolerance of consonant clusters which leads to the break-up of clusters; this is also characteristic of Persian which acts on loan words such as 'Skol' (beer brandname) to produce [eskol] or on 'club' to produce [kulub]. However, even clusters which are tolerated in Persian such as /sæbr/ 'waiting' or /ʔæmr/ 'order, age' are broken up when pronounced by Kurds. All of these processes seem to fit together very nicely - stress placement, optimal syllable structure, permissible clusters, prohibition against geminates, epenthesis, and metathesis - until one hears Kurmanji spoken fast, as it is in every day conversation. In casual style stress may shift and syncope may delete whole syllables, forming new consonant clusters and even geminates.

This chapter considers the position of stress in Kurdish on a word level (this includes monomorphic words as well as stems with bound morphemes) and on a phrase level (this includes compound grammatical constituents up to whole sentences). The discussion of stress is placed first because stress is usually helpful in predicting which elements will be syncopated in natural speech and where epenthesis has occurred on the surface. Although sets of rules or conditions presented in this chapter will not be strictly ordered relative to each other, it is assumed that stress applies first in all cases, thus accounting for penultimate stress in words such as [sábɪr] 'waiting' versus the more usual ultimate stress in /hazír/ 'ready.'

It is shown below that stress may only appear in a syllable other than the final syllable when it is morphologically conditioned; either a particular morpheme is stressed or a word belonging to a particular morphological class has contrastive, non-final stress. In the case of [sábɪr], there is no morphological conditioning; an underlying final cluster is simplified after the stress rule has applied to the word as if it is one syllable. Exceptions to the main stem final syllable stress rule are due to the presence of the following morphological categories in a word: plural, comparative, present tense person/number inflections, derivations, imperative/subjunctive, verbal negative, vocative, interrogative, adverb, interjection, preposition and conjunction. Following the stress rules will be a discussion of syllable types in Kurmanji as well as an accounting of permissible positions in the syllable for the sounds of Kurmanji as described in Chapter 3.

The types of consonant clusters both within the syllable and between syllables are also discussed. Processes such as vowel epenthesis, consonantal syncope, and metathesis which "conspire" to reduce unacceptable clusters are specified. Types of vowel clusters within syllables are described as well as forms of vowel sandhi between words ending in vowels and subsequent vowel-initial morphs or words.

Finally, these phenomena are reconsidered as they appear in casual speech. Although an analysis of features other than stress, such as pitch and tone, is not included here, suggestions will be made for possible correlations of fast speech phenomena with narrative content. Reformation of clusters outside of careful speech is compared to cluster simplification in careful speech.

The phonetic signals of stress are limited to a small difference in loudness, but usually there is little contrast in pitch and length. These latter features are reserved for other aspects of prosody which are not discussed here but appear to be similar to Persian prosody as described by Hodge (1957). These factors produce, in careful speech, an almost even valuation of syllables. Stressed syllables appear as only slightly prominent. With such a small perceptible difference between the absolute categories of stressed and unstressed, lesser degrees such as secondary and tertiary stress are marginal. We will consider secondary stress in the context of phrases. The presence of several stressed categories such as reflexive, ezafe, and deixis may reduce the word level primary stress to secondary stress in phrases.

5.1 Word Level Stress

Unmarked stress placement in Kurmanji places stress on the last syllable of the word or stem:

$$[+syll] \rightarrow [+stress] / \_\_\_\_\_ +$$

This is the only stress rule which has a phonological environment. Nearly every noun or verb when cited in zero inflected form will show ultimate stress. Notable exceptions are words like [sábɪr] cited above which have an epenthetic [ɪ] which is not stressed (rules for epenthesis apply after stress).

In words which are <u>not</u> stressed on the final syllable of the stem, stress placement is determined by the

existence of certain morphological categories which receive primary stress. These categories were enumerated in the introduction to this chapter. Stress in Kurmanji appears to be lexically redundant. That is, it is not easily specifiable by phonological rule, but rather appears to inhere in particular morphemes. Each of these stressed morphemes is discussed below and compared to morphemes which are not stressed.

The noun affixes which receive stress are the plural, the comparative, and derivational suffixes. The indefinite, on the other hand, is never stressed. For example: /mer/ '(the) man'; /méræk/ 'a man'; /merán/ 'men.' Examples of the comparative inflection and noun derivations are: /xoš/ 'pleasant'; /xoštír/ 'pleasanter'; /xoší/ 'pleasantness.'

Verb affixes which are stressed are present tense person/number inflections, imperative/subjunctive, infinitive, and verbal negative. Past tense person/number inflections (which appear only for non-transitive verbs) are unstressed; for example, /dɪkævím/ 'I'm falling' but /khátɪm/ 'I fell.' The copula is also unstressed; for example, /méræ/ 'he's a man.' An example of the infinitive form is /hatín/ 'to come' contrasted with /hátɪn/ 'they came,' or /řunɪštín/ 'to sit versus /řunɪ́štɪn/ 'they sat.'

The imperative/subjunctive and verbal negative are the most stressed categories. As we show below, they preempt stress in case they appear in a word with another stressed morpheme. For example, /bíšɪnɪn/ '(you pl.) send (it)!'; /ko bízanɪn/ 'that they know'; and /nách ɪnɪn/ 'they aren't planting; (you pl.) don't plant!.' In all of these words, the stressed negative or subjunctive/imperative takes stress off the person/number suffix of the verb. The following rule formalizes this stress shift:

$$[+\text{syll}] \rightarrow [-\text{stress}] \; / \; \begin{Bmatrix} [+\text{negative}] \\ [+\text{imper/subjunc}] \end{Bmatrix} \; X\_\_\_\_\_$$

where X does not contain #

In the case of /nə́čhinɪn/ we can see that the word is ambiguous; the prefix /nə́-/ may signify an indicative or an imperative negative. This is because the negative and imperative/subjunctive do not appear together. Thus, there is no conflict between these two categories for the primary stress in a word. For other imperative forms, there is neither an imperative/subjunctive affix /bɪ́-/ nor a negative /nə́-/; in these cases the verb may be a suppletive form which is stressed on the first syllable such as /wə́rə/ 'Come!' (/hatɪ́n/ 'to come') or /hə́rə/ 'Go!' (/čhon/ 'to go'). When an imperative suppletive form is negated, it sometimes reverts to the non-suppletive form as in /nə́čhə/ 'don't go!' Again, this evades a possible stress conflict between imperative and negative. However, the negative /nə-/, when it is part of a noun or adjective construction, is <u>not</u> stressed; e.g., /nə́kəvə/ 'Don't fall' but /nərəhə́t/ 'uncomfortable' and /nəxoší/ 'sickness, indisposition.'

Vocative stress is similar to cases of imperative stress where no imperative/subjunctive morpheme /bɪ́-/ appears. Vocatives are always stressed on the first syllable of the name or title as in /mə́sʃud/ 'Massoud!' or /mʊ́sa phə́xəmbər/ 'O Prophet Moses' and /qə́rban/ 'Sacrifice! (Excellency!).' Vocative stress appears to be an areal feature; both Turkish and Persian have word-initial stress to signal vocatives. At some time in the past Kurmanji also had unstressed vocative suffixes, /-o/ (masculine) and /-e/ (feminine) as in /kʊ́ro/ 'Boy!!' or /kɪ́ce/ 'Girl!' but these are rarely used now. Sometimes, in old folk tales, they may even be reinterpreted as part of the stem; i.e., when a name is used non-vocatively stress is placed on a final /-o/ or /-e/ as if these suffixes were actually part of the name as in /mamó/ 'Mam (hero of a Kurmanji epic)' /zɪné/ 'Zin (heroine of the same epic).'

The last group of stressed morphemes includes a number of "function words," i.e., interrogatives, locative and temporal adverbs, interjections, prepositions, and conjunctions. Most of the words in this category have two syllables; these words are usually stressed on the first syllable.

A few words which have three syllables may be stressed on the penult. However, interrogatives, no matter how many syllables they have, are always stressed on the initial syllable.

Some of these "function words" are borrowings as /ǽma/ 'but' or /wíla/ 'by God.' Other words in this class, particularly the adverbs, may have unstressed locative case endings. The following words never appear without the ending /-ə/ which is probably no longer analyzed as a separate morpheme although stress placement may be explained by considering it as such, e.g., /sí̲be/ 'tomorrow,' /dɪhúne/ 'yesterday,' and /lálə/ 'next to.' Interjections, conjunctions, and adverbs which cannot be classified as borrowings or historically divided into more than one morpheme include the following examples: /dísa/ 'again'; /ǽgær/ 'if'; /khǽne/ 'let's see' /wí̲sa/ 'similar to'; and /xénjɪ/ 'except for.' There are some exceptions in this class; some of these exceptions may be borrowings as is /hætmǽn/ 'surely,' but others such as /hætá/ 'until, as far as; /hækhí/ 'if, when' (but /ǽgær/ 'if') appear to be Kurmanji anomalies.

Interrogatives are always stressed on the first syllable; for example, /chǽwan/ 'how?' /bóchɪ/ 'why?' /khídære/ 'where' /khǽngɪ/ 'when?' The conversational forms of /chǽwan/ and /bóchɪ/ are often [chaa] and [bo] respectively where the unstressed syllable has been elided or syncopated.

As our discussion above documents, stress in Kurmanji is usually predictable from morphological class. There appear to be few cases where two stressed morphemes appear together (excepting the imperative/subjunctive and negative prefixes which pre-empt stress on other morphemes). In general, a clearly definable morpheme class which receives stress does not have exceptions. However, the last category of "function words" discussed above is not clearly limited to a single phonemic form such as the indefinite /-æk/ or the plural /-án/; some of the words in this latter class may be stressed anomalously. These exceptions pose no threat to our formulation because they are dealt with

individually in the lexicon, not by rule application. The very few anomalous cases of stress we have noted for Kurmanji words can often be explained by recourse to a consideration of phrase-level stress. In a phrase, as we specify below, certain morphemes are more marked than others; some of these morphemes may be bound and some may be free. On a word level, in the word /mácetır/ 'invisible spirits' the stress on the first syllable of a noun may be explained by considering the literal meaning of the compound, 'us better.' Although the word contains the comparative suffix /-tır/, normally a stressed morpheme, this is superceded by the oblique pronominal form /má/, a more stressed category on a phrase level.

5.2 Phrase Level Stress

On a phrase level, stress placement is simply an extension of stress placement within words. New semantic and syntactic classes which take stress, may supercede morpheme stress within the word. Three categories of syllables which normally take stress when part of constructions are: ezafe (vowel linking noun to following modifiers; see below) deictic, and oblique. All these appear as parts of noun phrases. For example /žınâ ʔaqíl/ the clever woman (ezafe construction)/awí mırofí/'this man (deictic) and /naw cəlé/'in (the) cellar' (oblique). These endings are not analyzable on a word level as with inflections and derivations because they only appear in phrases.

Ezafe, a term borrowed from Arabic grammar, refers to a linking vowel which appears between a head noun and a following modifier or modifiers which may be adjectives, pronouns, or nouns (Kurdish NP construction is N + Ezafe +Mod +Ezafe + Mod...). In Kurmanji this ezafe may be /-e/ or /-a/ depending on number (sg. /a-/, pl. /e/) and gender (M/-e/, F/-a/). Perhaps this heavier informational load explains in part why Kurmanji ezafe suffixes are stressed whereas the Sorani ezafe morpheme which indicates neither gender nor number is unstressed in that dialect. Examples

of Kurmanji ezafe constructions are /kíc á phašá/ 'daughter + ezafe + king' which is realized as [kɪcá phašá] '(the) pasha's daughter,' /sǽ é khæsíf/ 'dog +ezafe + dirty' which becomes [sǽ khæsíf] '(the) dirty dog' and /nók é thazé/ 'chick peas + ezafe + fresh' → [noké thazé] 'fresh chick peas.'

The deictic construction in Kurmanji is comprised of two morphemes: (1) a phrase-initial /æwí/ or /awé/ in the nominative case and /wí/ or /wé/ in the oblique and (2) a phrase final /-í/ or /-é/ after the noun. Both morphemes are stressed as in /æwí phašíí/ 'this pasha' or in /sær wé kanyé/ 'on that spring.'

The oblique case may be represented by a bound or a free morpheme. An example of a bound form is the ending /-a/ on the noun /junì/ in the following sentence:

mæʕayn	-á	tǽ	-žɪ	junì	-á	bìnæ
mare	E.	you	also	foal	O.	will bear

Free translation: Your mare will also bear a colt.
(Note: E. =ezafe; O. =oblique)

An example of a free oblique form is the use of the pronominal object /mí/ in the sentence below:

hæm	juní	bídɪ	mí
too	foal	give	me

'Give me the foal, too.'

Within extemporaneous discourse all primary stresses may become secondary and particular syllables stand out either because they belong to "marked" categories specified above and in section 5.1 or because the speaker wants to emphasize something. In its latter use stress is almost free-floating. It should be noted that the common morphemes /væ/ 'and' and /-žɪ/ 'also' are rarely stressed whereas /xo/, the reflexive pronoun which appears often in discourse almost always has primary stress. Some sentences taken at random

from connected discourse are shown below with primary and secondary stresses marked:

1. řóž- æk -e pʰašá -æk ʃadìl hé- bu wæ bo
day a O. king a kind there was and for

mɪlæt- é xó zòr bàš bu·
country E. self very good was

'Once there was a merciful king who ruled his country well.'

2. ʔæ̀z næræhǽt ɪm æm sæ̀ræk -é řúnɪn.
I uncomfortable am we a little O. that we sit

I'm uncomfortable; let's sit for awhile.

3. tæ khobarí kɪr tǽ gó æ̀(z) šɪr wæ nǽxom.
you oath made you said I milk will not drink

'You took an oath saying you would not drink milk.'

4. tɪ xó dɪbɪní chol o bɪyabánæk e.
you self bring it plain and desert O.

'Bring it yourself from the countryside.'

5. got qórbàn wæ gɪrar che kɪríyæ hæ̀tmǽn tɪ
he said sacrifice and stew was made surely you

nɪzanɪ.
didn't know

He said, "My lord, surely you didn't know a stew had been prepared."

5.3 Phonotactics

Theoretically syllable structure in Kurdish is fairly varied; in practice the language acts to limit syllables mainly to CV or CVC. The following types of syllables are possible: V, CV, VC, CVC, CCVC, CVCC and CCVCC. CV and CVC are the most preferred types. Word final clusters are usually broken up by an epenthetic [ɪ] (see next section) if there is no following vowel-initial morpheme. If the structure of a word is (C)VCV, the second consonant begins the second syllable unless morphological boundaries dictate otherwise. If the structure is CVCCV, the middle consonants are split to form syllable boundaries. However, in some cases Kurmanji appears to treat these as medial consonant clusters and metathesizes or otherwise eliminates the sequence -CC-. Syllable types V and VC usually do not occur after pause (see section on vowel sandhi) because [ʔ] or [ʕ] may appear at the beginning of a word beginning with a vowel. CCV(C) is limited to stop plus /r/ clusters which appear very rarely and then are often broken up by an epenthetic [ɪ]

Most of the consonants discussed in Chapter 3 can appear initially, medially (between vowels), and finally (except as otherwise noted in Chapters 3 and 4. A discussion of the possible combinations of these phonemes follows.

5.3.1 Optimal Cluster Types

Consonant clusters in the phonology of Kurmanji tend to follow these models:

$V\bar{C}C$, $C\bar{C}V$, $V\bar{C}CV$ where $\bar{C}$ is more sonorant than C

In other words, the closer the consonant segment to the vowel segment, the more sonorous that segment. However, the contiguous consonants must be differentiated by manner - e.g., they are not both stops or both fricatives. In the few clusters that appear word initially in Kurmanji; the combination is most often [+stop] [+flap] [+voc] (e.g., bra

'brother' or dran 'teeth') with the most sonorous segment closest to the vowel. In general, preferred combinations are specified by relative degree of sonority. The more sonorant member of a cluster may be a nasal, a lateral, a flap, or a fricative while the less sonorous member is usually a stop. Examples are: /dupɪšk/ 'scorpion,' /bɪlɪnd/ 'high,' /gærm/ 'warm,' and/ɪlq/ 'hiccup.'

5.3.2 Cluster Simplification

When the structural sonority relationship is violated, and sometimes when it is not violated, three processes work to simplify clusters: (1) Consonantal elision (2) Vowel epenthesis and (3) Metathesis. The consonants most commonly dropped in Kurdish are /r/ and /n/ and the most common environment for this elision is the cluster. For example /thærš̌ɪ/ 'drop spindle' in Kurmanji is realized as [thæš̌ɪ] for a large number of speakers. As cited in Chapter 3, /n/ often nasalizes the preceding vowel and then drops. The nasalization of the vowel may disappear as well. Two examples of /n/'s dropping to facilitate cluster simplification are: /zendæ/ 'it perceived' which commonly becomes [zedæ] even in careful speech and /dɪnyæye/ 'in the world' can become [dɪyæye] in faster speech. Where three consonants come together as in /pɪrsyár/, the /r/ is elided to form [pɪsyár]. Other consonants may be elided to get rid of unwieldy clusters as in /khæyfxôš/ 'happy' becoming [khæyxôš].

The second process which works to break up consonantal clusters is epenthetic /ɪ/. This is most noticeable in loan words (see section 6.2.8) such as /næzr/ from (Arabic) → [nɛ́zɪr] 'pledge, vow' and /z̲olm/ (from Arabic) → [zɪ́lɪm] 'oppression.' There are also a large number of Kurmanji words ending in /-ɪk/ (sometimes analyzable as the diminuitive suffix) which appears with /-ɪk/ in absolute form, but drop the /ɪ/ in fast speech when inflected with a suffixed vowel. However, these /-ɪk/ forms, when they appear, are all stressed on the /ɪ/ so they cannot be analyzed

as cases of epenthesis but must be considered as part of the elision inherent in fast speech (see section 5.4). When non-epenthetic /ɪ/ is elided, stress appears on the following ezafe or oblique morpheme vowel which has triggered the elision by moving the stress and making the resulting consonant cluster medial rather than final, e.g., /dafík á wí/ 'drum +his/her' is realized as [dafká wí]. Some "pure" Kurmanji words also use epenthesis to break up clusters as in /t̲íwr/ 'radish' which is realized as [t̲íwɪr] or /héfr/ 'manger' which becomes [héfɪr] (notice that stress remains on the first syllable).

A third process which acts to create optimal consonant clusters along the sonority continuum is metathesis which tends to operate medially. This process illustrates the extreme aversion of Kurmanji to all clusters, even medial ones: for example, /dærweš/ → [dæwréš] 'dervish'; /dærbaz/ → [dæwráz] 'pass'; /h̲æɪwa/ (Arabic loan) → [hæɪáw] 'halvah.' Notice that in each case the rearrangement of the segment /w/has placed it following a vowel; according to our analysis given in section 3.1.2.4, this makes /w/ a vowel in post-vocalic environments, eliminating the problem of a consonant cluster. Another type of metathesis acts to place /r/ in a post-vocalic rather than a pre-vocalic position; e.g., /mæxreb/ (from Arabic) → [mærxæb] 'sunset' and /kʰæbrɪt/ (from Persian) → [kʰærpɪt] 'matches.' The next step may be the elision of /r/ which could occur in a post-vocalic, but not pre-vocalic position.

5.3.3 Behavior of Segments /c/, /j/, /r/

Across syllable boundaries and in some cases word boundaries, two processes occur which also shed light on the phonemic classifications of /j/, /c/ and /r/: (1) Simplification of affricates (2) De-gemination. The first process (possibly related to Azeri Turkish influence) works in the following manner:

[+affricate] → [+fric]/ _____ [+bilabial]

Examples of this are /mæJmɛ́/ 'large eating tray' → [mæžmɛ́] /mæJbúr/ 'necessary' → [mæžbúr] /bǐčmæ/ 'I'll go' → [bɪšmæ]. A dialect variation for the word 'crab' /kʰežmaɪɛ́/ versus /kʰenjaɪɛ́/ also appears to reflect a process of assimilation and cluster simplification. As indicated in Chapter 3, the palato-alveolar affricates in most other instances seem to act as single phonemes. For example Persian /žandɪrmɛ́/ 'gendarmery' is borrowed into Kurmanj as /jandɪrmɛ́/ and intersyllabic clusters such as the one in /pʰænjærɛ́/ 'window' are permissible. The second process, de-gemination, works mainly on loans, since in Northern Kurdish there no geminates on the lexical or careful speech level. For example Arabic loan /bænna/ becomes/bænɛ́(r)/ 'builder' in Kurdish and /muhæmmæd/ becomes /mɪhæmɛ́d/ 'Mohammed.' In the phrase /sær rɪsé hæspé/ 'on the horse's mane' the two /r/'s would not combine to form /ř/, but rather /sær/ → [sæ]. This type of de-gemination indicates that /ř/ is not equal to /rr/, but that /r/ and /ř/ are separate phonemes.

Another example of cluster simplification bearing on the classification of a phoneme is in changes noted for clusters containing [ŋ] as one element: e.g., /dæng nɛ́kæ/ 'don't make a noise' → [dæy nɛ́kæ] and /dɪrɛ́ng/ → [dɪræn] or [dɪrɛ́k] but never [dɪræŋ].

Despite the pressure to simplify clusters in lexical items, some word final and medial clusters remain which do not conform to the sonority syntax. These fall into two categories:

(1) Onomatapoeic and reduplicative words: e.g., /hokš/ 'whoa,' /qɪtqǐdɛ́ng/ 'tickle,' /kǐtkɪt/ 'little by little'

(2) Borrowings: /kʰapšǐn/ 'short jacket,' /sɪbhɛ́t/ 'conversation'

Although we have not noted which types of linguistic devices Kurmanji "favors" in breaking up unacceptable consonant clusters, it is interesting to compare a set of

historical cognates shared by Persian and Kurmanji. From cases where we can document older Iranian (Avestan) forms it appears that at some point Kurmanji and Persian "broke up" initial consonant clusters, Kurmanji by a pre-posed /ɩ/ and Persian by a medial vowel as in the following:

	Avestan	Kurmanji	Persian
to break	sčand	ɩškandɩn	šekæstæn
star	star-	ɩs̲tayr	setare
white	spaeta-	ɩspi	sepid/sefid
to take	--	ɩs̲tandɩn	setadæn
column	stūna	ɩstun/sɩtun	sotun

We should point out that this illustrates a historical stage in the language. Due to a lack of loan forms with initial clusters of this type (see section 6.2.8) it is not possible to determine whether Kurmanji would still break up initial sibilant - stop clusters in the above manner. However, loans coming through Persian, such as /eskol/ (beer brand name) indicate that in at least some borrowings Persian now breaks up these clusters with a pre-posed vowel.

5.3.4 Vowel Sandhi

Vowel clusters, excepting diphthongs are non-existent within morphemes in Kurdish. However, due to the large incidence of inflectional suffixes which are either plain vowels or vowel initial, inter-morphemic vowel clusters do occur. These vowel clusters can be summarized as follows: /æ/ nearly always loses its identity to a preceding or following vowel that is different, /e/ retains its identity except in proximity to /a/, and /a/ always retains its identity. High vowels preceding low vowels always take glides, but Kurdish tolerates the other vowel clusters, including geminates, without glides. For example: /t̲ænikǽ á xalí/ → [t̲ænikǽ xalí] '(the) empty can'; /balthǽ é tuž/ → [balthé tuž] '(the) sharp ax'; /tɩrí é jɩndí/ → [tɩriyé jɩndí] '(the) pretty grapes'; /ře á wi/ → [řeyá wi] 'his/her

roads.' Cases where /a/ remains unchanged are exemplified by the following: /dɪnyá á mæz̲ɪn/ → [dɪnyaá mæz̲ɪn] '(the) big world' and /eždɪhá é xætærnáx/ → [eždɪhaé xætærnax] '(the) dangerous dragon.' There is a general tendency to drop a rounded stem-final vowel when it is destressed, e.g., /zarú é wɪ/ → [zaruyé wɪ] → [zaryé wɪ] 'his/her children.' When vowels are contiguous across word boundaries, they often remain distinct, sometimes by the use of intervocalic [ʔ] or a glide.

5.4 Observations on Conversational Speech

Listening to conversational speech, several observations may be made: (1) Many more consonants are elided than are during careful speech. For example: /dɪbežæ/ → [dɪbeyæ] 's/he says' and /sæmawɪr/ → [sæmaɪr] 'samovar.' (2) Unstressed vowels, sometimes inserted previously in epenthesis, are elided, thus creating new clusters, although mostly across morpheme or word boundaries.

The most startling change in regular speech is the production of geminate [-nn-] despite the fact that geminate consonants are strictly prohibited on a lexical level. The /ɪ/ of third personal plural endings of future verbs are dropped, e.g., /bín̍ɪnæ/ → [bín̍næ] 'they will bring,' /r̆únɪnæ/ → /r̆únnæ] 'they will sit,' but the geminates are not subsequently simplified. The probable reason for this is the opposing pressure on the system to preserve morphological distinctions. If [bín̍næ] became *[bín̍æ], it would be indistinguishable from the singular form /bín̍æ/. Besides numerous instances of this nasal gemination within the verb paradigm, one other example was noted: /s̲ond náxo/ → [s̲on náxo] 'don't swear.' However, other than alveolar nasals, no geminates have been noted in the language. In other cases of possible geminate formation, the first stop usually drops as in /kɪcík ko/ → [kɪcí ko] 'the girl that.'

Almost any unstressed /ɪ/ (and some stressed ones as well) is subject to syncope in spontaneous speech - whether

or not the /ɪ/ was previously added in the earlier epenthesis provided it is followed by a consonant and then another vowel:

[ɪ] → ø/ _____C+V

e.g., /dɪmǐk/ 'beak': [dɪmkǎ wǐ] 'its beak'; /tɪtǐk/ 'pieces of metal' [tɪtkǎ wǐ] 'its pieces of metal.' The [ɪ] of the verbal aspect prefix /dɪ-/ disappears (but not the imperative/subjunctive prefix /bɪ-/ which is stressed); e.g., /chǐ dɪgærì/ → [chǐdgærì] 'what are you looking for?' but [tǔ bǐgɪræ] 'take the mulberries.' Whole syllables with vowels other than [ɪ] may be syncopated as in /náhešarǐye/ → [náhšarìye] 'was not aware' or /khaxæzǎ/ 'of the letter' → [khaxzǎ] or even /xodanǎ/ → [xodnǎ] 'care of.' On the other hand, syllables may also be expanded to denote special emphasis. For example: /ʕæjǐb/ 'strange' → [ʕæjæhǐb] or /dumáyk/ 'remainder' → [dumayǐk].

This last observation is significant in pointing towards the type of information necessary to a complete description of the syntagmatic phonology of Kurmanji. Although in more careful (and more artificial) speech, stress and clusters are fairly predictable, the behavior of phoneme combinations in conversational speech can only be adequately analyzed by taking meaning and speaker's emphasis into consideration. A lively speaker who wants to emphasize the interesting points of a narrative may use all sorts of forms that are expressly forbidden by our phonological rules - e.g., one story teller consistently pronounced /šɪpǐk/ 'raining cats and dogs' as [šššǐpɪk]. She was not a stutterer and was evidently a good storyteller by the laughter she generated. Certainly any complete analysis of the prosody of the language (which is beyond the present scope) would have to explain these seeming anomalies. It is evident that there is a problem when the rules are violated in a significant percentage of natural speech. That speakers <u>know</u> the rules is apparent by their ability to produce the careful forms.

Whether or not linguists should continue to focus almost exclusively on citation forms is an important question.

If only conversational speech were considered, Bedir-Khan and Lescot's characterization of Kurmanji as tending toward monosyllabic words has some truth. However, even on a citation level, Kurmanji is striking for its prohibition against consonant clusters. The morphologically motivated stress rules enable the language to pare off unstressed syllables with fairly low informational loss. The combination of epenthesis, consonantal elision, and metathesis which all reduce clusters might be termed a conspiracy were it not for the fact that there is an opposite tendency in the language to re-create those clusters. However, even taking into consideration the most elided speech, Kurdish fails to develop any non-nasal geminates, nor does it permit initial clusters. The rules, then, are significant to some extent, for all speeds and styles of speech. The extent of this significance can only be accurately measured by an accounting of their subsequent fate in casual speech. Although this chapter does not arrive at a neat list of rules to apply to strings of sounds in Kurdish, it does, to the best of the investigator's knowledge, present the facts of Kurmanji phoneme combinations.

CHAPTER 6

BORROWING

Dans les excellents travaux que nous possèdons sur la langue kurde l'on a trop peu remarqué semble-t-il, que cet idiome a accuelli dans son glossaire non-seulement des mots turcs, arabes, parfois aussi syriaques et géorgiens, mais encore qu'il s'est approprié des mots néo-perses qui sont employés à côté de leurs forms soeurs kurdes, et, grâce à leur grande ressemblance avec ses dernières, se trouvent regardées comme étant kurdes elles-mêmes.

Ferdinand Justi (1872, p. 89)

6.0

Most of the alternations and rules discussed in the last three chapters are particularly evident when related to the assimilation of loan words in Kurmanji. The structural conditions which may appear fairly static in relation to a synchronic description of the phonology can be seen as functioning rules. Conversely, elements of the Kurmanji phonological system which have seemed problematic or even marginal up until now emerge more clearly as originally borrowed segments which have been re-analyzed in some cases to fit both the phonetic and phonological structure of Kurmanji.

Eight specific types of re-analysis of sequences and/or segments found in the assimilation of loans into Kurmanji are discussed below. Preceding those lists and analyses, the literature on loan phonology is touched on in relation to the problems encountered in Kurmanji. The aim of this discussion of the eight types of loan situations is not to draw up a set of rules or predictions, but rather to reveal the devices used by the language to deal with more and less unacceptable segments and sequences. Acceptability is revealed as fixed for some sequences, but variable for others.

6.1 Review of the Literature

In general, neither taxonomic nor generative phonologies have treated loans as central to phonological descriptions. Both types of theories have used some sort of marking system or diacritics to set off foreign forms from other sequences or to make "non-native" configurations unable to undergo applications of rules. Such an approach to Kurmanji would eliminate not only insights alluded to above, but well over 50 percent of the lexicon.

Fries and Pike (1949) and Weinreich (1963) challenged the marking and isolating of lexical items (as well as the opposite extreme of refusing to recognize any loans at all as such) as an insightful method for dealing with real language data. Fries and Pike concentrated more on the synchronic situation of a semi-assimilated loan from one language to another while Weinreich documented the actual process of assimilating phones and phonemes, mostly by bilingual speakers. Both analyses emphasized the importance of system and contrast on a phonemic level as reflected from the phonetic level. Fries and Pike centered their discussion on the example of a Spanish loan into Mazateco [siento] 'hundred,' a permissible phonemic sequence in Mazateco, which should, according to the rules, appear phonetically as *[siendo] because [d] and [t] are allophones in that language. Fries and Pike observe that both monolingual and bilingual speakers are most comfortable with a single symbol for /t/ in the writing system, although the presence of [siento] indicates a contrast between /t/ and */d/. Despite this evidence that the loan has not really changed the phonemic structure of the language, at least in the minds of the speakers, Fries and Pike posit a solution of two coexistent phonemic systems - one where /d/ and /t/ contrast phonemically and one where they do not.

Weinreich is not concerned primarily with allophonic environments in his analysis, but rather with phonetic

approximation within and across phoneme boundaries. He divides types of assimilation into four categories (p. 18): "underdifferentiation of phonemes," "overdifferentiation of phonemes," "reinterpretation of distinctions," and "phone substitution." He makes the point that borrowed phonemes may be realized "correctly" on a phonetic level in the target language while the phonemicization varies from the original loan phonology, or conversely that the phonemicization may be the same in two languages while the allophones differ. Both Weinreich and Fries and Pike appear to be more concerned with phonetic forms than phonemic ones. The fact that /siento/ is completely acceptable underlyingly is not compared to either hypothetical or actual cases where an incoming sequence might be acceptable phonetically but not phonemically, or unacceptable both phonetically and phonemically. Weinreich's analysis of interference is essentially paradigmatic as opposed to syntagmatic. He implies that bilingual speakers reanalyze foreign phones one-by-one in terms of the features of the native system.

Holden (1972), after examining the possibility of applying generative rules and feature hierarchies to the problem of loan assimilation, found these approaches greatly lacking in predictive value. He concluded that surface phonetic ("acoustic") similarity is probably the best indicator for types of assimilation. However, he did not illustrate this hypothesis except by a process of elimination in showing for numerous examples of loans into Russian how abstract feature hierarchies will neither generate unique assimilated forms nor predict segments that will be borrowed into a language. According to Holden "rules" for the assimilation of loanwords are usually quite different from ordinary phonological rules in a language.

Lovins (1973), after reviewing the loan phonology literature in great detail, claims that the theory of "natural phonology"[1] provides useful insights into the assimilation of loans. In natural phonology terms, loans tend to

[1]See Stampe, (1969).

reveal context free "processes" that may have been obscured by subsequent context sensitive "rules' in a language. Lovins translates this generalization into a method for dealing with loan word assimilation. She suggests that, in general, loans will be represented in the lexicon as they stand, if they are phonemically acceptable. The difference between Lovins and Fries and Pike is that the former focusses on the lexicalization process as reflected by the interplay of underlying and surface forms in both loan and target languages whereas Fries and Pike are concerned with underlying forms only insofar as they are reflected by surface ones in the target language. In some cases the differences may be merely philosophical, but in other cases they may result in quite different solutions for actual data.

Lovins formalizes the problems involved in theories of loan assimilation[2] which either place too much emphasis on surface forms or too much on underlying forms. She posits the following rules as representative of a dilemma in the assimilation of a loan sequence, [a'b]: a' → a" /_b and a → a'/ _b. In other words, the language has a segment which is admissible underlyingly but not phonetically in a certain environment and, conversely, admissible phonetically in that environment but not phonemically. The problem is, will a loan word coming in with [a'b] be reanalyzed with an underlying /a'/ or /a/? The position of Lovins and other natural phonologists is that there is no reason to suppose that the initial phonemic form of the loan in the target language will be any different from the incoming phonetic form from the loan language. This is considering the loan operation in terms of phonetic versus phonemic levels in both the loan and target languages. Considering the problem only within the target language (cf. the rules given above), Lovins states, (p. 34)

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[2]Fries and Pike do not actually propose a theory of loan assimilation, but rather of loan description.

> Within one's own language, the usual strategy would dictate /a/ as the underlying representation of [a'] in the given environment, not /a'/...But...If the borrower does not, for any reason, assume that what he is hearing conforms to the system of processes in his language, he may in fact adopt a foreign phonetic representation as an underlying form even if he need not in theory do so.

Lovins' observation offers a neat explanation of how such foreign segments as /t/, /s/, and /h/ were borrowed into Kurmanji. Although pharyngealization was not part of either the surface or underlying phonology of Kurmanji, these segments were not re-analyzed either on the surface or underlyingly as the plain counterparts of the pharyngealized occlusives. Lovins does not take us quite far enough when she suggests that a native speaker may be aware of a loan as not conforming to the rules of the target language. Kurmanji speakers appear to be not only aware of loans as not conforming to the target language rules, they are often very aware of rules in the loan languages. Depending on the degree of contact for each speaker (bilingualism, social attitude, etc.) this may result in numerous, persistent doublets and even triplets of assimilated loan forms in the language.

For example a loanword into Kurmanji from Classical Arabic through Persian [tʰæʁrɪbæn] 'almost' may be realized variously as [tʰæqrɪbæn], [tʰæxrɪbæn] and [tʰæʁrɪbæn]. Due to the following series of rules in Persian and Kurmanji, the segments [q], [x], and [ʁ] are members of different phonemes in each language:

In Persian the rules (slightly simplified here) are:

$$/q/ \rightarrow [ʁ]/\_\_\_\_\begin{bmatrix}+\text{cons}\\+\text{vd}\end{bmatrix}$$

$$[q]/\ldots.$$

$$/x/ \rightarrow [x]/\ldots.$$

For Kurmanji the rules are:

$$/q/ \rightarrow [q]/....$$

$$/x/ \rightarrow [ʁ]/\_\_\_\_ \begin{bmatrix}+\text{cons}\\+\text{vd}\end{bmatrix}$$

$$\rightarrow [x]/...$$

We cannot really determine whether the speaker who produces the word with [ʁ] has lexicalized it as /q/ or /x/. Considering the rules of Kurmanji, the straightforward choice is /x/. But the speaker who produces [tʰæqrɪbæn] appears to have derived [ʁ] from /q/ (using knowledge of Persian or perhaps Arabic, the original loan source) and then, using Kurmanji rules, re-analyzed this as [q]. It is difficult to explain how such a speaker could have assimilated [ʁ] as [q] except through the knowledge that [ʁ] in the loan phonology was derived from /q/. This type of assimilation will be discussed in more detail in section 6.2.7. In situations of continuous contact between loan and target languages, the potential for mixing of cross-language levels at which loans are understood and assimilated cannot be underestimated.

Several investigators (Weinreich, 1963; Haugen, 1953; and Whitely, 1967) have suggested that the degree of assimilation is directly related to degree of bilingualism (as well as other factors such as orthographical interference, social situation, etc.). This is usually but not always the case for Kurmanji where bilingual (Kurmanji and Azeri Turkish, Kurmanji and Persian) and trilingual speakers may assimilate borrowed forms identically or variably (as shown above) depending on phonemic re-analysis. A main difference is that bilinguals and trilinguals appear to introduce more unassimilated forms into their speech. These are not considered to be loans of the type discussed here but rather potential loans. These cases of "mixture" are often imbedded in non-native constructions (morphologically and syntactically) and are rarely used by monolingual speakers. For example Azeri Turkish "ax saqal" literally 'white beard (old one)' appeared in a text. This construction is a

violation of Kurmanji syntax which places the noun before the modifier while Azeri places the modifier "ax" first.

The loan situation in Kurmanji is far more extensive and less peripheral to the central (native?) phonology than the situations reported in the literature above. For many of these studies the majority of the speakers of the loan languages live apart from speakers of the target language (e.g., English and Russian for Holden, English and Japanese for Lovins). Haugen (p. 410) suggests that assimilation of actual phonemes is rare and would be likely to be limited to bilingual speakers or particular words or lexical categories. The pharyngeal(ized) series (as well as voiceless unaspirated) has been well-assimilated into Kurmanji. As we showed in Chapter 3, a number of common Indo-Iranian lexical items in Kurmanji contain these sounds: hæšt 'eight,' sæ 'dog,' and tarî 'dark.' Lovins remarks (p. 160) that rules are rarely borrowed independently of forms. Yet, as we shall show in section 6.2.6, there is at least one exception to this in Kurmanji. Only the fact that a number of rules (e.g., stress, cluster simplification, palatalization) are shared by all the languages in the area prevent us from documenting more cases of rule borrowing (because we cannot determine the original source).

Kurmanji and Persian offer a fascinating counter-example to a common view (cf. Trnka, 1964, p. 190) that languages change primarily in response to internal, not external pressures. These two closely related Indo-Iranian languages have very similar morphological and syntactic structure. Both have absorbed large numbers of Arabic loans. One language, Kurmanji, assimilated a whole new set of phonemes as a result of this borrowing, while the other, Persian, remained nearly unchanged phonetically and phonemically. In Chapter 7 the sociological data that bears on this problem is discussed.

Determining actual sources and "carrier" languages for particular borrowings is difficult in Kurmanji since all the languages in the area borrow from the same sources (the

borrowing tends to go in one direction only - e.g., from Arabic into Persian, from Persian into Azeri Turkish, and from Azeri Turkish into Kurmanji but not vice versa due to primacy of superstrata effects). The learned Arabic loans into Persian sometimes contrast with cognate colloquial forms of Arabic borrowings into Kurmanji. In certain cases, though, the Kurmanji forms are closer to "Persianized" Arabic loans than one would expect (given the borrowed "Arabic" phonemes in Kurmanji). In cases like these we would posit Persian as the "carrier" language for the loan. Within Azeri Turkish, another non-standard language (like Kurmanji) with borrowings from a sister standard, Istanbuli, it is nearly impossible to distinguish historical cognates from loans. However, the international border slows this inter-Turkic contact. For Persian and Kurmanji, as the above quote of Justi's suggests, it is even more difficult to separate historical cognates from borrowings. For this reason, few Persian words are discussed here as examples of borrowing into Kurmanji except where they are semantically likely to be loans (e.g., 'pearl,' 'dervish'). Despite the fact that few are discussed, this investigator is fairly certain that widespread borrowing from Persian into Kurmanji has taken place in the past and is continuing to occur.

Where possible, borrowings considered here were classified and compared according to forms from spoken languages (and dialects) present in the nearby area[3] - mainly Azeri Turkish (AT), Iraqi Arabic (IA), and Standard Persian (P)[4] This is because, the majority of Kurmanji speakers are and have been illiterate. In general borrowings travelled orally, not orthographically. The sources of loans in some cases may have been partially orthographical through

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[3]I am grateful to Sara and Hüsnü Atiş, Ernest McCarus, and John Workman for their help in tracking many of these loans back to their sources.

[4]Standard Persian predominates as a spoken form in Azerbaijan, whereas colloquial dialects precominate in Persian-speaking areas of Iran.

mediation of speakers such as religious teachers or other individuals literate in Arabic or other languages. In cases where forms could not be traced to the above languages, the borrowings were assumed to have come from these sources: Modern Standard Arabic (MSA), Eastern Turkish (ET), or Istanbuli Turkish (IT).

We depart somewhat in this chapter from the specification of levels established in Chapter 3. In numerous examples of loan assimilation, phonetic and phonemic levels are not symbolized by brackets or slashes. This is partially due to the difficulty in establishing forms in loan languages - particularly Iranian Azeri Turkish where existing phonologies are sketchy and no lexicons have been published. In general loan forms represent a phonemic level. Iraqi Arabic forms are given according to the phonemic transcription of Woodhead and Beene (1967) and Clarity, Stowasser, and Wolfe (1964). Modern Standard Arabic forms were taken from lexical entries in Cowan (1971). No Arabic forms were used in this study excepting those cited in the two Iraqi dictionaries (op. cit.) or the modern standard dictionary. The Persian transcription used here agrees with that of Hodge (1960). Persian lexical items were verified in Haïm (1973) or Lambton (1969). The Azeri Turkish forms are fairly ad hoc (probably more phonetic than phonemic) according to the author's impression of them in the field. However all of these forms were checked in Hony (1972) for cognates in Istanbuli Turkish. No form is cited here as Azeri Turkish unless it had a recognizable Istanbuli cognate or it was independently verified by a speaker of Eastern Turkish.

For the Kurmanji assimilated forms, we mainly represent Shikak, except when discussing variants. Since it was impossible to determine the degree of phonemicization for all individual loanwords, it was decided not to indicate these either phonemically by slashes or phonetically by brackets in the lists of examples. However, they are usually symbolized in the text according to phonemic level. If a loanword has a different meaning in the loan language from

its current meaning in Kurmanji, the gloss is cited for both languages; otherwise it is cited only for Kurmanji.

6.2 Loan Assimilation

Besides the types of assimilation which will be detailed below, a large number of loanwords have entered Kurmanji which show no change at all (other than minor details as, for example, a language-specific re-analysis of the contrast of vowel length as a front/back contrast; i.e., IA /a/ : /aa/ becomes K /æ/ : /a/; Arabic /i/ : /ii/ becomes K/ɪ/ : /i/; see Table 6). These are differences of phonemic classification within each language rather than significant phonetic differences. Some examples of phonologically unchanged loans which have been assimilated into Kurmanji are the following:

MSA nɪqaab → K nɪqab 'veil, mask'
AT,IT toz → K thoz 'dust'
AT,IT talan → K thalan 'plunder'
IA qadir → K qa̍dɪr 'prestige, regard'
IA kaasib('winner, earner') → K khasɪb 'laborer, poor man'
IA taajir → K thajɪr 'merchant'

In the following discussion of classes of loanwords, we will proceed from the most obligatory, automatic types of re-analysis, such as de-gemination of consonants, to more problematic classes where alternate surface forms, underlying forms, and rule applications are available and the language (or particular classes of speakers) chooses one form over another. The following criteria were used to ascertain the loan status of all words presented here. (Such criteria are essential in a situation of multiple or continual language contacts between a non-standard target language and standard and non-standard loan languages): (1) The existence of a phonologically and semantically recognizable form in the loan language (cited in a dictionary) (2) The

widespread use (especially in the speech of monolinguals) in the target language of a given loan, i.e., evidence that the word is a bona fide loan and not a case of language mixture. For example a Turkish word like duz 'right, straight' and a Persian word like šoma 'you (polite)' when they occasionally occurred in the speech of bilinguals were not considered to be real loans. Monolinguals used only the Kurmanji forms /rast/ 'right' and /tæ/ 'you.' However in other cases where monolinguals commonly used a borrowed form such as the Persian loan /xanɪm/ 'lady, Ms.' and no common Kurmanji form was apparent, the word was deemed a loan.

Although specific changes will be analyzed in context, Table 6 shows the Kurmanji chart of phonemes labeling which segments are common to which neighboring languages. The inventory of Kurmanji seems to embrace the smaller inventories of the other languages. However, as we shall see below, this does not always result in the simple one-to-one, phone-for-phone substitution that one might expect.

6.2.1 De-gemination

As we noted in Chapter 5, Kurmanji prohibits geminate consonants in nearly every position in which they might occur - even across morpheme and syllable boundaries (except in one case of the plural verb ending, noted in Chapter 5). For all loans found in Kurmanji, de-gemination occurred whether the sequence CC was at the beginning, middle or end of the word. In most cases CC→C. The following examples illustrate:

IA	ba<u>tt</u>aal	→	K	bæ<u>t</u>al 'unemployed, idle'
IA	<u>t</u>ɪɪɪlsɪm	→	K	<u>t</u>ɪlɪsɪm 'charm, talisman'
IA	<u>h</u>ammaam	→	K	<u>h</u>æmam 'bath'
IA	bazzaaz	→	K	bæzaz 'cloth seller'
IA	ba<u>nn</u>aa	→	K	bæna ∿ bænar 'builder'
MSA	mu<u>h</u>ammad	→	K	mɪ<u>h</u>æmæd 'Mohammed'
IA	xɪzzaama	→	K	xɪzem 'nose ring'

One case was noted where compensation is made for the de-gemination:

mm → mb in IA hammaI → K hambaI 'porter'

Although geminate consonants are fairly common in Persian (especially in Arabic loans) and Azeri Turkish, not even bi- and tri-lingual speakers produced geminates in Kurmanji. De-gemination appears to be an obligatory process that applies uniformly to incoming loans.

6.2.2 Replacement of Interdental Fricatives

Modern standard Arabic has a voiced pharyngealized dental stop /d̲/ and a voiced pharyngealized dental fricative /ð̲/ as well. There is also a plain voiced/voiceless pair of dental fricatives /ð/ and /θ/. In Iraqi Arabic, MSA /d̲/ → /ð̲/. Since Kurmanji has neither /ð/ nor /θ/, these sounds must be modified. Possibly due to the area reanalysis (see below) of d̲ as z̲, Kurmanji did not develop a pharyngeal /d̲/ from Arabic loans. Depending partly on the carrier language through which the loan was passed, /ð/$_L$ → /z/ , /ð̲/$_L$ → /z̲/ or /z/, /θ/$_L$ → /s/, MSA /d̲/ → /z/, or /d/:

	IA	ðurIyyaat	→ K	zɪryæt 'descendents'
	MSA	ð̲ulm	→ K	z̲ɪlm 'oppression, subjugation'
	IA	baaʃɪθ	→ K	baʃɪs 'motive'
	IA	maθaI	→ K	mæsæI 'fable, proverb'
	MSA	qaad̲I	→ K	qazI 'judge'
MSA ʔard̲	(IA ʔarð)		→ K	ʃærd 'earth'

One would expect Arabic /ð̲/ and /d̲/ to be re-analyzed as their phonetically closest acceptable counterparts - /z̲/ and /d̲/ - in Kurmanji. The fact that this is not always the case is probably due to interference from Persian and Azeri Turkish which have no /z̲/, or from Iraqi Arabic where /d̲/ is realized as [ð̲]. According to Garbell (1958,

pp. 317-318), conventions for the assimilation of borrowed Arabic words developed both in Standard Persian and Ottoman Turkish where /θ/, /ð/, and /ẓ/ were "actualized" as [s], [z], and [ẓ], a velarized [z]. Since [ḍ] had become [ẓ] in Iraqi Arabic, that phone was also realized as [ẓ]. This may explain why, for example, learned or religious borrowings from Classical Arabic that are shared by all the languages in the area - e.g., ramaḍaan 'Islamic month of fasting' and qaaḍii 'judge' appear as /ræmazan/ and /qazi/ in Kurmanji whereas K /ʃærd/, 'earth' a loan not shared by Persian and Turkish, is not assimilated with a /z/.

In general, in the area where Kurmanji is spoken, interdental fricatives are unacceptable segments. Usually they are perceived as lisping, and native speakers hesitate to imitate the sound correctly in foreign languages although they perceive it correctly. Kurdish speakers from Iraq who know Arabic do pronounce interdental fricatives in Arabic. Interdentals, like geminates, appear to be prohibited in incoming loans.

6.2.3 Treatment of Front Rounded Vowels

The Azeri Turkish phonemic system has two front rounded vowels which have no exact equivalents in the Kurmanji vowel system as shown in Table 6. Although, as specified in Chapter 3, some dialects in Kurmanji do show the change of /u/ to [ü] (as well as /o/ to [u]) this change does not seem to have been brought in via specific loanwords from Turkish. Various hypotheses could explain this: (1) The lexical borrowing took place prior to the variation of [u] and [ü] in Kurmanji (2) The dialects where [u] and [ü] alternate still have an underlying /u/ for both phones and re-analyze the incoming loan phonemically rather than phonetically (cf. Lovins above) (3) The dialects through which the borrowings came had no [ü]. Probably each of these factors prevailed at one time or another.

Assimilation of /ü/ and /ö/ from Azeri Turkish are not completely predictable in Kurmanji. Generally they are re-analyzed as /u/ and /o/ respectively despite the fact that Kurmanji does have a mid-rounded vowel /ʊ/ that might be closer phonetically. In one case in the next group of examples, Turkish /ü/ → K /o/. This is probably due either to the following /r/ or to a variant pronunciation of the original loan. In cases where assimilated loans show a change in rounding of the original vowel, this is probably the result of the application of Kurmanji labialization rules (see next section). The rules are context sensitive which explains why the vowels of Turkish /bütün/ are assimilated differently. The following examples illustrate the types of loan assimilation we have been discussing:

ET,AT tük,tüx → K tʰuk 'hair'
AT kürpɪ(IT köprü) → K kʰorpɪ 'bridge'
IT,AT bütün → K bɪtʰun 'all' (note exceptional aspiration)
AT süzæn(IT süzmek) → K suzmæ 'strainer'
IT,AT görüš (øyɪæmax) → K gorɪše kɪrɪn 'visit'
AT üzæɪlh(IT nazarlık) → K uzælɪk 'evil eye charm'
IT,AT göl → K gol 'pond'
AT köh(IT kök)→ K kok 'root'

From the examples given above, it is apparent that Kurmanji, besides backing the rounded vowels, has changed other vowel relations from their values in Turkish. In the case of assimilated forms /kʰorpɪ/, /bɪtʰun/, and /suzmæ/ this has resulted in the destruction of the vowel harmony in the original word. Azeri and Eastern Turkish both exhibit considerable vowel harmony in roots (cf. bütün, görüs) although not to the extent of Istanbuli Turkish. The assimilation process of these loans into Kurmanji appears to ignore both front-back harmony and rounding harmony in the loans.

6.2.4 Labialization and De-labialization of Vowels

In section 3.3.2, a set of rules was proposed to account for the labialization and de-labialization of Kurmanji vowels in the environment of respectively coronal and non-coronal consonants. These rules appear to have applied almost without exception to loans from Arabic, Persian, and Turkish. The set of non-coronal consonants includes all pharyngeal(ized) segments. In loans, at least, a non-coronal consonant appears to unround either a following or preceding vowel. The most noticeable and widespread example of the application of these rules is the Arabic sequence /mu-/ → Kurmanji /mɪ-/(or/mæ-/). Comparing this information to the native lexicon, it is immediately apparent that Kurmanji does not allow the sequence /mu/ or /mʊ/ or /mo/ to occur except in a few cases of monosyllabic words such as /mu/ 'hair' and mum 'candle.' Unrounding of vowels is apparent in borrowed words, but not so visible in the native lexicon except in phonetic variants. Some examples follow:

IA kuḥul → K kɪl 'eye cosmetic, kohl'
IA muʕallim → K mɪʕælɪm 'teacher'
IA ruuḥ → K rɪḥ 'soul'
AT boxtan(IT boktan 'excrement') → K bɪxtan 'slander, evil gossip'
P morvarid → K mɪrwarɪ 'pearl'
IA duʕaa → K dɪʕa 'pray'

In one case Arabic /u/ → Kurmanji /ɪ/ in the environment of a coronal:

IA jurum (crime, offense) → K jɪrm 'compensation'

Otherwise /u/ → /ɪ/ only in the environment of non-coronals. Examples where labialization of vowels (as opposed to de-labialization) has occurred are far less common. Only two examples were noted:

AT gædih(ET gædik) → K gæduk 'defile, pass'
IT,AT sanj+ → K sanju 'stomach ache'

In several other cases of borrowing, rounding was preserved in the environment of a coronal as in the second syllable of these words:

IA huJuum → hɪjum 'attack'
IT,AT bütün → bɪthun 'all'

These examples indicate that the flip-flop rounding rules appear to apply to loanwords irrespective of morpheme structure conditions such as vowel harmony in the loan languages.

6.2.5 Centralization and Other Changes in Vowel Quality

Unrounded vowels in incoming sequences are often changed regardless of the fact that the phoneme inventory of Kurmanji could seemingly absorb the loan without any change in the vowel. In some cases an unstressed vowel and occasionally a stressed vowel as well are changed from an extreme position on the vowel chart (e.g., low, back) to a more central one. In a few cases the vowel is simply lowered or, even, fronted, for example in the second syllable of the fourth word in the following loans:

IA Imtihaan → K ʔæmthɪhan
IA mIʃda → K mæʃædæ 'stomach'
IA ʔaxraj → K ʔɪxraj 'fine(n.)'
IA xIzzaama → K xɪzem 'nose ring'
AT panjar(IT 'beet') → K phɪnjær 'greens'
AT sanjaq(IT 'flag' sancak) → K sɪnjaq 'safety pin'
IA qaraar → K qɪrar 'resolution, agreement'

It is interesting that unrounded vowels in loans may be assimilated as lowered and variously centralized and fronted while front rounded vowels in Turkish loans are necessarily backed. In some cases we can explain lowering by proximity to a pharyngeal segment (see examples below) where it is likely that the original Arabic pronunciation may have been closer to [æ] than to [ɪ]. In other cases, the

centralization and/or fronting in words like /pʰɪnjær/ and /xɪzem/ looks suspiciously like vowel harmony, although as we indicated above, this is unlikely since in the assimilation of other loans, Kurmanji has ignored vowel harmony, changing vowels to suit Kurmanji, not Turkish rules.

It is perhaps significant that Kurmanji changes vowels which it could assimilate unchanged, considering both the inventory and the lack of any existing rules to change the sequences shown here. In Persian, these sequences are unchanged in assimilated loans as in:

P (from Arabic) ɪmtɪhan but K ʔæmtʰɪhan
P (from Turkish) sænjaq but K sɪnjaq
P (from French through Arabic?) mæqaze but K mɪxazæ 'store'

The divergence may result from a learned, written (or careful spoken) source for the Persian loans but a colloquial source for Kurmanji. In other words, we might infer that the vowels in these loans were already altered phonetically in the loan language. This is rather difficult to document, though, in the absence of phonetic lexical work on the source languages.

6.2.6 Stop-Affricate Sets and Pharyngealization

As Table 6 indicates, Arabic has two contrasts of manner (or phonation) for consonants - voicing and pharyngealization - while Persian and Azeri Turkish have only one - voicing. Kurmanji, on the other hand, has three - voicing, pharyngealization, and aspiration. However, as we noted in section 3.3.1, voiceless stops in Azeri are realized as aspirated word initially and unaspirated medially. In borrowed words, stops from Persian and Azeri tend to keep their original values; for example Kurmanji /pʰakʰet/ 'envelope' a loan from Persian (originally from French) has both an aspirated /pʰ/ and /kʰ/ as in Persian. A loan from Azeri, for example, AT/küpæ/ becomes Kurmanji /kʰupæ/ 'crock'

with an initial aspirated stop but a medial unaspirated stop (this usually but not always occurs in similar cases of initial versus medial stops; an exception cited earlier is Kurmanji /bɪtʰun/, a loan from AT /bütün/). In the majority of cases like /kʰupæ/ Kurmanji speakers do not appear to derive the borrowed [p] back to /pʰ/ but rather to analyze the segment in terms of the phonemicization of Kurmanji, not Azeri (although this is an allophonic form in the latter). The loam assimilation process may be somewhat obscured by the fact that Kurmanji appears to have borrowed at least part of a rule from Azeri which weakens consonants in medial position (i.e., non-initial voiceless stops are realized as unaspirated while voiced stops become fricatives medially). This may account for such forms as Kurmanji /xɪyavan/ 'street' a loan from Persian /xɪyaban/ or K/thævrez/ from Persian /tabrɪz/ (city name). The de-aspiration of medial consonants in Kurmanji includes native words as well as borrowings from Azeri. However, the examples of fricativization could still be analyzed (lacking further evidence on the carrier language of the borrowing) as lexical rather than rule borrowing through Turkish.

In general, pharyngeal(ized) consonants coming from Arabic (Persian and Azeri Turkish do not have these sounds) are realized as pharyngeal(ized). There are three exceptions to this: (1) If an Arabic loan contains two pharyngeal(ized) segments, Kurmanji will realize only one of them (2) If an Arabic loan has come into Kurmanji through Persian, pharyngeal(ized) consonants will usually not be realized as such (3) Due to some kind of "hypercorrection" or "hyper-Arabization" loan words (usually from Arabic) with no pharyngeal(ized) sounds may be re-analyzed as containing pharyngeals. This latter type of assimilation happens most often with the so-called 'primary pharyngeals' /ʕ/ and /ḥ/ rather than pharyngealized consonants. Some examples of identical assimilation from loan to target language follow:

MSA ləʕīn → K læʕīn 'evil, damned'
IA rahma → K ræhmæ 'mercy'
IA ʕamal → K ʕæmæl 'job, work'
MSA qīr → K qir 'tar'
IA hamla → K hæmlæ 'attack'
MSA mihassa → K mɪhæs 'currycomb'

Examples of two pharyngeal(ized) segments in a borrowing where only one is realized in Kurmanji are the following (Arabic /q/ and /ʁ/ are treated as pharyngealized segments in this type of assimilation):

MSA suhba(t)('friendly intercourse') → K sɪbhæt 'conversation'
IA haasīl → K hasɪl 'crops'
IA quutiyya → K qotɪ 'box'
IA subuh → K sɪbe 'morning'
IA ʁalat → K qælæt 'mistake'
IA tabaqa (layer, stratum) → K təbæk 'level, floor'

The examples seem to indicate that the earlier (from left to right) pharyngeal(ized) segment in a sequence tends to keep its pharyngealization, while later segments drop theirs.

In some cases the pharyngealized and pharyngeal consonants in Arabic have been assimilated as aspirated stops or non-pharyngeal(ized) consonants in Kurmanji. In most cases this is the result of Persian intervention, either directly as a medium of borrowing, or indirectly as a model for re-analysis or "Persianization" (see Chapter 7). The following examples are of pharyngeal(ized) segments in Arabic loans which are realized as non-pharyngeal(ized) in Kurmanji:

MSA təfrīh → K thæfrɪh 'amusement'
MSA talaaq → K thælaq 'divorce'
MSA saʕy → K sæʔayɪ (kɪrɪn) 'try'
IA nasīha(t) ('sincere advice') → K næsihæt 'compliments'

MSA taʕziya(t) → K thazi 'mourning, condolence'
IA ʔimtihaan → K ʔæmthɪhan 'examination'

For all of these words except /thazi/, Persian has similar forms for assimilated borrowings from Arabic. Thus, we may conclude that these forms either were borrowed from Arabic through Persian or influenced by Persian because the pharyngeal values are not maintained. However, for one borrowing /thazi/ this does not appear to be the case. The Persian synonym for Kurmanji /thazi/ is /tæsliyæt/, a different borrowing from Arabic. "Homonymic clash" with two other words in Kurmanji, /tæzi/ 'cool' and /tazi/ 'greyhound' may have precluded the adoption of another near homonym (e.g., */tazi/ or */taʕzi/) with a different meaning.

Examples of loans with non-pharyngeal(ized) segments which are re-analyzed as pharyngeal are the following:

MSA	ʔadab	→	K	ʕædæb 'polite, well-bred'
IA	jaahil	→	K	jaḥel 'young'
IA	zakaat	→	K	zɪqet 'almsgiving'
IA	zulal	→	K	zælal 'clear (water)'
IT,AT	tɪrpan	→	K	thɪrpan 'scythe'
IA	hujuum	→	K	hɪjum 'attack'

Consonants tend to be re-analyzed as pharyngeal-(ized) when they are (1) In Arabic loans and (2) Following a low or back vowel. Although most of the Kurds in this study could not speak Arabic, they could probably identify these sounds (see Chapter 7) - especially /ʕ/ and /ḥ/ - as Arabic. Changing initial /ʔ/ to /ʕ/ blurs the distinction made in the original Arabic form, but clearly distinguishes the word as "Arabic" in the context of Kurmanji. For example, two words which are quite separate in Arabic, due to the contrast of /ʔ/ and /ʕ/ become almost homonyms in Kurmanji:

IA ʔajal → K ʕæjæl 'instant of death'
IA ʕajala → K ʕæjæle 'rush'

No instances have been found of an /ʕ/ being inserted in front of a vowel initial loan from Azeri Turkish or Persian. Loans with initial vowels are fairly uncommon from either language where phonetically a weak glottal stop is usually inserted before word-initial vowels at least in careful speech./ʔ/ and /ʕ/ in Arabic loans into Persian and Azeri are non-contrastively realized as a weak glottal stop. When these loans are borrowed into Kurmanji through Persian, Kurmanji will sometimes re-analyze the Persian glottal stop as /ʕ/, as for example in the Classical Arabic form /ʔalʔaan/ which appears as /ʔælʕan/ 'immediately' in Kurmanji. Borrowing through Persian may account for some of the seeming confusion about placement of /ʔ/ and /ʕ/ in Arabic loans in Kurmanji.

As discussed in Chapter 4, /ʕ/ may replace /h/ as in the Iraqi Arabic loan /mahar/ 'dower, bride price' → K /maʕr/ kɪrɪn 'to contract for marriage,' and /ʕ/ may be re-analyzed as C as in IA /tɪmaʕ/ → K /tɪma (khar)/ 'miser' and IA /daʕwa(t)/ 'invitation' → K /dawæt/ 'wedding.'

As we stated earlier, it is much more common for segments in Arabic loans to be re-analyzed as pharyngealized than for this to happen to segments in Persian or Azeri loans. One reason for this is the identification of pharyngealization with 'Arabic.'[5] A second reason is the fact that stops which come in from Persian and Azeri are phonemically voiceless and phonetically aspirated, although as we noted above, we regularly get unaspirated allophones in Turkish. There is one case of pharyngealization in the above examples where a Turkish loan /tɪrpan/ becomes /thɪrpan/ in Kurmanji. The fact that the /p/ in the Azeri form was already de-aspirated probably enabled it to be

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[5]Cf. a similar phenomenon in the Abzakh dialect of Circassian spoken in Northern Israel where non-etymological initial [ʕ] occurs before [a] in some words. Speakers explained this by saying, "We know Arabic and many Arabic words have [ʕa]," (personal communication from J. C. Catford).

re-analyzed as pharyngealized before a low, back, unrounded vowel. On the other hand, two other loans from Azeri in which stops appear before /a/ are not changed:

IT AT tanıš → K thanıš 'acquaintance'
IT AT talan → K thalan 'booty, plunder'

We might posit a condition in assimilation rules that would require stop consonants to be unaspirated before they can be pharyngealized; although this is not necessarily the case when an /ʕ/ in an Arabic loan changes a contiguous phonetically aspirated stop to a pharyngealized one.

6.2.7 Assimilation of Uvulars

Looking at the treatment of uvular segments in loans provides insight not only into the level(s) at which loans are assimilated, but the awareness by speakers of the target language of phonemic categorization of these segments in the loan languages. In Arabic, the segments /q/, /x/ and /ʁ/ are phonemic. In Persian, however, there are basically two phonemes, /q/ and /x/. The first of these, /q/, may be realized as a voiced uvular stop word initially or before another /q/, but is generally realized as a voiced uvular approximant [ʁ]. /q/ may also be realized as [x] in front of a voiceless stop or fricative. In Azeri Turkish, according to Householder (1965) and Amirpur-Ahrandjani (1971), these three phones are phonemically contrastive as in Arabic. However the incredible amount of overlap in Azeri (/q/ → [q], [ẍ], [ʁ]; /ʁ/ → [ʁ], [q]; /x/ → [x], [ʁ]) suggests that there must be another solution.[6] In Azeri, these sounds are more velar than uvular, but they are substituted for /x/ and /q/ in Persian loans.

[6] In fact, this overlap may be an artifact of the type of analysis used by these investigators. A more limited underlying inventory of phonemes might be specified where classes of consonants, rather than segments, are made to undergo rules.

In Kurmanji there are two phonemes (as described in Chapter 3), /q/ and /x/, the latter of which is realized as [ʁ] when it appears between two back vowels or preceding a voiced consonant. A loan such as IA /qafaṣ/ is unchanged in the Kurmanji lexicon, except for the fact that two pharyngeal segments cannot appear - K /qæfæs/ 'coop.' /q/ is admissible both underlyingly in Kurmanji and in word initial position as [q]. However, a number of borrowings have come in through Arabic which originally had word initial /ʁ/. In Persian, these words are assimilated with /q/ since [ʁ] is an allophone of that phoneme in Persian. In Kurmanji initial Arabic /ʁ/ usually, but not always becomes /x/ as in the following examples:

MSA ʁulaam → K xolam 'male servant'
IA ʁalaṭ → K qælæt 'mistake'
IA ʁanīma(t)(pl 'spoils, booty') → K xænimæt 'useful,good for'
MSA ʁawla → K xæwlæ 'surprise attack, seize unawares
IA ʁarīb → K qærib or xærib 'stranger'

/ʁ/ in other than initial position may also be assimilated as /x/ in Kurmanji, e.g.:

IA maššuṭ → K mæšxul 'busy, occupied'
AT cʰaʁ(IT çağ) → K cʰax 'time'
IA muʁrub,miʁrib → K mærxæb 'sunset'

In cases where /ʁ/ and even /x/ have been re-interpreted as /q/, this may be due to pressure from Persian phonemicization or the use of Persian as a medium for the loan process as for example in K /qærib/ 'stranger.'

As we noted in the beginning of the chapter, the phonetic variants of any loan into Kurmanji which originally contained these uvular segments may include any or all of the three segments. The re-analysis of these sounds may be as much of a function of the influence of Persian on the speaker as it is of the rules of Kurmanji. Although we do

not include these particular segments in the discussion in Chapter 7 where other linguistic variables are correlated with social variables, any hypothetical correlations for uvulars would presumably coincide with the re-analysis of aspiration and pharyngealization in stops or rounding in vowels, e.g., the educated, urban, Persianized speaker tends to re-analyze [ʁ] as an underlying /q/, especially in loans either through or similar to Persian forms. Assimilation of these segments from Azeri Turkish into Kurmanji is more straightforward, e.g., AT sanjaq is realized as [sɪnjaq] 'pin' in Kurmanji but [sænjaʁ] in Persian. In loans directly from Turkish /q/ is almost never re-analyzed as /x/ in Kurmanji as Persian /q/ may be. However, Persian /aqa/ (from Turkish)'Mr.' may or may not become /axa/ in Kurmanji, but in any case in both languages is realized as [aʁa].

6.2.8 Cluster Simplification

Because the loan languages for Kurmanji also tend to prohibit consonant clusters, especially in initial and final position, the process of cluster simplification does not need to be widely applied to these loans. However, Persian and Arabic allow some consonant sequences which are not acceptable in Kurmanji. Azeri Turkish is more similar to Kurmanji in its aversion to clusters although Azeri does permit geminates. Word initial and final clusters in Arabic and Persian loans are usually broken up by an epenthetic [ɨ] as in the following examples:

MSA	nəðr	→	K	nézɨr 'pledge, offering'
MSA	makr	→	K	mékɨr 'trick, deceit'
P	chætr	→	K	chétɨr 'umbrella'
MSA	ṣabr	→	K	sébɨr 'waiting,' patience

In some cases /æ/ is inserted to break up clusters:

IA	ḥaaf	→	K	læḥæyf 'quilt'
P	bargah	→	K	bærægah 'castle'

Clusters with the sequences hC or Ch, whether medial or final, are often simplified, e.g.:

MSA šalh → K šɪlhæ (dan) 'to undress'
MSA šɪbh → K šɪbɪ 'similar to'
IA muhla(t) → K molæt 'time period'

Metathesis, sometimes combined with epenthesis, is another method of rearranging unacceptable initial, medial, or final sequences as for example in:

MSA suhba(t) → K sɪbhæt 'conversation'
IA muʁrub ,miʁrīb → K mærxæb 'sunset'
IA qɪbla → K qolíbɪ 'direction of Mecca, horizon'
MSA sufra 'dining table' → K sɪfɪrk 'meal cloth'

In Chapter 5, we considered the apparent permissible sequences of consonants in native words as well as in loans. Given any loan or even native form, there is no clear-cut method to predict or explain epenthesis, metathesis or ellipsis as the device that effects cluster simplification. The following pairs appear to differentiate an underlying Arabic /i/ (in qaatil) from an epenthetic [i] (in qatil)

IA qatil → K qáthɪɪ 'murder'
IA qaatil → K qathíɪ 'murderer'

Although, in this chapter, we have touched on social variables or degree of 'Persianization' or 'Arabicization' to suggest the motivation behind types of changes in loan segments and sequences, cluster simplification in Kurmanji is fairly obligatory even in the most Persianized speakers using Persian loans. The variation appears to exist more between styles (and speed) of speech rather than between speaker characteristics (see Chapter 5).

6.3 Conclusions

In the introduction to this chapter, we acknowledged the fact that no single series of rules would be posited to

specify or predict the assimilation of loan segments and sequences. Looking at very specific types of loan segments and sequences that are unacceptable in the target language, we discovered that we could not always predict how they would be assimilated. Considering the diverse contacts in the area where Kurmanji is spoken, as compared to the loan situations reported in the literature, it is perhaps surprising how uniform some types of loan assimilation appear to be.

Comparing the conclusions from the data given here to the claims and methods proposed by other investigators (see section 6.1), some approaches appear to be applicable to Kurmanji while others do not. Lovins' and the natural phonologists' emphasis on the relation between levels of borrowing in both target and loan languages is particularly insightful here in dealing with the assimilation of uvulars. However, the approach had to be expanded to include speakers' awareness of the phonemic level in the target language. Although Lovins focussed her discussion of assimilation on segments within sequences, Kurmanji shows that even isolated segments, such as non-pharyngeal(ized) segments in Arabic loans may be re-analyzed by speakers more or less "aware" of types of phonemes in the target language.

A general theory of phonetic (or acoustic) approximation seems to have comparatively little relevance to loan assimilation in Kurmanji. As we saw in the examples given above, Kurmanji often overlooks identical segments in its own inventory and substitutes non-identical segments as the loan is assimilated. This is particularly true for vowel quality. Changes seem to occur even when there are no context sensitive rules (e.g., labialization rules) to trigger them.

The comparison of the treatment of segments which are identical in both loan and target phonologies is revealing. Although Kurmanji may substitute the identical segment in the incoming loan, the assimilated form clearly reflects

whether the rules of Kurmanji have applied. For example, speakers of Kurmanji will only assimilate one pharyngeal per Arabic loanword despite the fact that the Kurmanji phonemic inventory could cover all of the pharyngeals in a given word. Conversely as the assimilation of uvular segments illustrates, the speakers may overlook the native phonological rules and modify loan segments according to loan phonologies.

The most startling observation that can be made from this data is that Kurmanji speakers, even monolinguals, in the loan assimilation process, exhibit considerable knowledge about phonological rules and segments in the loan languages; this is apparent even for Arabic, a language which none of the speakers in this study actually spoke. Furthermore, this knowledge appears to be selective. That is, certain segments are borrowed unchanged or modified according to the rules of the loan language while other segments are quite Kurdicized. Interdental fricatives, geminates and some types of vowel quality are not retained in Arabic loans. Unlike the pharyngeals, the dental fricatives and geminates show no sign of being borrowed into Kurmanji. For "Persianization" as well as "Arabization" of loans, speakers appear to pay attention to particular segments. The segment [ʁ] may be re-analyzed on the analogy of Persian /q/, but Persian geminates and Persian word final clusters are not tolerated. Two different marking systems could be established to account for this data - one for segments which speakers are positively aware of as representing desirable foreign phonological distinctions, and one for segments which speakers are negatively aware of and are consequently modified. Across a range of speakers we would probably find considerable overlap depending on factors such as bilingualness, urbanization, and identification with other cultures.

In order to draw tighter conclusions about the trends that appear here we need two additional sorts of data: (1) More information about the phonetic variants in the lexicon of the loan languages as items are available for

borrowing and (2) Information regarding the psychological valence of loan segments for speakers of Kurmanji. The latter will have to come from some sort of test which, at the moment, is difficult to obtain considering the high rate of illiteracy, the illegality of written Kurmanji, and the difficulty of conducting survey research in that geographical area. In the absence of psychological data, we have correlated the available social data on each speaker with the linguistic forms they produce. These results are discussed next in Chapter 7.

CHAPTER 7

VARIATION

hæ(r) zarye mı yek sall dıbun pheya dıchon, qısæ dıkırın. khordvarı hæ(r) tıšt dızanın, faʕm dıkın. (Each of my children [when] they were one year old were walking and talking. Kurds know and understand everything.)

ʕalša mohammedı

Instruction in Arabic, Turkish, or Persian is not likely to stick when the business of daily life is conducted in Kurdish.

Derk Kinnane (1964, p. 4)

7.0

Throughout this dissertation, the variability of a number of phonological features and/or segments has been noted for Kurmanji. Probably most of the phonemic system is subject to some phonetic variability, but the variable contrasts of aspiration and pharyngealization in the consonants and the rounding in the vowels appear to be the most pervasive types of variation. There is also alternation between [v] and [w], among [x], [q], and [ʁ], and of /r/ and ø, but these variants are not as common nor do they involve features which distinguish classes of phonemes as does variation in consonant manner and vowel rounding.

A significant proportion of the variation appears to be related to the multilinguality of the speakers. As the discussion of the data below will show, the presence or absence of certain types of variation in the speech of a given Kurd is often directly related to whether the variant form is closer or farther away from a standard language (usually Persian) and whether the speaker is in contact with that standard.

The discussion of the data is in three parts: (1) An analysis of the results of a spectrographic study comparing the production of /ʔ/ and /ʕ/ sequences across speakers; this study demonstrates the gradient nature of pharyngealization and links greater or lesser difference between pharyngeal and non-pharyngeal segments to particular types of speakers: (2) Discussion of variable contrasts of pharyngealization and aspiration; this is subdivided into two sections: (a) A gross comparison of percentages of aspirated and pharyngealized segments in texts of radio broadcasts and ordinary speech, and (b) Observations from the data on the relationship between particular types of variation and specific categories of speakers and lexical items; and (3) A consideration of where and how the flip-flop rounding rules apply (see section 3.3.2).

For each case of variable alternation, we attempt to correlate linguistic patterns to common social characteristics in the group of speakers who produce the variant. Going one step further, we propose that, if we can clearly correlate linguistic forms with particular social characteristics and if these characteristics appear to be in the process of becoming more common in the population, then we may point to these socially conditioned linguistic variants as likely directions of linguistic change.

We should point out that this analysis is limited primarily to a discussion of variation <u>across</u> rather than <u>within</u> speakers. This is due to limitations on the collection of data rather than any claim about Kurmanji. It is presumed that all speakers have a range of styles and that a more formal style is usually characterized by greater resemblance to the standard language. Across speakers using a fairly similar style (see Chapter 2), there are marked differences in pronunciation. A considerably larger sampling of speech in a study of Kurmanji would probably reveal similar differences within individuals. However, we would not expect evidence of individual variation to refute

our predictions of the direction of change in progress.

7.1 A Closer Look at Speaker Characteristics

In Table 2 seven characteristics were listed for each speaker: sex, age, tribe, origin, education, fluency in other languages, and wealth. Examination of the chart reveals that these characteristics do not occur independently in the sample. Rather, they appear to cluster. For example, male speakers are all at least bilingual in Azeri Turkish; most of the wealthy speakers are literate; older, poorer females are less likely to be literate than younger, wealthier ones.

Since we are ultimately interested in making predictions about the directions of linguistic change in terms of socially correlated variables, the distribution of speaker characteristics in the sample (Table 2) should reflect the distribution in the general population. In the absence of available, reliable demographic information, for the whole population, this study must rely on the impressions of the investigator. It seems likely that the population as a whole would show a similar clustering among characteristics as is found in Table 2. However, this study does have a disproportionate number of educated and wealthy Kurds relative to the general population. Probably the most serious drawback in the sample is the absence of wealthy Shikaks. This partially reflects the distribution of the population and is partially due to sampling error. Despite the limitations of the sample, many of the population characteristics are represented and are correlated with each other in a typical way.

The characteristics that appear to be most linked with the linguistic variation observed here are education and multilinguality. These two categories are also linked with each other. It is rare for an uneducated speaker to have much fluency in Persian, the language that appears to be the greatest current influence on the Kurds of this

study. As we mentioned in Chapter 2, the influence of Arabic was correlated with tribe and proximity to the Iraqi border. However, Arabic primarily influences only the older Sayid (and perhaps Herki) speakers.

Some characteristics shown on Table 2 can be expected to change in distribution over time and some cannot. Age, tribe, and sex can be expected to remain fixed. Despite some changes caused by a land reform program in Iran, wealth has also remained rather fixed in relative distribution. As we mentioned above, certain characteristics which are not fixed - e.g., education, language fluency - seem to be correlated with characteristics that will not change in distribution, e.g., sex, wealth. It appears from our sample and from our knowledge of social change in Iran that these correlations are beginning to change; specifically, that education has begun to cut across class and sex lines even for relatively isolated (village-centered) groups like the Kurds. If we can establish the correlation of types of linguistic variants below with an education (and multilinguality) factor, then we should be able to predict the direction of change, presuming that the population continues to increase the degree of education for individual speakers as indicated by our sample.

7.2 Types of Variation

In the three sections below we will discuss the data on variation, submitting it to instrumental and lexical analysis. In every case we will correlate the type of variant to the social characteristics of the individual or group who produces it. Unfortunately our texts were not varied enough to provide evidence of style shifting for the majority of the speakers. The reader should keep in mind that this would provide an added dimension to the analysis. At the end of the discussion of the data, directions of change will be posited and justified as well as possible methods and directions for further study.

7.2.1 The Gradations of Pharyngealization

In section 3.1.1 we indicated that pharyngealization is phonetically a gradient phenomenon. Figure 3b illustrated this effect in a comparison of F_1 and F_2 values for a voiceless aspirated dental stop, a voiceless unaspirated dental stop and a pharyngealized dental. Unfortunately the comparative rareness of these phones in the lexicon as well as the difficulty of finding minimal pairs (or at least identical vowel environments) to measure for 25 speakers has prevented us from comparing the differential production of plain and pharyngealized stops.

In Chapter 4, ʕ was posited as an underlying segment from which to generate all the pharyngealized segments. Because of the relative frequency of /ʕ/ in the lexicon, an acoustic analysis was done on the production of this segment. Examples of /ʕæ/ and /ʔæ/ were spectrographed and then F_1 and F_2 were measured from the spectrograms of as many speakers as possible. Poor acoustic conditions or impossibility of formant identification necessitated excluding a quarter of the total number of taped speakers as well as discarding numerous spectrograms which were impossible to measure accurately. As a result, we were only able to measure one or two pairs for each of the speakers in the study. However, we listened to tapes and looked at spectrograms for many more instances of /ʕæ/ and /ʔæ/. The taped sequences of /ʕæ/ and /ʔæ/ were chosen at random. Where spectrograms of these sequences proved unclear for measurement, new sequences were chosen, again at random. Acoustic quality was the only determining factor for which sequences were chosen. Although the measured data for each speaker is fairly limited, it does accurately represent other instances of the production of /ʕæ/ and /ʔæ/. In other words, in the entire speech sampling for a given individual, pronunciation of these sequences appeared fairly uniform. /ʔ/ and /ʕ/ were the best possible choices to measure the pharyngeal contrast on because (1) they appear in a large number of common words

and (2) it was easier to measure the formants of [æ] (as opposed to [a]) both in the environment of [ʔ] and [ʕ]; in the latter case [æ] is more stable than other vowels which tend to be radically altered in quality following [ʕ].

/ʕ/ and /ʔ/ were found to be produced contrastively for all but two of the speakers used in this study. One of these speakers, MM, did not produce /ʕ/ as a pharyngeal. Instead he produced /ʕ/ as [ʔ] and articulated /ʔ/ in few words. However, in letters to the investigator written in the transcription used here he independently placed /ʕ/ and /ʔ/ where other speakers pronounced them. Thus, he seemed to be aware of the identity of these phonemes.

Figure 7 indicates the type and degree of difference between F_1 and F_2 values for [ʔ] and [ʕ] for each speaker. Lines, broken for women and solid for men connect the values for each pair of pharyngealized/non-pharyngealized vowels. Distance on the ordinate represents difference in F_1 while distance on the abscissa represents difference in F_2. A negative slope results from the expected pattern which is a higher F_1 and lower F_2 for pharyngeal as opposed to non-pharyngeal. For both formants women show greater magnitude differences - their F_1 values for vowels following the pharyngeal are uniformly raised and their F_2 values are uniformly lowered. The only male speaker who showed a comparable degree of difference was a fourteen year old boy who seemed to spend more or at least equal time in the company of women as with men. Positive slopes for three men indicate that F_1 was lowered proximate to a pharyngeal. This is an indication of some type of "abnormal" differentiation between pharyngeal and non-pharyngeal segments. The segment [ʕ] in these cases was heard as pharyngealized. This may be reflected by the lowering of F_2. However, the fact that F_1 was not raised, as it is normally following a pharyngeal segment, but lowered, places the pharyngeal production of these speakers in question. F_1 remained the same for three other male speakers. These latter include two of the four

radio speakers. The fourth radio speaker is not graphed because his spectrograms showed no apparent difference between formant values of vowels following /ʔ/ and /ʕ/.

The greatest contrast was produced by a Sayid woman in her fifties who had lived in Iraq. Within both sexes, speakers with the least outside language contact usually showed the greatest contrast. For example, T, a more highly educated speaker than anyone else from his village, showed the least contrast among members of his family from that village. Of all the speakers, the radio broadcasters pronounced /ʔ/ and /ʕ/ least contrastively.

7.2.2 Pharyngealization and Aspiration

Radio Study

A comparison (see Kahn, in press) was made between the amount of aspiration and pharyngealization produced by radio speakers and by a cross section of village speakers. For each group of speakers, three thousand words were analyzed. Raw scores of aspirated and pharyngealized segments per total number of words were tabulated and then proportions were calculated. These proportions or "indexes" of aspiration and pharyngealization were compared for each group of speakers. Production of pharyngealization was divided into three categories: (1) [ʕ] and [ḥ] in words of Iranian or non-Arabic origin (2) [ʕ] and [ḥ] in words of Arabic origin (3) Pharyngealized obstruents. Kurmanji broadcasts are often read from prepared scripts written in Persian (modified Arabic) orthography. The Arabic letters for /ḥ/ and /ʕ/ (realized in Persian as [h] and [ʔ], respectively) appear often in the large number of learned Arabic loanwords that are used in the programs. Rather than being realized with their Persian, non-pharyngeal values, the Kurmanji broadcasters translate them back to their original pharyngeal values. However, the pharyngeals which appear in Kurmanji words such as /ḥæwt/ 'seven' /ʕæɪæšɪš/ 'turkey' and /hæž kɪrɪn/ 'to like, love' are usually not pronounced

as pharyngeal but rather as [h] and [ʔ]. In Arabic loans which contain letters representing pharyngealized obstruents (/t̲/, /ð̲/, /s̲/, and /d̲/), these letters are rarely realized as pharyngealized. The pharyngealized obstruents in such Kurmanji words as /s̲æd/ 'hundred' /t̲ændur/ 'oven' and /c̲æm/ 'river' are even less commonly pronounced as pharyngealized by radio broadcasters.

The index of primary pharyngeals calculated for radio speakers is 3.5 percent for words of Arabic origin and 0.2 percent for words of non-Arabic origin. Village speakers, on the other hand, had a 1.4 percent index for Arabic loans and a 1.5 percent index for Kurmanji words. Thus, the village speakers do not appear to distinguish pharyngeals in Arabic loans from those in Kurmanji words, whereas the radio speakers produce pharyngeals mainly in Arabic loans.

The indexes for pharyngealized obstruents show even more difference between the two groups of speakers. Radio speakers realized these segments (in both loan and native words) only in 0.3 percent of the total words, while village speakers used them in 3.7 percent of the words in a text. The raw percentages of aspirated segments were more similar between the two groups. Radio speakers produced aspirated stops in 9.8 percent of the total words in a text, while village speakers used them in 8.5 percent of the total number of words. Two recordings by radio broadcasters of informal speech not intended for broadcast yielded different indexes somewhat more similar to those of village speakers.

The results of this comparison study show two trends: (1) The importance of the identity of the word since, its pronunciation frequently depends on whether speakers are aware of the loan source through the orthography and, perhaps, knowledge of Arabic (2) The difference between two groups of speakers in the realization of pharyngealization and aspiration. The social differences between the speakers studied in this radio/non-radio comparison cluster at two extremes; the radio speakers were all relatively educated

trilingual, urban, male, and in constant contact with the standard language whereas the ordinary speakers were selected from comparatively isolated mono- or bi- lingual fairly uneducated speakers used in this study.

The comparison of radio to normal speech has indicated two clear sources of variation: the first relates to speaker characteristics and the second to lexical characteristics. A differentiation of lexical types (Arabic and non-Arabic primary pharyngeals) appears, in this study, to be almost exclusively located in the speech of the broadcasters. Although we were able to perceive broad trends in variable production of segments, this study did not consider the production of phones contextually. We merely counted the total number of aspirated, pharyngeal, and pharyngealized phones in texts. We did not consider, for example, whether a given aspirated stop in a given word was underlyingly pharyngealized in the monolingual Shikak lexicon. Although for pharyngeal consonants we were able to correlate identification of loan source positively with one type of articulation, we did not investigate this possibility for the other two types of segments counted. Furthermore, because we categorized our speakers into only two groups -one, urban, educated, and trilingual; and the other rural, uneducated, and bilingual, we were not able to correlate fine social distinctions with linguistic variation. We expand our consideration of the variable production of these segments in the following discussion of specific speaker characteristics and particular lexical items.

The Variability of Consonant Features of Aspiration and Pharyngealization

For some speakers the contrasts of aspiration and pharyngealization are variable. Although these speakers - notably the broadcasters - differentiate unaspirated and pharyngealized segments in a limited set of words, all Kurmanji speakers in this study produce these features in some lexical items and for some segments. However, the set of

words and segments which are nearly always contrastive are often, but not always, the same for all speakers.

Among the tribal groups, the Sayids produce the segments, /ʕ/, /ḥ/, /ṣ/ and /q/ quite contrastively, but never produce /ṗ/, /ċ/, and /ẓ/ and occasionally produce /ṭ/ in some lexical items. The division between the groups /ʕ, ḥ, q, ṣ/ and /ṗ, ċ, ṭ, ẓ/ is also apparent for other speakers. The contrast between the first group of consonants and their non-pharyngealized equivalents is most commonly preserved while the pharyngealized members of the second group are more commonly replaced by plain counterparts. This frequency of occurrence across speakers corresponds to the frequency of occurrence within phonological environments (see section 4.1). For example, /ṗ/ may only occur prior to /a/ or /æ/ or word finally. Only comparatively less educated Shikak and Herki speakers produced this phone. One important reason for the greater frequency of the first group of pharyngeals is that these are all Iraqi Arabic phonemes. /q/ is a Persian phoneme as well. Of the second group only /ṭ/ appears in Iraqi Arabic as a primary phoneme (the others could conceivably be conditioned by contiguous emphatics). Not surprisingly /ṭ/ occurs in a wider range of phonetic environments and is produced by more speakers than are /ṗ/, /ċ/, and /ẓ/.

If we look closely at the characteristics of the speakers who produce variants of lexical items which, in the speech of monolinguals, have unaspirated and pharyngealized consonants, we see that the speakers who aspirate or de-pharyngealize these phonemes are largely the most educated, urbanized speakers in the study. If we compare some typical words which are variably pronounced we see that they are oftenly cognate with Persian words that have aspirated or plain consonants rather than unaspirated or pharyngealized ones. For example, the Shikak phonemic form is listed below, followed by the variant, and then the phonetic Persian form:

gloss	Shikak	Variant	Persian
star	ɪstayr	ɪster	sitare
morning	sɪbe	sɪbe	sobh
fear	tɪrs-	thɪrs-	thærs-
back	pɪšt	phɪšt	phošt
a little	kem	khem	khæm
seven	hæwt	hæft	hæft

Since none of the above (except /sɪbe/) are borrowed forms, it is unlikely that the variation could be traced to a variable loan source. Most speakers who produce variants in the middle column above may produce the more conservative unaspirated or pharyngealized forms at least some of the time. In other words, no speaker showed a complete loss of the pharyngeal or unaspirated series. However, as we mentioned above, the Sayids and radio broadcasters appear to make little use of the phones [p̲], [t̲], [c̲], and [z̲].

7.2.3 Variants from the Flip-Flop Rounding Rules

In section 3.3.2 we described a set of rules which can be summarized as changing [u] to [ɪ] (or [o] to [æ]) following non-coronals and [ɪ] to [u] following coronals. An intermediate variant for the first change is [u] to [ɪ] with concommitant labialization of the non-coronal consonant. Another intermediate output from the application of the rules in either direction (rounding or unrounding) is [ü].

These rules appear to have applied to and changed lexical items in the past. For some words there is no longer a variable application of the rule as in *mušk 'mouse' → /mɪšk/; the form is now fixed for all speakers. This is also true of assimilated borrowings (see section 6.2.4) where in the Arabic sequences /mu-/, /u/ is always changed to an unrounded vowel.

The flip-flop of [ɪ] and [u] (and [o] to [æ] is a Kurmanji phenomenon. Although there is certainly some delabialization in Iraqi Arabic as a result of vowel reduction

and in Azeri Turkish as part of vowel harmony rules, neither language appears to have variable rounding rules either as widespread or similarly conditioned to Kurmanji. In other words, in flip-flop rounding we are not dealing with a variable which is modeled on a neighboring language.

The de-labialization of vowels in Kurmanji can be divided into two types: one for the high, rounded vowel /u/ and one for the low round vowels /o/ and /a/. The second change is most characteristic of Shikak. In general this rule applies to an /x/ plus rounded vowel sequence as for example /xo/ 'self' → [xʷɷ]. All of the Shikak speakers often produced [xʷɷ] pronunciation except two speakers, MM and Asx, who never changed /x/ + rounded vowel sequences. These two speakers were the most educated, most urbanized, and youngest Shikaks in the study. For every change involving /x/ → [xʷ], there is a close Persian cognate - for example:

gloss	Phoenmic	Variant	Persian
self	xo	xʷɷ	xod
pleasant	xoš	xʷɷš	xoš
lady, Ms.	xanɪm	xʷanɪm	xanɪm
to eat	xarɪn	xʷarɪn	xordɷn

In these cases the influence of Persian appears to inhibit the alternation as opposed to precipitate it as we saw above in the case of de-pharyngealization and aspiration of stops in close Persian cognates.

For the second set of changes which involves high vowels, /u/ → [ü] → [ɨ] and /ɪ/ → [ü] → [u], younger Sayid speakers represent the most complete application of the rules ɨ → ü and u → ü. In other words, for most of these speakers, application of the flip-flop rounding rules appears to have stopped at [ü]. The following are some common examples of variants produced by young Sayids: /bun/ 'to be' → [bün], /run/ 'butter' → [rün] /musa/ 'Moses' → [müsa]. Older Sayids and non-Sayid speakers seem to apply

all of the rules to a smaller range of lexical items; they do not always produce [ü] but sometimes [ɪ] or [u] as in /rɪžɪ/ 'charcoal' → [rəžu]; /nezik/ 'near' → nezuk; /helin/ 'nest' → [helun] /kʰusəl/'turtle' → [kʰɪsəl] /vəku/ 'like, similar' → [vəkɪ]. A few speakers show intermediate forms such as [xʷɪsk], 'sister.'

One speaker, Fx, never produced any of the variants resulting from the above rules (although she did sometimes aspirate unaspirated consonants). This may be attributable to her Iraqi origin as well as to her interest in the Kurdish language (she often recited Kurdish poetry). Another speaker, Fw, a Herki woman, was also anomalous in that all of her /u/'s were produced as [ü] but her /ɪ/'s did not always become [ü] while the other Herki speakers did not show this change. It is possible, since Fw came from a different location, that she in fact spoke a different Herki dialect. Another explanation might be that, since Fw was a recent bride in a Sayid family, she had radically altered her speech as part of her desire to fit in (she was under considerable social pressure because a huge bride price had been paid for her and she had married into an "enemy" tribe). Fw appeared to have an unconditioned rule /u/ → /ü/ while the Sayid and Herki speakers were more variable in their pronunciation, showing [u] and [ɪ] as an output in some cases.

One last anomaly was speaker SM, a Sayid, who changed /u/ to [ü] only in Arabic borrowings as for example: /məšhur/ 'famous' → [məshür] /məxsus/ 'special' → [məxsüs] and /məwjud/ 'existing' → [məwjüd]. He also occasionally produced variants where /ɪ/ → [u] as [nezuk] for /nezik/ 'near.' This man, although formally uneducated, was quite fluent in three languages-Kurmanji, Turkish, and Persian. However, despite the fact that /ü/ is a phoneme in Azeri Turkish, he seemed not to identify it with that language. In fact, he corrected his family when they taught me Turkish loanwords in Kurmanji. His own speech, however, was laced

with Arabic loans.

Although variable labialization is a phonologically unified process, different outputs from the rules have different social connotations. One type of change exemplified by xo → xʷæ definitely appears to be stigmatized. No urban, educated, or high status speaker produced it. The other changes or alternations are more problematic. For some speakers, [ü], for either /u/ or /i/ appears to be a prestige variant (especially for Fw and her Sayid sisters-in-law). This is particularly evident in its association with 'Arabic' for SM. The alternation of /ɪ/ and /u/, especially /ɪ/ → /u/ following coronals appears to be socially neutral in spite of the fact that the variants are often further from the Persian forms than the original forms were - e.g., [nɛzɪk] ~ [nɛzuk] 'near,' Persian [næzdik]; [tɪž] ~ [tuž] 'sharp' Persian [tʰɪz].

7.3 Conclusion

From the data on the realization of pharyngeal /ʕ/ we conclude that one aspect of variable pharyngeal pronunciation is phonetic. In other words, rather than being either [ʕ] or [ʔ] the production of /ʕ/ appears to vary gradually with some speakers producing greater or lesser difference or even in the case of speakers with lowered F_1 some sort of abnormal difference. However, the variable lexical items in which a plain segment is substituted for a pharyngealized one indicate that these changes are phonemic as well. Phonemic changes in aspiration and pharyngealization contrasts are most likely to appear in words which are cognate to Persian (or Persianized Arabic) forms. These phoneme substitutions are most likely to be produced by speakers who are both educated and fluent in Persian.

Certain parts of the flip-flop rounding rules appear to apply for some groups of speakers, while other speakers seem to apply different parts of these rules. Specifically, Shikak speakers tend to unround low rounded

vowels following uvular fricatives. However, the two most highly educated and most fluent Persian speakers in the Shikak section of the sample never produced a change such as /xo/ to [xʷɷ]. For Sayids, [ü] appeared to be a prestige variant. The substitution of /ɨ/ for /u/ and /u/ for /ɨ/ according to the environments specified by the rules could not be socially or lexically correlated; it appeared to happen, to some extent, for all speakers, except Fx and Fw, and to apply equally in words which did or did not closely resemble Persian cognates.

Both types of variation - consonantal and vocalic - appear to be correlated with the Persian identification of both word and speaker. In the case of the loss of consonantal manner distinctions, the correlation is positive; the more similar the lexical item is to Persian and the closer the speaker is to Persian (in fluency gained in daily use necessitated by job or schooling), the more likely the collapse of distinctions. The vocalic alternations, on the other hand, appear to some extent (in xo → xʷɷ) to be negatively correlated to Persian (although positively correlated in our study of the effects of the standard language). The more a given item resembles Persian, and the more contact a speaker has had with that language, the less likely it is that the variant will be produced.

If we assume that the direction of the Kurmanji population is toward an increasingly higher percentage Persian speaking individuals, then we may suppose that the direction of linguistic change will be towards the loss of pharyngeal and aspirated distinctions. The flip-flop rounding rules appear (from the literature as well as data on borrowing) to have been running through the lexicon for some time. They are partially motivated by the phonetic processes of vowel reduction and dissimilation of consonant and following vowel. Whether the increased influence of Persian, where no similar change in progress is visible, can halt this change remains to be seen. Chen and Wang (1975, p. 256) have commented, "...more often than linguists have thought, a phonological

rule peters out toward the end of its life span, or is thwarted by another rule competing for the same lexemes."

We are reluctant then to predict the ultimate fate of the flip-flop rounding rules. They have probably changed the lexicon permanently to some extent already. In the case of variable pharyngealization and aspiration, we are dealing with distributions that are quite defective for some segments (see section 4.1). These distinctions were originally borrowed from neighboring languages (pharyngealization from Arabic and unaspirated stops probably from Armenian). Although they became part of the Kurmanji system, they do not appear as completely in the lexicon as do other consonants. Perhaps the strongest argument for the prediction that pharyngeal segments in Kurmanji will be lost in the future is the fact that they were borrowed in the first place. This original borrowing is a precedent for a radical change in the phonology resulting from the influence of a prestige language. In past centuries when there were no government schools in Arabic, no telephones, no roads or buses, and little central government interference in Kurdish affairs, Kurmanji presumably borrowed a whole set of phonemes from Arabic, the dominant political and religious language. We have no reason to suppose that ultimately Kurmanji will resist pressure to collapse this set of phonemes under pressure of a much more pervasive and organized type from Persian.

7.4 Further Directions

A major factor lacking in this study of borrowing and variation in Kurmanji phonology is time depth. The resources available in this study were concentrated first on establishing an accurate picture of the synchronic situation. The social and linguistic milieu of Kurmanji was probed for evidence and directions of apparent variation. Because it was necessary to provide a complete phonetic and phonological description as a basis for establishing variation, this

study is very preliminary in sociolinguistic terms.

Probably the most exciting prospect for any future study of Kurmanji is the evidence it could provide on linguistic change. For instance, how will the dialects of a language which has already absorbed a large amount of borrowing in the past be changed in the future? What will be the linguistic results of sustained pressure from a new prestige language? The same types of changes that are occurring today in the sociolinguistic situation of Kurmanji occurred many years ago in the histories of the non-standard languages of Europe. Furthermore, most of the European non-standards were not subject to the influence of such genetically diverse languages as is Kurmanji. Public schools became free for the first time in Iran in 1974. Ethnic groups such as the Azeri Turks have already been substantially assimilated into the mainstream of Iranian culture. Their language, a non-Indo-European tongue, shows more evidence of current Persian influence than does Kurmanji. One last reason for studying Kurmanji is political as well as linguistic (if it is necessary to separate the two). Kurmanji is actively repressed nearly everywhere it is spoken. If we want, in the future, to be able to make statements about the mechanism of linguistic change as it takes place in such contexts, we do better to study these languages now in the field than to reconstruct them when they are extinct.

APPENDIX A

Tables and Figures

KEY TO TABLE 2

$\alpha, \beta, \delta, \gamma$ - each symbol represents one family

Tribe - Shikak (Sh), Sayid (S), Herki (H)

Age - rounded off to approximate decade except for speakers under 20

Origin (Residence) - Shapur (Sha), Rezaiyeh (Rez), Ushniviye (Ush)

Other Languages - Turkish (T), Persian (P)

Education - Illiterate (Il), Literate (L), 6 or more years of school (E)

Wealth - Large landowner (LL), Poorer farmer (F), Servant (S)

RR - Radio broadcaster

? - data uncertain

TABLE 2: SPEAKER CHARACTERISTICS

NAME	TRIBE	SEX	AGE	ORIGIN (RESIDENCE)*	OTHER LANGUAGES	EDUCATION	WEALTH
Xî	Sh	F	40	D	T?	Il	F
αAvd	Sh	M	50	D	T,P?	Il	F
αSh	Sh	M	30	D	T,P?	L	F
αT	Sh	M	20	D(Sha)	T,P	E	F
αS	Sh	M	20	D	T,P?	Il	F
αFtl	Sh	M	40	D	T,P?	Il	F
αShz	Sh	M	20	D	T,P?	Il	F
αOs	Sh	M	30	D	T,P?	Il	F
αAî	Sh	F	40	D(C)	-	Il	F
Aeh	Sh	M	40	C	T,P?	Il	F
αQ	Sh	F	40	C(Rez)	T,P?	Il	F
Asx	Sh	F	15	near Rez	T,P	E	F
αMM	Sh	M	15	C(Rez)	T,P	E	F
βSM	S	M	50	A(Rez)	T,P	L	LL
βFx	S	F	50	Iraq(A)	P	L	LL
βG	S	F	15	A	P,T?	L	LL
βN	S	F	20	A	P,T	L	LL
βSMo	S	M	20	A(Rez)	T,P	E	LL
βSR	S	M	20	near A(Rez)	T,P	E	LL
βH	S	M	10	A(Rez)	T,P	L	LL
Gul	S	F	60	A	T,P?	Il	F
βSAsm	S	F	40	A	P?	Il	LL
AsD	?	F	20	near A(Rez)	T,P	Il	S
Ft	S	F	40	A	T,P?	Il	S-F
βPx	S	F	20	A(Rez)	T,P	L	LL
βFw	H	F	20	near Ush(Rez)	P?	Il	LL
δAX	H	F	30	B	P?	Il	LL
δB	H	M	15	B(Rez)	T,P	E	LL
Zî	H	F	40	B	?	Il	F
γSH(RR)	S	M	40	near D(Rez)	T,P	E	F
γSA(RR)	S	M	40	near D(Rez)	T,P	E	F
T (RR)	S	M	40	near D(Rez)	T,P	E	F
BA(RR)	H/Turk	M	40	Rez	T,P	E	F

*if currently different from origin

FIGURE 2a: LANGUAGES SPOKEN IN KURDISH AREAS

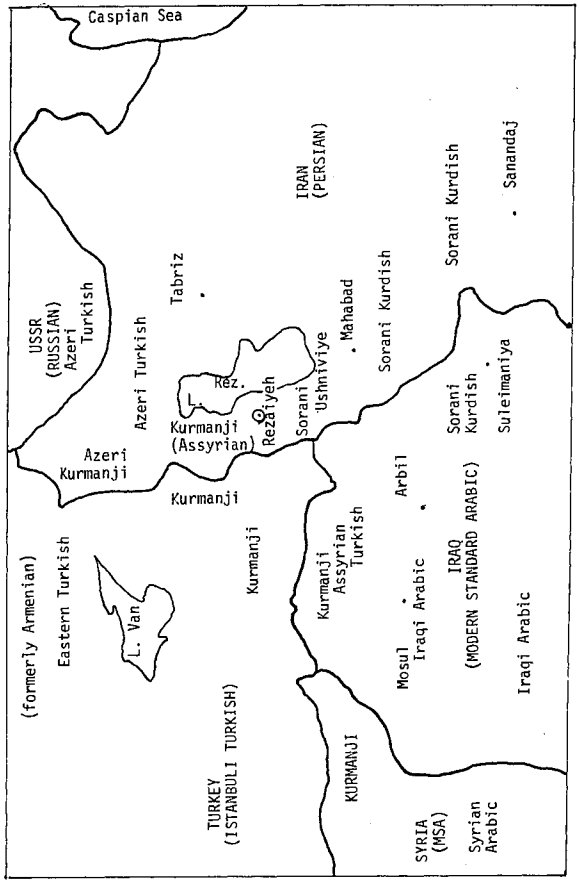


FIGURE 2b: LOCATION OF SPEAKERS AND VILLAGES IN IRAN

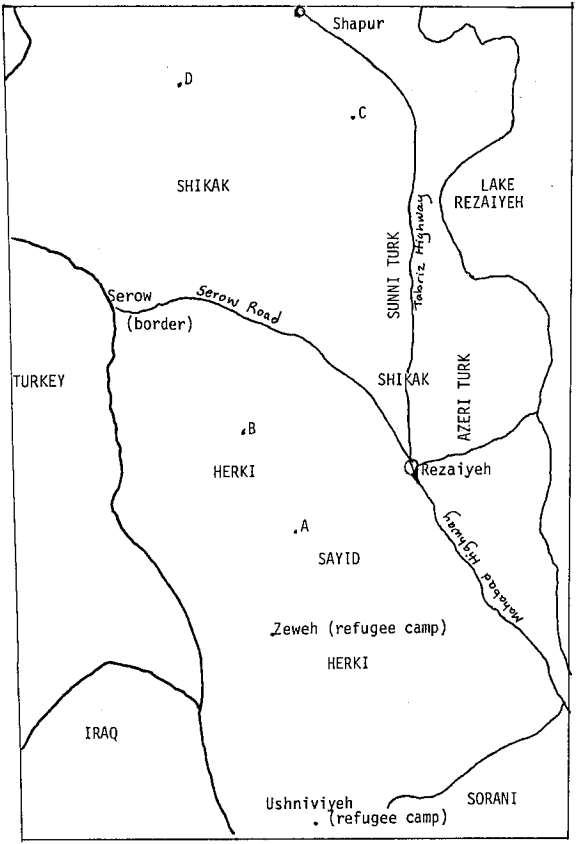


FIGURE 2c: SAMPLE MINGOGRAPHIC MEASUREMENTS

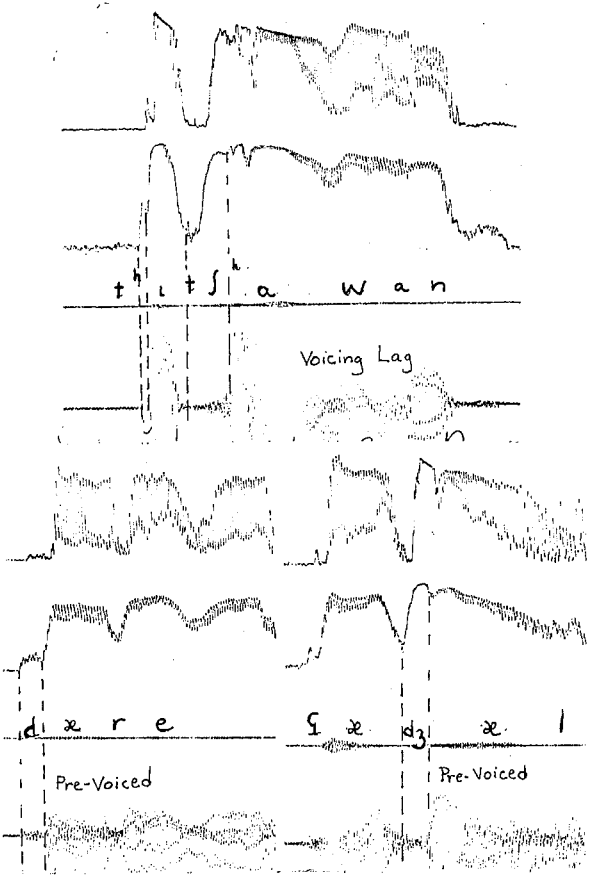


FIGURE 2d; SPECTROGRAPHIC MEASUREMENT

Measurement for Vowels (Male Voice)

Measurement for Pharyngeal (Female Voice - Half Speed)

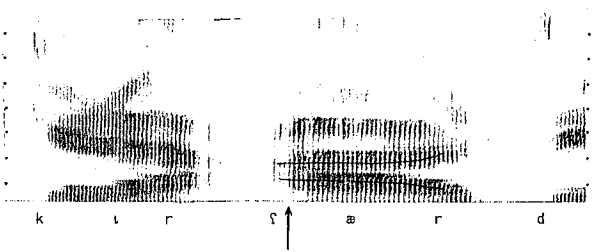


TABLE 3a

PHONEMES OF THE SHIKAK DIALECT OF KURMANJI

Part 1: Consonants

Manner and Secondary Articulation	Bilabial	Labiodental	Dental-Alveolar	Alveolar-Palatal	Velar-Uvular	Pharyngeal	Glottal
			Place of Articulation				
voiced occlusive	b		d	j	g		
voiceless "	p		t	c	k		ʔ
pharyngealized occlusive	p̲		t̲	c̲	q		
aspirated occlusive	pʰ		tʰ	cʰ	kʰ		
vd. fricative plain, pharyng.			z, z̲	ž			
vl. fricative plain, pharyng.		f	s, s̲	š	x	h̲	h
nasal	m		n				
lateral			l				
flap			ɾ				
trill			r̆				
approximant and semivowels	w			y		ʕ	

TABLE 3a

Part 2: Vowels

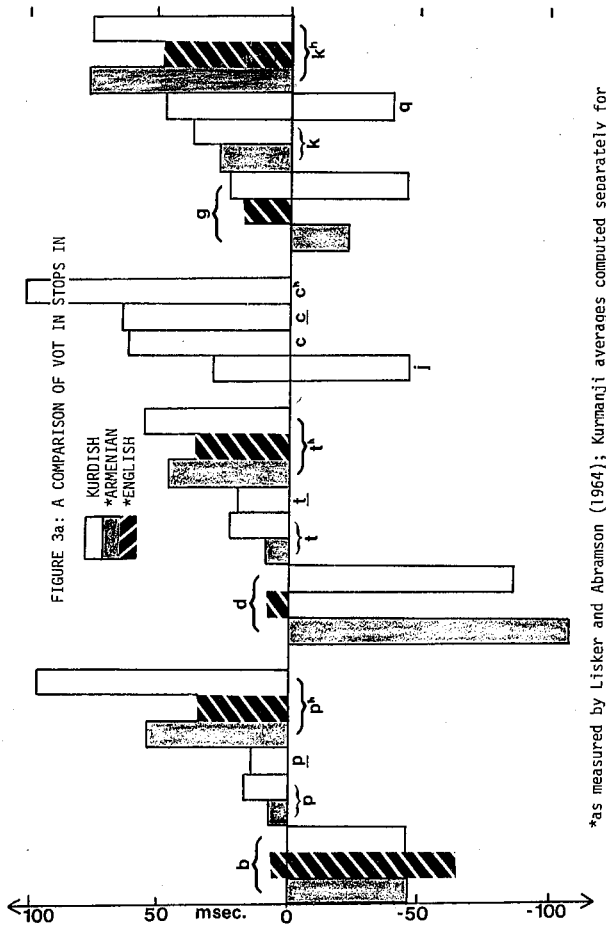


FIGURE 3b: SPECTROGRAPHED EXAMPLES OF {T}+/æ/

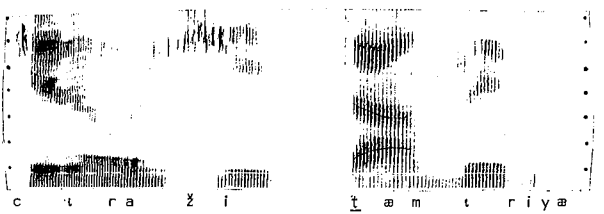
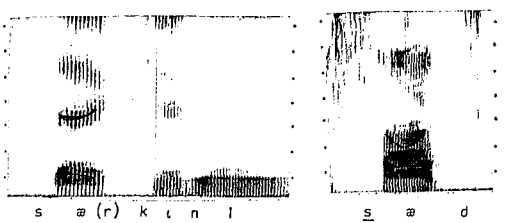


FIGURE 3c: SPECTROGRAPHED MEMBERS OF {S} + VOWEL



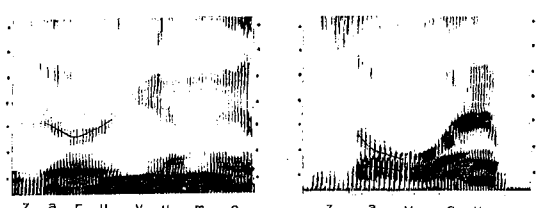
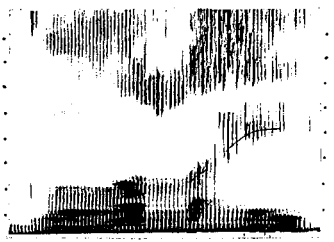


FIGURE 3d: A SPECTROGRAPHIC COMPARISON OF /hi/ AND /hi/



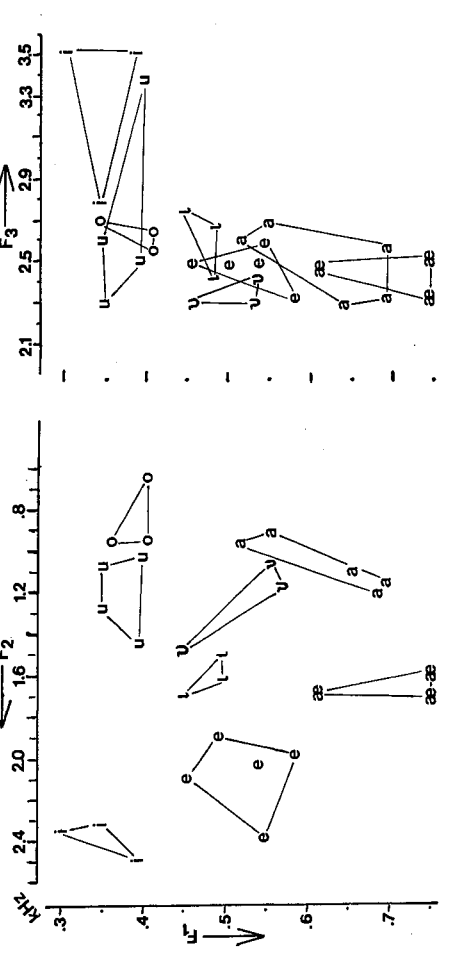


FIGURE 3e: F_1, F_2, and F_3 FROM CONNECTED SPEECH OF SEVERAL SHIKAK MALES

FIGURE 3f

A COMPARISON OF AVERAGED F_1 and F_2 VALUES FOR KURMANJI VOWELS AND COMPARABLE VOWELS FROM FANT (1973)

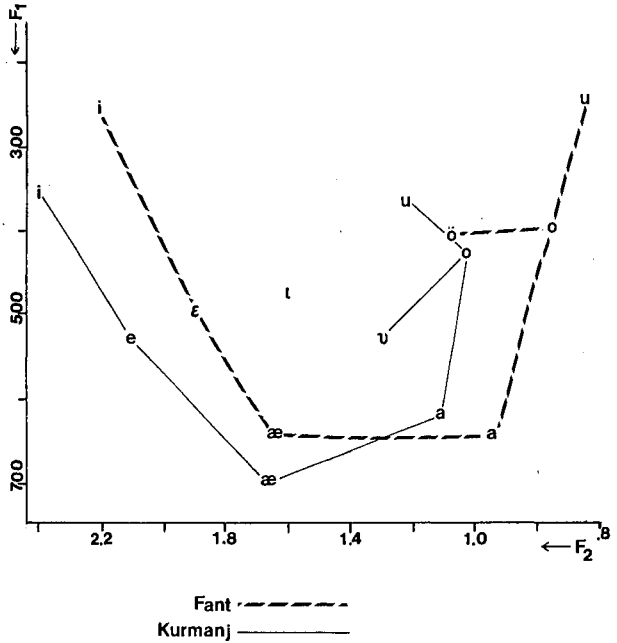


TABLE 6.

KURMANJI PHONEMES SHARED BY LOAN PHONOLOGIES

Part 1: Consonants

Stop-Affricate Set

p	t	c	k	?
p̲	t̲	c̲	q	
b	d	j	g	
pʰ	tʰ	cʰ	kʰ	

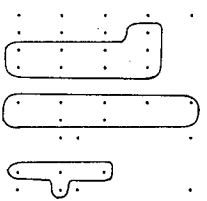
Fricative Set

f	s	š	x	h
	z	ž		
	s̲,z̲			h̲

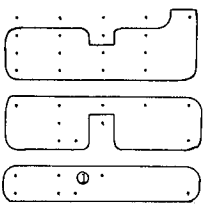
Sonorant Set

m	n	y		
w	r,ɣ			ʕ

Azeri Turkish and Persian



Iraqi Arabic



① Phonemically geminate /rr/, but phonetically similar to K /ɣ/

TABLE 6

Part 2: Vowel Systems

Kurmanji

i		u
	ɪ	ʊ
e		o
	æ	a

Iraqi Arabic[2]

i i		uu
	i	u
ee		o/oo
	a	aa

Persian

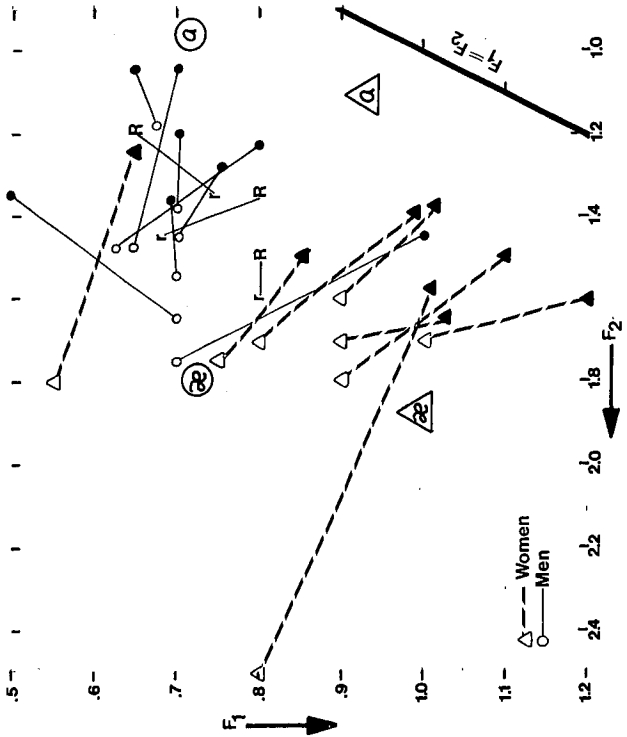
i		u
e		o
	æ	a

Azeri Turkish

i		ɨ
	ü	u
e	ö	o
	æ	
	a	

[2]Phonemic categories (long and short) are placed in approximate phonetic position according to description in Erwin (1963); following emphatic consonants, vowels are lowered and backed

FIGURE 7: F_1-F_2 DIFFERENCES IN PRODUCTION OF ?æ AND ?ɑ



APPENDIX B

Notes on Text and Translations of /zer dırıžın/

The following appendix consists of a text and an interlinear translation of a story told by speaker MM. Following this morpheme-by-morpheme translation is a free translation.

The story, /zer dırıžın/, was taped in the field and transcribed by the investigator. The transcription was subsequently checked with the speaker (MM). For the most part, stress in this story was not marked in the field and had to be transcribed later from the tape. The transcription is sub-phonemic where the investigator noted significant allophonic variation. For example, [v] and [w] alternate as well as [ʁ] and [x], [r] and [ř], and C and Cʰ. All of these variations are discussed in the dissertation. MM is a well-educated urban-dwelling Shikak speaker who shows some influence from Persian in his speech.

The purpose of this text is to give the reader some feel for Kurmanji phonology, particularly for the variation therein. The morphological analysis represented by the interlinear translation is tentative. In cases of extreme uncertainty, an "(?)" appears following the translation. Two abbreviations are used: E for ezafe and O for oblique. A raised dot · signals the end of a Kurmanji sentence. Paragraphing follows Kurmanji discourse rather than English rules.

Several phenomena found in the text are worth noting: (1) The speaker regularly used /yáni/ 'meaning' to correct mistakes or specify names used; (2) In general, morphemically determined stress followed the rules specified in Chapter 5, although oblique forms were often weaker than Chapter 5 had suggested. Also some forms remain without stress notation and occasionally some stresses as transcribed are at variance with our discussion in Chapter 5; (3) Azeri Turkish is used for commercial street cries in this and other stories collected by the investigator.

zér dιrιžίn
gold pours

1 řóžæke mιrófæk kʰasίb hǽbu ko cʰί tιšté wί
day-a-O man-a laborer there-was that no thing-E him

nǽbun væ žιnίkæk ko kιcίkæk hǽbu kιcá wi gǽlæk
not-was and wife-a that daughter-a there-was daughter-E her very

jιndíbu· vǽxte dιgίriya cavé wί dá zér dιrίžiyan
pretty-was time-O she-was-crying eyes-E her on gold was-pouring

væ vǽxte dιkʰǽniya gul sær cáwa dιřίžiyan·
and time-O she-was-laughing flowers on eyes were-pouring

2 řóžæke ledá dayká kιcίke mίr væ sálæk
day-a-O struck mother-E girl-O died and year-a

tʰιmám nǽbιbu ko babé wί cʰo žίnæk iná· æw
finished not-become that father-E her went wife-a took this

žιnkéži ko kίcæk hǽbu kιcá wίži gǽlæk pʰίs
wife-also that daughter-a there-was daught. her-also very disgusting

bu· væ ævé žιnké hæsudyá kιcká ko sær cavé wi
was and this woman envy-E girl-O that on eyes-E her

gul dιværíyan væ cavá dá zér dιrιžiyán ve navé
flowers were-dropping and eyes on gold was-pouring that name-E

wίži mιnævǽr bu· hæsudiyá wί dιkʰæšánd væ hær jaře
her-also Monavar was envy-E her was-pulling and every time

jιlίk dιdáne dιgóte bίbæ sær cǽme bίšo æwži dι-
clothes was-giving she-said-to carry on river wash she-also was

gιríya ǽma cʰaræ cʰιnǽbu· dιcʰó væ dιšóštιn·
crying but remedy none-was she-was-going and was-washing-them

3 řóžæke sær cǽme bu ko kuřé pʰašá cʰo bo
day-a-O on river-O was that son-E king went for

bίgæræ væ zendǽe æw dit væ ʔášqé wί bu væ
(that)he-stroll and looked her saw and in-love-E her became and

cʰo gótæ babé xó æz ʔášqe kιcιkækemæ ko hækʰί
went said-to father-E self I in-love girl-a-O-I-am that when

dɪgɪrí sær cavé wɪ væ zér dɪrɪžín hækhɪ dɪkhænǽ
she-cries on eyes-E her and gold pours when she-laughs

gul dɪrežín· phašáži ko æw xæbǽræ bɪhíst go qǽydi
flowers pour king-also that this information heard said obstacle

nákæ áze æwé kɪcké bo tǽ bínɪm· væ hat gótæ
don't-make I this girl-O for you will-bring and came said-to

væzíré xó góteda ſrokæ tɪ hářæ væ béžæ babé kɪcíke
minister-E self said-to-him today you go and tell father-E girl-O

kɪcá xó bídæ kúře mí· væzírži gótæ phašá qǽydi
daughter-E self give-to son-E me minister-also said-to king obstacle

nákæ væ cho væ gótæ merík kuřé phašá kɪcá tǽ
don't-make and went and said-to man son-E king daughter-E you

ditíyæ væ ʔašqé wí bwíyæ ǽmži hatínæ ko khǽne
has-seen and in-love-E her has-become we-also have-come that to-see

te bídimæ ya nǽ· meríkži go ǽži gǽlæk khæyxóšɪm
you will-give-her-to-us or not man-also said I-also very happy-am

ko kɪcá xó bídɪmæ phašá· væ æwnǽ řabún chón væ gótnæ
that daughter-E self that-I-give king and they stood-up went and told

phašá wíla æwí mɪrofí kicá xó dá·
king by-God this man daughter-E self gave

4 dayká mɪnævǽreži ko gǽlæk hǽsudbu væ hæz nǽkir
mother-E Monavar-O-also that very envious-was and did not like

ko ævæ bíchæ malá phašá lále xó dɪgó ko áya
that she would-go house-E king next-to self was-saying that (in-

ævá mɪnævǽr bǽ ko bíchæ malá phašá væ
terrog.) that Monavar should-be that she-go house-E king and

kɪcá míži málda bímɪnæ væ řózæki ko hæmǽn se
daughter-E me-also home-at should-stay and day-a-O that the-same three

řož mabún bo dawætawán mɪnævǽr bír go wǽræ æm
days remained for wedding-E-them Monavar took said come we

bíchɪn æz særé tǽ bɪšóm æwé bír exíste cálæke
shall-go I head-E you will-wash her took threw in cellar-a-O

ko gǽlæk khúr bu væ hárdɪ cavé wíži dærexístɪn
that very deep was and both eyes-E her-also put-out-them

væ ma lówe· væ kɪcá xóži iná go bædælá
and she-stayed there and daughter-E self-also brought said in-place-of

mɪnævére áze bíšinmæ malá phašá væ se řož ko
Monavar-O I-will send-her-to-them house-E king and three days that

mábun bo dawátawan kuřé phašá thab nákɪr ve řóžæke
remained for wedding-E-them son-E king was impatient and day-a-O

pheš extstɪná mɪnævére náve ævé calé hatíbu væ
before throwing-E Monavar-O into this cellar-O had-come and

lalé razábu væ haž chíži nábun ko daykɪnyá
next-to-her slept and aware nothing-also not-was that stepmother-E

mɪnævére áw ?æmælá kɪríne·
Monavar-O this deed has-done

5 væ dayká mɪnævére ko yáni daykɪnyá wí hær
and mother-E Monavar-O that means stepmother-E her each

jaré híndæk nán dɪbír dɪdáe væ dɪgó bíla
time some bread was-bringing was-giving-her and was-saying so!

némɪræ væ zeré wí væ gulé wí dɪ?inán dɪdá
don't-die and gold-E her and flowers-E her was-taking was-giving

kɪcá 'xó· dɪgó bíla názanɪn ko æw mɪnævér níne
daughter-E self was saying let they-not-know that this Monavar is-not

væ navé kɪcá xóži dánebu mɪnævér·
and name-E daughter-E self-also had-given-her Monavar

6 chænd qædéræk buhúri sálæk thɪmámbu yáni næ
some amount-a passed year-a finished-was meaning nine

hævíl chon ko ævíl kúřæk iná yáni mɪnævére kúræk
months went that this son-a delivered meaning Monavar son-a

iná ko sére wi zér bu· daykɪnyá wi hat zendáe
delivered that head-E him gold was stepmother-E her came looked-at

wáne æwé kúræk bwíyæ væ særé wíži zéræ· hæsud-
them she son-a has had and head-E him-also gold-is envy-

ínyá wí khešand væ kuřík le ɪstánd væ bír·
them-E her pulled and boy from-her seized and carried

bír da kɪcá xo go tɪ kúré xó bídæ mí· áze
carried gave daughter-E self said you son-E self give me I will

væ̇ šærɩm æw kúræk jindíyæ ko bíla næ̇zanæ ko .
hide that boy-a pretty-is that so he-won't-know that

tɩ mɩnævær̈ níni· æwíži iná kuré kɩcíke bɩrsí
you Monavar not-are she-also took son-E daughter-O hungry

helá væ hætá kúre kɩcíke mír væ kuré mɩnæværeži
let-be and until son-E daughter-O died and son-E Monavar-also

lalé kɩcá wi ko žɩná kuré pʰašá bu léwe má·
next-to daughter-E her who wife-E son-E king was there stayed

7 páši mæ̇zɩn búne særæke ma sé cʰar sale
after big he-became a-little stayed three four years-O

le hát væ mɩnæværži hær léwe hær dɩgɩríya zedá
to-now-came and Monavar-also still there still crying saw

cʰaræ̇ cʰɩnínæ· řóžæke reyá dɩkʰancʰíæke léwe kʰæ̇t
remedy none-there-is day-a-O route-E storekeeper-a-O there fell

væ gót hætmæ̇n æze bícʰɩm kʰáne æze cʰɩ bɩkím væ
and he-said surely I shall-go to-see I what can-do and

zendáe dængé gɩríye cʰo sær ve calé zendáe váne
perceived sound-E crying-O went over this cellar-O looked-to there

dængé kɩcíkæke te æwé kɩcké gó tɩ kʰéy hati
voice-E girl-a-O comes this girl said you who came

sær cále to xode hækʰí tɩ mɩ dærexi ve gælæk
over cellar-O you God-O if you me get-out (future) much

xerá mí tæ bɩgír· æwí dɩkancʰí tɩrsíya ʔævíli
goodness-E me you will-get this storekeeper was-afraid at-first

páši híngi go tʰævækæ̇la xodé æze bícɩm kʰáne ve
after a-little he-said trust-E God-O I-will go to-see (future)

cʰíle bé· cʰo æw kɩcík iná bíræ malá xó
how will-come went that girl brought took house-E self

væ malá xóda xodán kɩr·
and house-E self-at took-care-of

8 væ žɩníkži hæmæ̇n daykɩnyá mɩnævære hátæ léwe
and woman-also the-same stepmother-E Monavar-O came-to there

zendáe næ̇xe mɩnævær cʰɩnínæ væ cʰo piræke kolóze
perceived no Monavar not-is and went old-an-E crocks-O

ko hæmén dežín piré kolozá yek žɪ wán
that the-same they-say old-women-E crocks one from them

phæydá kɪr væ ʔiná væ góteda hækhí tɪ kɪcɪkék
found and brought and said-to-her if you girl-a

kór phæydá kí æzó cáŋgæk zér bídɪmæ té· væ æw
blind that-you-find I-will fistful-a gold I-give-to you and that

piréži kolozé xó sárbu væ chó·
old-one-also crock-E self mounted and went

9 cho gálæk gæríyan naw šæhér hætá zendáe
went much searched in city until she-looked-at

vane malá dɪkanchí dɪkanci ko méžvæ æv malá wí
them house-E storekeeper storekeeper that earlier that house-E him

dabú pe zeré wí bɪxó dærbané gálæk jɪndí
set-up with gold-E him by-self buildings-E very pretty

ché kírɪbun· væ daykɪnyá mɪnævére góta æve kolozé
had-made-them and stepmother-E Monavar-E said-to this crock-E

piré góteda tí háræ áve bídɪzæ hákhi tɪ ævé
old-one-O said-to-her you go her steal if you her

biní tɪ chíya bɪxazí ázе bídɪmæ té· æwíži chó
bring you whatever that-you-want I will-give-to you she-also went

væ juráæke æw dɪzí ʔiná væ dá daykinyá wi æw
and way-a-O her secretly brought and gave stepmother-E her her

bír go tɪ chobu khídære ko æz hɪndé té
took said you had-gone where that I so-much you

dɪgæríya næhé áze te bíbɪmæ jíyæke wísa ko chí
was-searching now I you will-carry place-a-O like that no

khés té nébinæ· æw bíla léræ bɪn æm bénæ
person you will-not-get this thus here be we will-come

sær qísæda phašá vo kúré wí·
on conversation king and son-E him

10 řózæke væxté sɪbezú kuré phašá cho lále phašá
day-a-O time-E morning son-E king went next-to king

væ phašáži zendáe ko kúre wi kúške bæmgínæ· góteda
and king-also perceived that son-E him a-little sad-is he-said-

kúre mɪ tɪ bóchɪ ʁæmginʃ xæmá dɪxóy æwʃži
to-him son-E me you why sad-are sadness you-eat he-also

go qæt bábo· páši hʃngi gælæk góte góte kúre
said none Father after a-little much told told son-E

mɪ hækhʃ tɪ xæmá bɪxó xæmé tæ yét mʃnɪn· béžæ
me if you sadness by-self sadness-E you belongs-to me-is say

æwʃži go wʃla šɪká mʃ dɪčhé ævé žɪnɪká ko mɪ
he-also said by-God doubt-E me goes this wife that I

?inae babé wiži góte áxɪr kúre mɪ tæ xó æwé
took father-E him-also said after-all son-E me you self her

bæyæm kʃrɪyæ æwé chʃ qɪsé tɪ dežʃ éwe go bábe
loved she what talk you is-saying he said Father

mɪ wʃla æwé biná mɪnævére nʃnæ æwé nʃzanɪm chʃ
me by-God she like Monavar-o is-not she I-don't-know what

jurʃyæ· babé wíži gó tɪ xó dɪzanʃ hæmén kɪcʃkæk
sort-is father-E him-also said you self know the-same girl-a

ko ya tæ xastʃ· mæ éwži chóæ ináwæ tɪ
that of you wanted we her-also have-gone have-brought you

dežʃ æw khéy bæ kuŕé phašá góteda wʃla æz nʃzanɪm·
say she who could-be son-E king said-to-him by-God I don't-know

11 éwži wʃsa ma kuŕé phašá hæ šɪké dabú ko
this-also like stayed son-E king still doubts-E had that

bʃla æwži wʃsa bʃmɪnɪn· væ kuŕé merʃkži yáni
so-be-it this-also like they-would-stay and son-E man-also meaning

kuré phašá cho zendáe kuré xo dit gælæk khéyfa
son-E king went looked-at son-E self saw much pleasure-E

wi hat go xodá ya æwé kuré mʃnæ ko æw
him came said God O this son-E me-is that he

hʃndæ jɪndʃyæ páši hʃngi hat gótæ žɪná xo góteda
so pretty-is after a-little came said-to wife-E self said-to-

tɪ khéngiwæ xæmgʃni· æwʃži go hɪndʃ chʃle kɪr
her you when-since sad-are he-also said some what happened

góteda qæt chʃ chɪnʃnæ· páši wi nébežæ zeré
said-to-him none no not-is after this she-didn't-say gold

wɪ́ži kem hɪndɪ́k bɪbún yáni mɪnævér cʰæn mɪdétæk
her-also less some had-become meaning Monavar some period-a

bu ko ʔə́ndabɪbu yáni æwe dɪkancí bɪrebú
was that she-had-become-lost meaning this storekeeper had-taken-her

zeré wi kém mabún· sær hɪ́nde žɪná wi ʁæmgín bu·
gold-E her less had-stayed for this wife-E him sad was

hɪ́ndi kʊré pʰaš́á cʰɪ́le kɪr· æwí go qét cʰɪ
so son-E king what could-he-do he said nothing no

xə́me mɪ cʰɪnínæ væ hæ wɪ́sa ma· axɪrí meré
sadness-E me none-is and each like stayed in-sum husband-E

mɪnævére hæmə́n kɪcá daykɪnyá mɪnævére bu nə́gotæ
Monavar-O the-same daughter-E stepmother Monavar-O was didn't-tell

meré xo ko æz bócʰɪ ʁæmgínɪm væ mere wɪ́ži
husband-E self that I why sad-am and husband-E her-also

zɪvɪ́ri cho·
returned went

12 védaži daykɪnyá mɪnævére ko mɪnævér inábu dæsté
there-also stepmother-E Monavar that Monavar had-brought hands-E

xo bɪ væsilá piré kolozá bɪr bɪ́ræ ɪškéwtæke væ
self by means-of old-one-E crocks took took-to cave-a-O and

léweda zendæganí kɪr væ hæ řožé hɪ́ndæk nan dɪ́sa
there she lived and each day-E some bread again

biná ʔævɪ́li dɪbɪ́r dɪdáe væ xodán dɪkɪr hætá né-
like at-first was-bringing was-giving and was-taking-care until not

mɪræ· zéro gulé wi dɪʔinán bo kɪcá xó væ kævɪ́r-
she-die gold-and flowers-E her was-taking for daughter-E self and rock

æk mæzɪ́nži danɪ́bu bær dæré ɪškéwte ko cʰɪ kʰə́s
a big-also had-put against door-E cave-O that no person

pʰæyda nə́kæ·
find that-not

13 wə́xte ko dɪkánchɪži zɪvɪ́ri malá xo zendáe
time-O that storekeeper-also returned house-E self looked-for

mɪnævér málda nɪ́næ· gə́læk gɪrɪ́yæ ə́ma zendáe cʰɪ́
Monavar at-home not-is much he-cried but he-perceived no

faydé chɪnʃnæ xorɪjɪké xo řakʃr da pɪštá xo væ
use none-is saddle-bag-E self picked-up put back-E self and

hʃndæk nan hóvetæ nav væ chó· æv dɪkancʃyæ gǽlæk
some bread threw inside and went this storekeeper much

gærʃya hæta hæft salá chole gærʃya væ nædɪhatæ
searched until seven years plains-O searched and wasn't-coming

malá xóži axɪrʃ řóžæke cho hæmén hátæ nezúke
house-E self-also finally day-a-O went the-same came-to near-O

hatʃya ævé ɪškǽwte zendǽe váne zéræ khǽtiyæ léwe
came-to this cave looked-at these gold fallen there

go xodǽe tɪʔalá æwe chʃ zéræ æw zéræ hætmén
said God-E you-Allah this what gold-is this gold surely

ya mɪnævǽræ řænge zere wi dɪdʃn· wán dæra gærʃya
that-of Monavar-is color-E gold-E her they-give those places searched

góhe xo bær dærʃda dá léwe zendǽe dǽnge mɪnævǽre
ear-E self against door-at put there perceived voice-E Monavar

te væ hedʃ léwe rachó zendǽe daykɪnyá wi gæl
comes and quietly there got-up-went perceived stepmother-E her with

qɪsǽ dɪkǽ· léwe rawæstá hætá daykɪnyá wi chó væ
she-is-talking there stood until stepmother-E her went and

æwǽ cho lále mɪnævǽre væ góteda kʃca mɪ æz hatʃmæ
he went next-to Monavar-O and said-to-her daughter-E me I have-

mɪnævǽr gǽlæk khæyfá wi hat væ gǽl dɪkanchʃ
come Monavar much pleasure-E her came and with storekeeper

ko bʃbu babé wʃ gæl hátɪnæ mal væ sǽræke
that had-become father-E her with they-came home and for-awhile

man·
they-stayed

14 řóžæki mɪnævǽre góteda dʃkanci væ hær jaré
day-a-O Monavar-O said-to-him Storekeeper and each time

dɪgóteži babé mɪ dɪgóte bábo tɪ ʃro hʃndæk
she-was-calling-him-also father-E me said-to-him Father you today some

gulé mʃ bʃbæ bǽr dære phašá bʃfɪrošæ ko bʃla
flowers-E me carry to door-E king sell that thus

kúre pʰašá bíbinæ yæ xo nišá wížį nǽdæ
son-E king that-he-see and self show him-also don't-give

yæ bíziviræ wǽræ· ævížį go kíca mi qǽydi nákæ
and return come he-also said Daughter-E me obstacle don't-

æzé bícim væ sælíkæk gul rakírin yæ cʰó
make I will-go and basket-a flowers picked-up and went

cʰo bær dæré pʰaša væ kíræ hævár gulá kʰǽy
went to door-E king and made cry flowers who

dikirǽ gula kʰǽy dikirǽ yáni go [gúl alán
is-buying flowers who is-buying meaning he-said flowers buy

gúl alán]* væ páši híngi sǽræke má kuré pašážį
flowers buy and after awhile a-time stayed son-E king-also

æw dǽngæ bihíst væ gótæ yeké yaní xodamá xó
that voice heard and said-to one-O meaning maidservant-E self

góteda hǽræ æwán gulá bíkiræ bínæ gǽlæk jindínæ
said-to-her go those flowers buy bring very pretty-are

væ ævé gulá difiróšæ ævéžį biné léræ· æw kicík
and he flowers is-selling he-also bring here that girl

cʰo væ góteda æván gulá bínæ šazadǽ dixazǽ· æwí
went and said-to-him these flowers bring prince wants this

dikancížį gul birin dáne· go bæs ti hǽræ
storekeeper-also flowers brought gave-to-her said enough you go

ʔahán ǽžį pe tæ ve tém· kicík cʰo hætá zivíri
ahead(?)I-also with you will come girl went until returned

zedae dikancí cʰóæ væ cʰo gótæ kuřé pʰašá góte-
perceived storekeeper was-gone and went said-to son-E king said-to-

da wíla gulfiróš cʰo væ æwížį go qǽydi nákæ
him by-God flower-seller went and he-also said obstacle don't-

æwán gulá bínæ ævížį gúl ʔinán væ kuré pʰašá
make those flowers bring she-also flowers brought and son-E king

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*Azeri Turkish

zendáne æw gulánæ ʔáyni binane gulænæ mɪnævárenæ·
looked-at-them these flowers like they-are-like flowers-E Monavar-O

gálæk kʰætæ šké go xoda yá æw gulánæ kʰídære
are much fell-to doubt-O said God O these flowers where-from

hatínæ væ járe dɪ kušké ma go hætmán dayká
they-have-come and time another a-little stayed said surely mother-E

žɪná mɪ æw gulánæ dánæ mɪrófæke áwži hatʃyæ væ
wife-E me these flowers gave-to man-a-O he-also has-come and

dɪfɪróšæ ámma go bæs bóchɪ æwʃ mɪrofí dɪráf næ
is-selling but he-said enough why this man money not

hel gírt hætmán léræ ʔæmélæk háyæ·
he-took-up surely here job-a there-is

15 véda piræmér' hæmán dɪkancí áwži chɔ lalé
there old - man the-same storekeeper he-also went next-to

mɪnævére væ gótəda mɪ ʔéw gulánæ hanækí dánæ wí
Monavar-O and said-to-her I these flowers in-such-way gave-to him

væ æz hátɪm væ áži nádítɪm mɪnævérži gálæk
and I came and me-also not-he-saw-me Monavar-also very

kʰəyxóšbu páši hínngi řózæke kuřé mɪnævére ko mæzín
happy-was after awhile day-a-O son-E Monavar-O that big

bɪbú áwži řózæke dɪchó necíre ko mɪnævére zanʃ·
had-become he-also day-a-O was-going hunting-O that Monavar knew

mɪnævére gótæ piræmer góteda bábo tɪxodé háræ phešf-
Monavar-O said-to old-man she-said-to-him Father please go in-front-

ya æwʃ hækhʃ necíre dɪzɪvíræ væ béžæ æm bíšnæ
E. him when hunting-O he-is-returning and say we shall-go

mal bíbæ mevané mæ sárækeži ɪstɪrahéte bɪká ævíži
home be guest-E us a-little-also rest-O take he-also

go kíca mɪ qáydi náka áze bícɪm væ bínɪm· ma
said daughter-E me obstacle don't-make I-will go and bring stayed

hætá kure vu ko navé wí yelmár bu ko dɪgótɪnæ
until boy-O and that name-E him Yelmar was that they-called

šazadé yelmár ži necíre zɪvíri væ hækí dærbané
Prince Yelmar from hunting-O returned and when buildings-E

dɪkancʃ ditʃn hær lɪmá léwe væ zendá ævé
storekeeper saw-them still stayed there and saw these

dærbaná væ dɪkancʃži zu chó væ góteda kærámkæ
buildings and storekeeper-also soon went and said-to-him please

ævné pheškéšɪm væ æw bíræ malá xó æwʃ dɪkancʃ-
these I-present and him he-brought home-E self this storekeeper-

ži ko zendáe hæmén khæyfá wi dærbané wi te
also that he-perceived the-same pleasure-E him buildings-E him comes

væ hær zéndɪdæ ván dæra šázadæ yelmárži díle
and still he-is-looking-at those places Prince Yelmar-also heart-E

xóda go xóda ya æw dáræ bɪhə́štæ ya chʃyæ· gə́læk
self-in said God O this place heaven-is or what-is much

dɪchó fɪkɪrá páši hɪngʃ dɪkancʃ æwé bɪr chó ʔodá
was-going thought-O after awhile storekeeper him brought went room-E

mɪnævárе ko mɪnævárе te dabú væ chúmko mɪnævárži
Monavar-O that Monavar-O is placed-in and because Monavar-also

kór bu væ chʃ khæs nædɪdʃt hæ léwe runɪštɪbu
blind was and no person not-was-seeing still there had-sat

páši hɪngi cho řunɪštɪn væ šazadé yelmár hækhʃ
after awhile went they-sat and Prince Yelmar when

odáwan dit wɪsa zendáe go áwdæræ bɪhə́štæ væ ævé-
room-E-them saw like he-perceived said there heaven-is and she-

ži yék ži fɪrɪšté bæhə́šteyæ· páši hɪngi gə́læk
also one of angels-E heaven-is after awhile much

khæyfá wi æwʃ kɪcké hat yáni mɪnævárе hat væ
pleasure-E him this girl came meaning Monavar-O came and

díle xóda bu ʔašqé wi væ páši hɪngi zɪvɪri
heart-E self-in was in-love-E her and after awhile he-returned

cho malá xo væ gótæ babé xo æz ʔašɪqɪm· ævʃži
went home-E self and said-to father-E self I in-love-am he-

góteda tɪ bwʃ ʔašqé khə́y· ævʃži nə́gotæ wi
also said-to-him you became in-love-E who he-also not-said-to him

páši gótæ væzír wíla kɪcíkæk dɪkhanchʃyæ væ xoži
after he-told minister by-God daughter-a storekeeper-is and self-also

malá wan fɩlán dǽreyæ yæ mala wánži hanækí hatíyæ
house-E them such-and-such place-is and house-E them-also this-way has-

cʰe kírɩn væ babé wí vu væzír řabún cʰón væ
been built and father-E him and minister got-up went and

gótɩn æm bícɩn kʰáne ve kɩcá xo bídæ mæ
they-said we shall-go to-see (future) daughter-E self that-he-give us

ya nǽ·
or not

16 cʰónæ malá dɩkancí væ dɩkancíži góteda
they-went-to house-E storekeeper and storekeeper-also said-to-them

kɩcá mɩ hǽrdɩ cavé we kórɩn· páši nǽbežɩn ko
daughter-E me both eyes-E her blind-are after don't-say that

tæ bócʰɩ nǽgotiyæ mæ væ kʰærbé wíži væbún
you why have-not-told us and anger-E him-also was-renewed

go kuré mí bócʰɩ hatíyæ búyæ ʔašɩqé kɩcíkæk kór·
he-said son-E me why he-has-become (?) in-love-E girl-a blind

zɩvíri hátæ malá xo væ væzírži góteda qírban
returned came house-E self and minister-also said-to-him Sacrifice

xó dɩzaní tíži bwí ašɩxé kɩcíkæke ko jɩlík
self you-know you-also are-become in-love-E girl-a-E that clothes

dɩšuštɩn· æwiᵛ góteda vǽzir æw kɩcká mɩ dití sær
washes-them he said-to-him Minister this girl I saw-her on

cawé wi væ gúl dɩværín væ zérži dɩværín· væzír
eyes-E her and flowers are-dropping and gold-also are-pouring minis-

góte dežín æw kícɩkækži wísanæ·
ter he-said-to-him they-say this girl-a-also is-like-that

17 páši híngi cʰo lalé kuré xo væ góte
after awhile he-went next-to son-E self and said-to-him

šázadæ yelmár æwæ cʰíyæ tæ kíriyæ tɩ bócʰɩ
Prince Yelmar this what-is you have-done you why

ʔašqé zɩníkæk kór yáni hæmǽn kɩcíkæk kor ævíži
in-love-E woman-a blind meaning the-same girl-a blind he-also

go bábo hæskí æwǽ hǽrdɩ lɩngé wíži cʰɩnæbín
said Father if she both legs-E her-also none-were

væ hærdɪ mɪlé wi chɪnæbʃn mɪ qabúlæ· páši æwé
and both arms-E her none-were me agreed-is after that

hétæ lale væzír væ góte vézir héræ béži kɪcá
he-came next-to minister and said-to-him Minister go tell-him daugh-

tæ kór bæži mæ qæbúlæ væ cho gótæ dɪkancí
ter you blind may-be-also us agreed-are and went said-to storekeeper

væ dɪkancíži go mɪnævére˅ šértæk héyæ· go chíyæ
and storekeeper-also said Monavar-E condition-a there-is he-said what-

yáni navé mɪnævéreži négo go kɪcá mɪ
is-it meaning name-E Monavar-O-also did-not-say said daughter-E me

go šérte wi chíyæ æwí go šærté wi æwéyæ ko
he-said condition-E her what-is he said condition-E her this-is that

malá fɪlán khése yáni malá daykɪnyé wi mæjlísæke
house-E such-and-such people-O meaning house-E stepmother-E her gather-

cánin hæw hæmú mɪrófe xówæ væ phašá yáni
ing-a-O set-up together all people-E self-your(?) and king meaning

kuré phašá hæw žɪné xó wæ léwe mæjlíseda hazír
son-E king together wife-E self and there gathering-O-at ready

bɪn væ æwéži cirongé kɪclæk kor béžæ· páši edí
be and she-also story-E girl-a blind will-tell after also

bínɪn bídɪnæ kuré phašá yáni bídɪnæ šazadé
we-shall-bring shall-give son-E king meaning shall-give-to Prince

yelmár· æwíži go qéydi nákæ æzé béžmæ kuré phašá
Yelmar he-also said obstacle don't-make I will-tell son-E king

væ cho gotæ kuré phašá wíla mæsælæk hanækí
and went told son-E king by-God story-a like-this

héyæ· æwíži go qéydi nákæ·
there-is he-also said obstacle don't-make

18 væ páši xožá dawéte ko hatɪbú páši híngi
and after day-E wedding-O that had-come after awhile

chon mæjlísæk mala wánda danín væ zendáne vane
they-went gathering-a house-E them-at they-set-up and they-saw them

hæmú xɪr kɪrínæ chónæ mæjlíse væ mɪnævéro
all were gathered they-went-to gathering-O and Monavar-and

dɩkanchíži chóna léwe yæ mɩnævárži nɩqábæk kɩšánd
storekeeper-also they-went there and Monavar-also veil-a pulled

sær cave xo ko naz nákɩn væ chon léwe
over eyes-E self that they-wouldn't-recognize and they-went there

řuníštɩn væ mɩnævárěži cirongá xo ?ævílida hætá
they-sat and Monavar-O-also story-E self from-the-first until

særé go· dáykɩnya wí ævíli dɩl hábu bírævæ
top-O she-said stepmother-E her at-first heart there-was that-she-flee

zaní ko mɩnæværæ· páši šazadá néhelan ko ævá
she-knew that Monavar-is after prince didn't-allow that she

bírævæ væ páši zendáe ko ævá žɩná wi nínæ
flee and after he-perceived that she wife-E him is-not

cho zendá sær cavá væ zendáe bále ævá æw nínæ
he-went looked on eyes-O and perceived yes this her not-is

væ zendáe dɩgɩrí væ dɩkhæná cho zéro gul sær
and he-looked-at she-cries and laughs went gold-and flowers on

cawá nárɩžɩn væ hátæ lalé væ góteda gálæk bášbu
eyes did-not-flow and he-came next-to and said-to-her very good-

ko axɩrí mɩ tɩ phæydá kíri væ ævíži gazí
was that at-last I you found you and she-also called

kuré xo ko hæmán šazadæ yelmár bu væ bíbu
son-E self that the-same Prince Yelmar was and had-become

?ašqé wí gazí kír væ góte kúre mɩ wáræ lalé
in-love-E her called and said-to-him son-E me come next-to

mí ko mɩ méžvæ tɩ nádititɩbu væ páši híngi
me that I long-ago you had-not-seen and after awhile

níškevæ zendáne žɩ thæræfé xodá hærdɩ cavé wi
suddenly(?) they-saw from side-E God both eyes-E her

qánj bun væ cáve wi hárdɩkži ditín væ mɩnævárе
healed were and eyes-E her each-of-them-also saw and Monavar-O

zu kíræ hævár xóda ya zor šɩkúr ko hárdɩ
quickly made cry God O great thanks that both

cavé míži dítɩn væ æz nɩhá dɩkarím hæmú tɩšti
eyes-E me-also they-saw and I now can all things-O

væ hæmú khæsé blbinɪm·
and all people-O that-I-see

19. páši hĺngi ɪnán æv kɪcĺko daykɪnyá mɪnævárežI
after awhile they-brought that girl-and stepmother-E Monavar-O-

ʔinán háreki giredán delá hæspæke vá væ dære-
also they-brought each-one-O tied-them tail-E horse-a-O and out-threw-

xĺstɪnæ dæré malé væ hær hæspé dɪ sé šæláq
them outside-E house-O and each horse-O two three lashes

le dán væ exĺstɪnæ chólé· æw hæspæná gælæk chon
they-struck and sent-them-out plains-O these horses much went

væ æwná bæla bæla kĺrɪn væ æwné ræhæt bun
and those scattered scattered made and these comfortable were

yáni mɪnævár šwži mánæ malá xo væ gælæk baš
meaning Monavar she-also stayed-at house-E self and very good

zendæganĺ kɪrĺn væ edĺ žɪ dæsté mɪrofé zalĺm
they lived and otherwise from hands-E people-E oppressive

dær khætɪn·
was delivered

TEARS OF GOLD

1 Once there was a poor laborer who had almost nothing. His wife bore him an extraordinarily beautiful daughter. When this girl cried, gold poured from her eyes, and, when she laughed, flowers rained down from her face.

2 One day, the girl's mother died, and before the year was out, her father took another wife. This woman had a daughter who was altogether disgusting. The new wife was envious of her husband's daughter, Monavar, who cried tears of gold and laughed flowers. This envy gnawed at her so she would pile up the laundry and give it to her step-daughter, ordering her to wash it in the river. The girl cried and protested, but in the end she had to do it anyway.

3 One day, the pasha's son went for a walk by the river and saw Monavar. He fell in love with her. He went to his father and said, "I am in love with a girl; when she cries, gold flows out of her eyes, and when she laughs, flowers come out." The pasha, who had heard about this girl, said, "Don't worry. I will get her for you," and he went to his vizier and said, "Go today and say to the girl's father, 'Give your daughter to my son.'" The vizier replied, "I'll take care of everything." He went to the man and said, "The pasha's son saw your daughter and fell in love with her. We have come to see whether you will give her to us or not." The man answered, "I'm very happy to give my daughter to the pasha." They stood up and went. They reported to the pasha that the man promised to give them his daughter.

4 Monavar's stepmother, who was very envious and didn't want the girl to go to the pasha's house, said to herself, "Is it right that this Monavar goes to the pasha's house while my daughter has to stay home?" One day when there were only three days until the wedding the stepmother took Monavar aside and said "Come here. I'm going to wash your hair." She grabbed her stepdaughter and shoved her into a cellar deep underground. Then she plucked out both of her

stepdaughter's eyes and left her there. She then prepared her own daughter to go in Monavar's place to the pasha's house. However, [unknown to the stepmother], the day before she threw Monavar into the cellar, the pasha's son had been to visit. His heart was full of desire so he came to see Monavar and they slept together. But he hadn't found out how Monavar's stepmother was persecuting her.

5 Every day the stepmother would bring Monavar a little bread and admonish her, "Don't die." She would take Monavar's gold and flowers to give to her own daughter so they wouldn't know she was not Monavar. She called her own daughter Monavar [to disguise her real identity].

6 Some time passed; a year was finished - meaning nine months went by. Monavar bore a son whose hair was golden. The stepmother came, and looked at them. Seeing the boy's golden hair, she coveted him. She seized the boy and took him to her own daughter, saying, "Give me your son and I will hide him. Take this beautiful baby so that no one will suspect that you are not Monavar." She took her daughter's son and starved him until he died. Monavar's son stayed with the stepmother's daughter who was now the pasha's wife.

7 The boy grew big, nearly three or four years old. Monavar was still there [a prisoner] and she was crying but to no avail. One day a storekeeper's route fell near there and recognizing the sound of crying, he went to help. He went over to the hole where he heard the voice coming from and he saw a girl. She cried out, "Who is that who comes near the cellar. Please, if you can lift me out, you will be rewarded." The storekeeper was afraid at first, but after awhile, trusting God, he said, "I might as well do it and see what happens." He went in and picked up the girl and brought her to his house where he took care of her.

8 The woman, Monavar's stepmother, came there and looked. "No, Monavar is not here." She went to find one of the old women who are said to ride around on crocks [witches]. She found one [of these witches], brought her over and said,

"If you find me a blind girl, I'll give you a handful of gold." The witch rode away on her crock.

9 She searched around the city a lot until she spotted the house of the shopkeeper. Some time ago this shopkeeper had erected a beautiful residence using [Monavar's] gold. The stepmother said to the witch, "If you can kidnap her and bring her to me, I'll give you whatever you want." The witch went and by some means secretly got the girl and gave her to her stepmother. She took the girl and said to her, "Where have you been? I've been looking everywhere for you. This time I'm going to take you to a place where no one will be able to rescue you." (Let's leave these two and listen in on the conversation between the pasha and his son.

10 One morning, the pasha's son went to see his father. The pasha noticed that his son seemed a little sad. He asked, "What's troubling you, my son? Has something bad happened?" The son replied, "Nothing, Father." The pasha then talked to his son at length. He said, "My son, if you are sad, then your sadness belongs to me as well as to you. Tell me what's wrong." His son said, "Truthfully, I have doubts about the wife I took." His father replied, "You were actually in love with her. What has she been saying to you?" He replied, "Father, she is not at all like Monavar. I don't know what's wrong." The pasha said, "She's the same girl you wanted. We went and got her for you. Now you say, 'Who could she be?'" The pasha's son replied, "Honestly, I don't know."

11 He continued to have doubts, but he let things stay the way they were. When he saw his son he was very happy and thought how beautiful he was. Then he went to see his wife and asked, "Why have you been unhappy these days? What has happened?" She replied, "Nothing at all." After all, how could she tell him that her gold had been decreased while Monavar was at the storekeeper's house? Because of this his wife was sad. What could the king's son do? She insisted that nothing was wrong. So each of them stayed

unhappy. Monavar's stepmother's daughter didn't tell why she was unhappy and her husband left.

12 At the same time, Monavar's stepmother was now keeping Monavar, who had been returned by the witch, in a cave. Monavar lived there. In the same way as before, she would bring her stepdaughter a little bread everyday and taking care that she would not die. She would take the gold and the flowers for her own daughter and kept a large stone against the door of the cave so that no one would find the girl.

13 When the storekeeper returned to his house, he realized that Monavar was gone. He cried a lot, but realizing that wouldn't bring her back, he put on his pack, threw some bread in it, and went to look for her. He wandered around outside the walls of the town for seven years, never coming home. Finally one day he came near that cave where he saw some pieces of gold had fallen on the ground. He cried out, "Great God, what is this gold? It looks like Monavar's. Certainly it is the same color as hers." He walked around and put his ear to the door of the cave and heard Monavar's voice. He got up quietly and heard her talking with her stepmother. He stood until the stepmother left and then went in to see Monavar and said, "My daughter, here I am." Monavar was overjoyed and went home with the storekeeper who had become like a father.

14 Several months passed, and one day Monavar said to the shopkeeper, "Papa," as she always called him. "Papa, take some of my flowers today and sell them near the pashe's house so that the pasha's son sees them, but don't let him see you. Then come back here." He replied, "Don't worry, my daughter. I'll go." He took a basket of flowers and went to the pasha's door. He cried, "Who will buy my flowers, who will buy?" and "Flowers for sale, flowers for sale." After awhile, the pasha's son heard his voice and said to one of the woman servants, "Buy some flowers and bring them here. They look very beautiful. Also bring the man who is

selling the flowers." The girl went and said to him, "Bring your flowers over here. The prince wants some." The storekeeper brought his flowers over, gave her some, and said, "O.K., go ahead and I'll come after you." The girl left and then returned, but saw that the shopkeeper had gone. She went to the pasha's son and said, "Goodness, the flower seller has left." He replied, "Never mind. Bring the flowers." She brought them over and he saw that they were like Monavar's. He became very suspicious and said, "My God, where did these flowers come from?" A little later he reasoned, "Obviously my wife gave these flowers to some man and he came and sold them." "But," he said "why didn't he take money for them? There is something strange going on here."

15 Monavar's storekeeper returned to Monavar and described to her how he had sold the flowers to the pasha's son without being seen. Monavar was very happy. Time passed and Monavar's son, the pasha's grandson, who had grown up, began to go hunting. Monavar found out about this and said to the old man, "Papa, please go ahead of the boy. When he goes to return from hunting, tell him to come to our house for a rest." He replied, "Don't fret, daughter. I will go and get him." So they waited until one day the boy, whose name was Yelmar, really Prince Yelmar, returned from hunting and saw the storekeeper's establishment. He stood looking at the buildings. The storekeeper came and said, "Please, if you like my house, it is yours." He brought him home and watched while the boy looked around and admired everything. Prince Yelmar said to himself, "O God, is this heaven or what?" He sat, deep in thought, until the shopkeeper took him to Monavar's room where she was waiting. Because she was blind and couldn't see anyone, she had remained there sitting. When Yelmar sat down and looked around him, he wondered if this were paradise and he were beholding an angel. He liked Monavar a lot. In his heart he was already in love with her. After awhile Yelmar returned to his house and told his father he was in love. His

father asked, "Who are you in love with?" His son didn't reply, but went to the vizier and told him, "It's the storekeeper's daughter and her house is in such and such a place. Her house looks like this." His father and the vizier got up and left saying, "We're going to see if he'll give us his daughter or not."

16 They went to the house, and the storekeeper told them, "My daughter is blind in both eyes so don't say afterwards 'Why didn't you tell us before?'" The pasha's son was angry. When they left, he said, "Why has my son fallen in love with a blind girl?" When they returned home the vizier said, "Your highness, you realize you are in love with a girl who washes clothes?" The boy replied, "Vizier, I saw this girl's face and both flowers and gold fall from it." The vizier replied, "I've heard she's like that."

17 Then, the pasha's son went to the boy, and said, "Yelmar, what happened? Why did you fall in love with a blind girl?" He replied, "Papa, even if she had no arms or no legs, I would still want her." His father went to the vizier and said, "Go tell the man that we've agreed to take his blind daughter." The vizier went to the storekeeper and the storekeeper said, "Monavar has one condition." The vizier asked, "What is it?" He replied, "The condition is that you gather together a group of people at the house of certain people (meaning Monavar's stepmother) and summon them together with all of your family including the pasha's son and his wife. Prepare a party and Monavar will tell her story of a blind girl and afterwards she may be given to Prince Yelmar." The vizier replied, "Don't worry I will tell the pasha's son about this." Then he went to the pasha's son and explained the situation. The son replied, "No problem."

18 Finally the day of the wedding arrived; they went to the party and saw everyone gathered at their house. Monavar and the storekeeper came. Monavar wore a veil, so that no one would recognize her. They all sat down and Monavar told

her story right from the beginning to the end. The stepmother wanted to flee as soon as she realized that it was Monavar, but the pasha's son wouldn't let her. He realized that his wife was not Monavar. He went over to check and decided it definitely wasn't her. When she cried and laughed gold and flowers did not pour from her face. Then he went over to Monavar and said that it was very good that at last he had found her. She called her son, Yelmar, who had fallen in love with her and said, "My son, come here next to me. I haven't seen you in a long time." Then a miracle occurred. Both of her eyes were healed and she could see. Monavar quickly cried out her thanks to God.
19 Then they picked up the stepmother and her daughter and tied them behind two horses and took them outside the walls of the house. They whipped the horses and sent them into the plains. As the horses galloped, the bodies of the two women were scattered in pieces.

Monavar and her family remained at home and lived happily ever after, staying clear of all tyrants and oppressors.

BIBLIOGRAPHY

Abercrombie, David 1967 Elements of General Phonetics. Aldine Co., Chicago

Al-Ani, Salman 1970 Arabic Phonology: An Acoustical and Physiological Investigation. Mouton, The Hague.

Amirpur-Ahrandjani,M. 1971 "Der aserbeidschanische dialekt von Schahpur." Islam Kundliche Untersuchungen, Band 11, Freiburg im Breisgau.

Bakaev, Č. X. 1957 Kurdsko-russkij slovar. Akademia nauk SSSR. Institute Jazykoznaniya, Moscow.

Bedir-Khan, Emir Djeladet & Lescot, Roger 1970 Grammaire Kurde (dialecte Kurmandji). Librairie d'Amerique et d'Orient, Paris.

Brame, Michael 1970 Arabic Phonology: Implications for Phonological Theory and Historical Semitic. Doctoral dissertation, MIT.

Brame, Michael 1972 "On the Abstractness of Phonology: Maltese ʕ," Contributions to Generative Phonology, Brame, ed., University of Texas Press, Austin.

Chen, Matthew & Wang, William 1975 "Sound Change: Actuation and Implementation." Language 51:255-292.

Clarity, B., Stowasser, K., and Wolfe, R. 1964 A Dictionary of Iraqi Arabic: English-Arabic. Georgetown University Press, Washington, D.C.

Cowan, J. M., ed. 1971 A Dictionary of Modern Written Arabic by Hans Wehr. Spoken Language Services, Inc. Ithaca, New York.

Delattre, Pierre 1971 "Pharyngeal Features in the Consonants of Arabic, German, Spanish, French, and American English." Phonetica 23:129-155.

Douglas, William O. 1951 Strange Lands and Friendly People. Harper & Brothers, New York.

Eagleton, William 1963 The Kurdish Republic of 1946. Oxford University Press, London.

Erwin, Wallace 1963 A Short Reference Grammar of Iraqi Arabic. Georgetown University Press, Washington, D.C.

Fant, Gunnar 1968 "Analysis & Synthesis of Speech Processes," Manual of Phonetics. Bertril Malmberg, ed. North-Holland, Amsterdam.

Fant, Gunnar 1973 Speech Sounds and Features. MIT Press, Cambridge.

Fries, Charles & Pike, Kenneth 1949 "Coexistent Phonemic Systems." Language 25:29-50.

Garbell, Irene 1958 "Remarks on the Historical Phonology of an East Mediterranean Arabic Dialect." Word 14: 303-337.

Haïm, S. 1973 The Shorter Persian-English Dictionary. V. Beroukhim & Sons, Tehran.

Hale, Kenneth 1970 "On Papago Laryngeals." Languages and Cultures of Western North America, E. H. Swanson, ed., Idaho University Press, Pocatello.

Harrell, Richard 1957 The Phonology of Colloquial Egyptian Arabic. American Council of Learned Societies, New York.

Harris, Zellig 1942 "The Phonemes of Moroccan Arabic." Journal of the American Oriental Society, 62:309-318.

Haugen, Einar 1953 The Norwegian Language in America. A Study in Bilingual Behavior Vol. II. University of Pennsylvania Press, Philadelphia.

Hodge, Carleton 1957 "Some Aspects of Persian Style." Language 33:355-369.

Hodge, Carleton 1960 Spoken Persian Part 1. Center for Applied Linguistics. Washington, D.C.

Holden, K. T. 1972 Loan Words and Phonological Systems. Doctoral Dissertation, University of Texas at Austin.

Hony, H. C. 1957 A Turkish-English Dictionary. Oxford University Press, London.

Householder, Fred 1965 Basic Course in Azerbaijani. Uralic and Altaic Series, Volume 45. Indiana University Publications.

Hyman, Larry 1970 "How Concrete is Phonology?" Language 46:58-76.

Jakobson, Roman & Halle, Morris 1968 "Phonology in Relation to Phonetics," Manual of Phonetics, Bertil Malmberg, ed. North-Holland, Amsterdam.

Justi, Ferdinand 1872 "Note sur les mots étrangers en kurde." Revue de Linguistique et de Philologie Compareé, 5-6:89-99.

Kahn, Margaret 1975 "Arabic Emphatics: The Evidence for Cultural Determinants of Phonetic Sex-Typing." Phonetica, 31:38-50.

Kahn, Margaret (in press) "The Official Persianization of Kurdish," to appear in Proceedings of the Eighth International Congress of Phonetic Sciences, 1975. Leeds, England.

Keiler, Allen 1970 A Phonological Study of the Indo-European Laryngeals. Mouton, The Hague.

Kim, C-W 1970 "A Theory of Aspiration." Phonetica 21: 107-116.

Kinnane, Derk 1964 The Kurds and Kurdistan. Oxford University Press, London.

Kurdoev, K. K. 1960 Kurdsko-Russkij slovar. Akademiya nauk SSSR institut vostokovedeniya, Moscow.

Labov, William 1971 "Methodology." Dingwall, ed. A Survey of Linguistic Science. University of Maryland, College Park.

Labov, W., Yaeger, M., and Steiner, R. 1972 1972 A Quantitative Study of Sound Change in Progress; 2 volumes. U.S. Regional Survey, Philadelphia.

Ladefoged, Peter 1971 Preliminaries to Linguistic Phonetics. The University of Chicago Press, Chicago.

Lambton, A. K. S. 1969 Persian Vocabulary. Cambridge University Press, Cambridge.

Lescot, Roger 1940 Textes Kurdes I. Librairie Orientaliste. Paul Geuthner, Paris.

Lisker, Leigh & Abramson, Arthur 1964 "A Cross-Language Study of Voicing in Initial Stops: Acoustical Measurements." Word 20:384-422.

Lovins, Julie 1973 Loanwords and the Phonological Structure of Japanese. Doctoral Dissertation. The University of Chicago.

Mackenzie, D. N. 1961a Kurdish Dialect Studies I. Oxford University Press, London.

Mackenzie, D. N. 1961b "The Origins of Kurdish." Transactions of the Philological Society. Oxford, pp. 68-86.

Makas, Hugo 1900 Kurdische Studien. 1. Eine Probe des Dialektes von Diarbekir 2. Ein Gedicht aus Gāwar 3. Jezidengebete. Heidelberg.

McCarus, Ernest 1958 A Kurdish Grammar. American Council of Learned Societies. New York.

Minorsky, V. 1933 "Remarks on the Romanized Kurdish Alphabet." Journal of the Royal Asiatic Society. pp. 643-650.

Odisho, E., Barker, D., & Scully, C. 1975 "Tafxiim (Emphasis) in Arabic & Neo-Aramaic : A Phonetic and Phonological Study," paper given at The Eighth International Congress of Phonetic Sciences, Leeds, England.

Rhea, Samuel 1880 "Brief Grammar and Vocabulary of the Kurdish Language," Journal of the American Oriental Society 10:118-155.

Short, Martin & McDermott, Anthony (no date) Minority Rights Group No. 23. The Kurds. London.

Sokolova, V. S. 1953 "Kurdiskij jazyk." Osterku po fonetike iranskix jazkov. I. Belydžskij, Kurdskij, Talyšskij, Tatskij jazyky, Moscow. pp. 78-103.

Stampe, D. 1969 "The Acquisition of Phonetic Representation." Papers from the Fifth Regional Meeting of the Chicago Linguistic Society, pp. 443-454.

Stewart, J. M. 1967 "Tongue Root Position in Akan Vowel Harmony." Phonetica 16:185-204.

Trnka, B. 1964 "On Foreign Phonological Features in Present-Day English." In Honour of Daniel Jones ed. by D. Abercrombie. Longmans, Green, and Co. Ltd, London.

Weinreich, Uriel 1963 Languages in Contact. Mouton, The Hague.

Whitely, W. H. 1967 "Loanwords in Linguistic Description: A Case Study from Tanzania, East Africa," in I. Rauch and C. T. Scott, eds., Approaches in Linguistic Methodology, The University of Wisconsin Press, Madison.

Woodhead, D. & Beene, W. 1967 A Dictionary of Iraqi Arabic: Arabic-English. Georgetown University Press, Washington, D.C.

Zwicky, Arnold 1974 "Taking a False Step." Language 50: 215-223.