Contact, Attrition, and Structural Shift: The Case of Oroqen*

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0. Introduction

Oroqen is a Tungusic language spoken by roughly 2,500 people in two provinces of northeastern China: Heilongjiang Province and Inner Mongolia Autonomous Region. The Oroqen lived as hunter-gatherers until the early 1950s, when the Chinese government began its effort to settle them. Before this time very little was known about the Oroqen language outside of piecemeal information provided by the great Russian ethnographer, S. M. Shirokogorov (1923, 1929-1933, 1935, 1944). During the early 1960s, after the demise of Oroqen nomadicism, more comprehensive research on the language began with the pioneering work of Hu Zengyi, resulting in the first grammatical sketch of Oroqen (ultimately published as Hu 1986). One additional grammatical sketch has since appeared (Zhang et al. 1989) as well as two phrasebooks (Han and Meng 1993, Saxirong 1981), a collection of texts (Meng 1993), and work on more specific aspects of the grammar (Doerfer 1983; Li and Whaley 1998; B. Li 1992, 1996; F. Li 1996; S. Li 1981; Whaley and Li 1998, 2000; Whaley et al. 1999; Zhang 1996; Li and Whaley 2000). It is glaringly obvious among these works that hardly any attention has been devoted to the rapid changes that Oroqen has been undergoing over the last few decades. Therefore, the aim of this paper is to explore both the internal and external factors that led to the drastic changes that have taken place in Oroqen, focusing on the dismantling and reordering of its structural system. The first section of this paper is a brief introduction. The second section is devoted to a discussion of the changes that are attributable to language attrition. The third section deals with contact-induced changes, and the final section of the paper offers some explanations and systematic patterns about contact and attrition situations.

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1. Attrition-Induced Changes

It has been abundantly demonstrated in the literature that the structure of languages undergoing attrition is subject to a certain amount of change at all levels: phonological, morphological, syntactic, semantic, and lexical (Hill 1980, Dorian 1989, Maher 1991, Grenoble and Whaley 1998). The changes that have been described in the literature display systematic patterns. As Schmidt (1985) and Maher (1991) point out, the patterns found in obsolescing languages are remarkably similar—with many showing allomorphic reduction, radical simplification and regularization of certain paradigms, generalization of a single case affix to cover various peripheral case functions, a tendency to eliminate verbal inflectional affixes, a breakdown in agreement rules, replacement of synthetic forms by analytic ones or by periphrastic constructions, and so on. Fieldwork on Oroqen done by Lindsay J. Whaley and Fengxiang Li over the past five years yielded data consistent with some of the aforementioned characteristic features.

For instance, morphological processes that have restricted applications are no longer present in younger Oroqen speakers' speech. Li and Whaley (2000) give a detailed description of one of the intensive marking strategies utilized in Oroqen—namely, emphatic reduplication. Emphatic reduplication operates in Oroqen by copying the first syllable of an adjectival stem onto a CVC template and prefixing the copied material to the adjective. If the first syllable of the adjective is open, then a [b] is inserted into the post-vocalic slot of the CVC template. These patterns are demonstrated in (1).

(1)	bagdarın	'white'	bag-bagdarın	'very white, white as snow'
	ʃiŋarın	'yellow'	ʃib-ʃiŋarın	'very yellow, golden yellow'
	kara	'dark (glossy)'	kab-kara	'very dark, glossy black'
	kɔŋɔrın	'black'	kɔb-kɔŋɔrın	'very black'

For certain speakers, the post-vocalic [b] in the last three forms in (1) has assimilated in voicing to the following obstruent, and so is pronounced [p].

Emphatic reduplication occurs only with a small number of adjective stems, perhaps only the four presented in (1). Notably, all the adjectives are color terms, and all of them are commonly associated with the hue of certain domestic animals. Speakers routinely reject emphatic reduplication with other adjectives, even if they are color terms, as shown in (2).

(2)	gılbarın	'sky blue'	*gıl-gılbarın
	tʃəŋg^{y}ɛn	'deep blue'	*tʃəŋ-tʃəŋg^{y}ɛn
	ʊlaːrın	'red'	*ʊb-ʊlaːrın
	tʃuturin	'green'	*tʃub-tʃuturin

The restrictive application of reduplication has made it highly vulnerable to rapid loss as Oroqen becomes obsolescent. Data from four informants demonstrate that younger speakers no longer have emphatic reduplication in their grammar. Our two older informants A (70 years old) and B (60 years old) both used Oroqen as their primary language until their early twenties. Since that time they have increasingly used Mandarin Chinese. Both women use the reduplicated adjectives in (1), though the younger of the two does not recognize or accept the last of these forms. Our two younger informants C (46 years old) and D (30 years old) no longer accept or recognize any of these forms. Though both of these women learned Oroqen in the home as a first language, both have grown up and been educated in a Mandarin-dominated context.

Similar patterns were found with other morphological processes indicating the same process of loss. Among the nominalizers in Oroqen, *-ŋki* is by far the most productive. It occurs with practically any verb to yield a noun. Examples are given in (3).

(3)	kadı-rə-n	'cut-future-3sg.'
	kadı-ŋki	'sickle/scythe'
	dʒik-tə-n	'slice-nonfuture-3sg.'
	dʒiki-ŋki	'cutting board'
	tək-tə-n	'sit-nonfuture-3sg.'
	təɣə-ŋki	'sth. to sit on'

Both our older informants A and B readily produced many examples using this and other less productive nominalizers. For example, they employed the nominalizer *-wun* (*kadı-wun* 'knife', *tukti-wun* 'ladder') when they produced the forms for 'knife' and 'ladder'.

What is noteworthy is that quite a few of the less productive nominalizers are no longer in the repertoire of our informants C and D. Our informant C only used the suffix *-ŋki*, even in forms where older speakers do not use it. Although she retains this most productive nominalizer *-ŋki*, and in fact uses it more generally than older speakers, she alternates between having the velar nasal and leaving it out. A similar pattern held for informant D's speech. Only the most productive nominalizer was employed. However, for her, nasal deletion in the suffix *-ŋki* is compulsory, which is shown in the examples in (4).

(4)	lɔxɔ-rɔ-n	'hang sth. up-nonfuture-3sg.'
	lɔxɔ-ki	'hook'
	təɣə-rə-n	'sit-nonfuture-3sg.'
	təɣə-ki	'sth. to sit on'

muː-ləː	‘water-LOC’
muːləː-ki	‘water bucket’
tukti-rə-n	‘go up/climb-nonfuture-3sg.’
tukti-ki	‘ladder’

A clear pattern emerges in the data from the four informants A, B, C, and D. The older speakers have a much richer repertoire of derivational morphology than the younger ones, and there is a gradual phonological erosion of the productive suffixal nominalizer *-ŋki* that correlates with the age of the speakers, which is illustrated in the table in (5).

(5)

A	B	C	D	
təɣə-ŋki	təɣə-ŋki	təɣə-ŋki/təɣə-ki	təɣə-ki	‘sth. to sit on’
muːləː-ŋki	muːləː-ŋki	muːləː-ŋki/muːləː-ki	muːləː-ki	‘water bucket’
tukti-wun	tukti-wun	tukti-ŋki/tukti-ki	tukti-ki	‘ladder’
kadı-wun	kadı-wun	kadı-ŋki/kadı-ki	kadı-ki	‘sickle/scythe’

These data demonstrate, for the younger generation of Oroqen speakers, the wholesale loss of certain limited derivational strategies such as emphatic reduplication, and the replacement of low productivity derivational morphemes such as *-wun* by equivalent, yet more productive, strategies. These changes are fairly consistent with the findings in the literature on first language attrition. Maher (1991:68) points out that indigenous languages undergoing attrition due to the encroachment of a dominant language reveal a restructuring or reconfiguration of morphological and syntactic structures which display the following characteristics: (a) reduction in the number of allomorphs (i.e. more invariable forms, or fewer context sensitive rules) with increased paradigmatic regularity, (b) replacement of synthetic forms by analytic ones or by periphrastic constructions, (c) progressive reduction in inflectional morphology, entailing less flexible word order, (d) preference for coordinate rather than embedded constructions, and (e) distinctive aspectual constructions in verbal systems.

The drastic reduction in the number of nominalizers in the younger informants’ speech, needless to say, provides supporting evidence for principle (a). In fact, we also found cases conforming to principle (b). Specifically, our informant D employs the periphrastic adverbial form *mani* ‘very’ in place of the emphatic reduplication strategy to express degree of intensity.

Such changes are not confined to the realm of derivational morphology. A reduction of inflectional morphology is also found in several of our informants’ speech displaying a pattern of varying degrees of loss, conforming to part of principle (c), shown in (6).

(6) a. tarı məmi mənaxa suxə-rə-n
3sg. self self:refl. hit-nonfuture-3sg.
'He hit himself.'

b. biː məmi mənaxa suxə-rə-n
1sg. self self:refl. hit-nonfuture-3sg.
'I hit myself.'

c. ʃiː məmi mənaxa suxə-rə-n
2sg. self self:refl. hit-nonfuture-3sg.
'You hit yourself.'

d. tarı mʊrın-mə suxə-rə-n
3sg. horse-def.:acc. hit-nonfuture-3sg.
'He hit the horse.'

e. biː mʊrın-mə suxə-m
1sg. horse-def.:acc. hit-nonfuture:1sg.
'I hit the horse.'

f. ʃiː mʊrın-mə suxə-rə-n
2sg. horse-def.:acc. hit-nonfuture-3sg.
'You hit the horse.'

This informant is in her late 50s, and the data in (6) were collected in July 1997. She has lost most of her subject-verb agreement, using the third-person singular non-future form for all persons. Notice that she did use the first-person singular verb form in (6e). The examples in (6d-f) were collected after we reminded her of the agreement rule by feeding her the correct forms. Even so, she still used the third-person singular non-future form for the second person as is shown in (6f). However, she does retain the case marking system. She used the accusative markers on the noun 'horse' unfailingly. In contrast, a slightly younger informant, who is 44 years old, has lost not only subject-verb agreement, but part of the case system as well, which is illustrated in the examples given in (7-10).

(7) a. biː dʒəktə-yə dʒək-tə-n/dʒək-tə-m
1sg. food-indef.:acc. eat-nonfut.-3sg./eat-nonfut.-1sg.
'I am eating (food).'

b. ʃiː dʒəktə-yə dʒək-tə-n
2sg. food-indef.:acc. eat-nonfuture-3sg.
'You are eating (food).'

c. nɔnin dʒəktə-yə dʒək-tə-n
3sg. food-indef.:acc. eat-nonfuture-3sg.
'He is eating (food).'

d. bu: dʒəktə-yə dʒək-tə-n
1pl.:excl. food-indef.:acc. eat-nonfuture-3sg.
'We are eating (food).'

e. biti dʒəktə-yə dʒək-tə-n
1pl.:incl. food-indef.:acc. eat-nonfuture-3sg.
'We are eating (food).'

f. ʃi: dʒəktə-yə dʒək-tə-n
2pl. food-indef.:acc. eat-nonfuture-3sg.
'You are eating (food).'

g. taril dʒəktə-yə dʒək-tə-n
3pl. food-indef.:acc. eat-nonfuture-3sg.
'They are eating (food).'

The examples in (7) show that almost all of the agreement markers between subject and verb are lost in this informant's speech. The only exception is the first-person singular in (7a), which she uses some of the time. Curiously, the same behavior can be observed in her use of the first-person plural exclusive agreement marking, which is demonstrated in (8).

(8) a. bi: dʒanda-rə-n
1sg. sing-nonfuture-3sg.
'I am singing.'

b. ʃi: dʒanda-rə-n
2sg. sing-nonfuture-3sg.
'You are singing.'

c. nɔnin dʒanda-rə-n
3sg. sing-nonfuture-3sg.
'He is singing.'

d. biti dʒanda-rə-n
1pl.:incl. sing-nonfuture-3sg.
'We are singing.'

e. bu: dʒanda-rə-n/dʒanda-rə-wun
1pl.:excl. sing-nonfuture-3sg./sing-nonfuture-1pl.
'We are singing.'

f. ʃu: dʒanda-rə-n
2pl. sing-nonfuture-3sg.
'You are singing.'

g. taril dʒanda-rə-n
3pl. sing-nonfuture-3sg.
'They are singing.'

Clearly, all of the agreement markers are lost in (8a-g), except for (8e) in which case the informant sometimes put the agreement marker in. When asked what the difference is between the two forms with and without the agreement marker, the informant explains that older people prefer forms with the agreement marker, and it is too verbose to talk that way. This indicates that for speakers like her, it is not a matter of imperfectly learning the grammatical system of their L1. They use certain structures by choice, which is counterevidence against some of the claims made in the literature on language attrition situations (e.g. Dorian 1989). In terms of case markings, the informant seems to have a preference for the indefinite accusative case marker to the definite accusative case marker. Notice that in (7), the case marking used on the direct object 'food' is the indefinite accusative marker *-yə*. This is no accident, which can be proven by the examples given in (9).

(9) a. nɔnin dʒaxal ʃilki-rə-n
3sg. thing wash-nonfuture-3sg.
'He is washing something.'

b. nɔnin təti ʃiki-rə-n
3sg. clothes wash-nonfuture-3sg.
He is washing clothes.'

c. nɔnin min-ŋi təti-yi ʃiki-rə-n
3sg. 1sg.-poss. clothes-indef.:acc. wash-nonfuture-3sg.
'He is washing my clothes.'

d. nɔnin min-ŋi təti-wə ʃiki-rə-n
3sg. 1sg.-poss. clothes-def.:acc. wash-nonfuture-sg.
'He is washing my clothes.'

e. biː min-ŋi təti-yi mənəxan
1sg. 1sg.-poss. clothes-indef.:acc. 1sg.:refl.
ʃiki-m
wash-nonfuture:1sg.
'I am washing my own clothes.'

In (9a) and (9b), there is no accusative marking on the direct object 'thing' and 'clothes' respectively. When a determiner is added, the informant produced the sentences given in (9c-e). The determiner seemed to have some sort of triggering effect inducing the use of the accusative markers in all of the three examples. However, the speaker apparently has a preference for the indefinite accusative

marker over the definite one, though she switches between the two shown in (9c) and (9d) despite the context requiring the definite accusative marker. Also, in (9e) we again see the first-person singular agreement marker on the verb showing up. It is interesting to note that a deletion of the consonant in the coda position of the initial syllable in the verb *ʃilki-rə-n* 'wash' occurred in (9b-e), a phenomenon observed in other informants as discussed earlier in the case of nominalizers. The missing accusative marking in (9a) is not an isolated case. In fact, this informant and some other informants of a comparable age routinely leave out accusative markers, which is shown in the examples in (10).

(10) a. bi: araxi im-nə-n
1sg. wine drink-nonfuture-3sg.
'I am drinking wine.'

b. ʃi: araxi im-nə-n
2sg. wine drink-nonfuture-3sg.
'You are drinking wine.'

c. nɔnin araxi im-nə-n
3sg. wine drink-nonfuture-3sg.
'He is drinking wine.'

d. biti araxi im-nə-n
1pl.:incl. wine drink-nonfuture-3sg.
'We are drinking wine.'

e. bu: araxi im-nə-n
1pl.:excl. wine drink-nonfuture-3sg.
'We are drinking wine.'

f. nɔntin/taril araxi im-nə-n
3pl. wine drink-nonfuture-3sg.
'They are drinking wine.'

The examples in (10) demonstrate that for this informant, the accusative case marking is no longer obligatory. In fact, she only put it in infrequently. Notice also that in (10) all of the agreement markers have been leveled, reducing them to the default choice of the third-person singular form. It is safe to say that this particular informant has lost most of the case distinctions. When asked about the differences between *mɔ:-duki*, *mɔ:-la:k*, *mɔ:-li*, and *mɔ:-ki*, the informant said that they all meant the same thing without hesitation, despite the fact that in each case we have the root morpheme *mɔ:* 'tree' plus a different case marker: *-duki* 'ablative (from)', *-la:k* 'loco-ablative (from inside)', *-li* 'prolative (pass by, along the side)', and *-ki* 'allative (to)'. None of these cases is in the grammatical system of this informant. This is also true of another informant comparable in age to this

informant. Both speakers learned Oroqen as their first language at home. They did not learn Chinese until they started elementary school at the age of seven or eight. It should be pointed out that the language of instruction from grade one through grade five was Oroqen. This means that their dominant language was Oroqen up until they were around 15 years of age, indicating that they lost those forms in a very short period of time, about three decades. A systematic pattern emerges among the informants we have worked with over the years. Those who are 60 or older still have the grammatical system completely intact. All of the older speakers we have worked with so far never failed to use the right agreement markers, and they always readily rejected any violations of the agreement rules. The following paradigm was elicited from a 71-year-old informant in Baiyina in Huma County.

(11) bi: dʒanda-m
1sg. sing-nonfuture:1sg.
'I am singing.'

ʃi: dʒanda-ni
2sg. sing-nonfuture:2sg.
'You are singing.'

nɔnin dʒanda-rə-n
3sg. sing-nonfuture-3sg.
'He is singing.'

biti dʒanda-rə-w
1pl.:excl. sing-nonfuture-1pl.:excl.
'We are singing.'

miti dʒanda-ra-p
1pl.:incl. sing-nonfuture-1pl.:incl.
'We are singing.'

su dʒanda-ra-y
2pl. sing-nonfuture-2pl.
'You are singing.'

nɔtin dʒanda-ra
3pl. sing-nonfuture:3pl.
'They are singing.'

The data from speakers with varying degrees of proficiency in Oroqen presented so far show a clear tendency of the younger speakers moving away from inflectional devices and favoring unmarked forms, showing a preference for periphrastic constructions over synthetic ones and for lexemes over bound morphemes to express grammatical relations. The data reveal a restructuring and

reconfiguration of morphological and syntactic structures which display characteristics that provide some insight into longitudinal aspects of language obsolescence. Further investigation is needed to answer some intriguing questions. For instance, we do not fully understand why when subject-verb agreement is lost, second person seems to go first, followed by first person. It is possible that the first person not only has a higher frequency of occurrence but has egocentric prominence as well, resulting in its being more salient, which provides a certain degree of resistance to loss. Why third-person singular is chosen as the default agreement for all persons is unclear. One possible explanation could be that third person is less deictic. Consequently, it is relatively more stable (Lenore Grenoble p.c.). It is also unclear why the definite accusative case marker is lost first. It is likely that the definite accusative case is more cognitively demanding in production since it is semantically more complex. One can argue that the unmarked form is normally retained or lost last. This means that the indefinite accusative case is unmarked with respect to the definite accusative case and the third-person singular agreement marking is unmarked in relation to the other agreement markers. One of our informants once commented that when kids learn Oroqen, they initially only use the third-person singular agreement forms of all verbs. It is possible that frequency of occurrence, saliency, and functional load all have a role to play in the retention and rate of loss of the grammatical forms. It would be of benefit to sort out what goes first and why in terms of the various grammatical components of an obsolescing language. It is equally important to answer the questions of what factors led to those changes and why the changes took place in such a remarkably short period of time. Answers to such questions would help unravel the complexity of language obsolescence taking place in a number of other seriously endangered languages in China.

As Saliger and Vago (1991) pointed out, many, though not all, of the linguistic changes attendant to attrition are simplificatory in nature. This is definitely true in the case of Oroqen. The patterns evident in this simplification process are remarkably similar to those that have already been documented elsewhere (e.g. Schmidt 1985) as is mentioned earlier in this section. However, not all of the changes in Oroqen are explainable through such attrition-induced internal motivations. I argue that, in the case of Oroqen, some of the changes are externally motivated.

3. Contact-Induced Changes

Oroqen has had massive contact for an extended period of time with several genetically related and non-genetically related languages, such as Chinese (Sinitic), Dagur (Mongolic), Ewenki (Machu-Tungusic), and to some extent Russian (Slavic) in the Lesser Hinggan Mountain region. It is imminently clear that for all speakers (except a few elderly speakers), Oroqen is at best a second language, which is being rapidly replaced by Mandarin Chinese. This section is an attempt to identify the changes taking place as speakers replace one language by another, with an emphasis on the role of the contact languages upon the

phonological, morphological, and syntactic changes which take place, as well as the rate, extent, and order in which these changes occur. The situation Oroqen offers in this respect is quite complex because all the fluent Oroqen speakers are multilingual, at least in Oroqen, Mandarin Chinese, Dagur, and, most importantly, some other Tungusic variety, such as Solon or Evenki.

Among the linguistic effects common to situations of language contact are convergence, loss of morphological and syntactic complexity, transfer, interference, and an overall increase in semantic transparency (Dorian 1989). In the case of Oroqen, we observe borrowing and acts of reception. That is to say, some of the structural changes in this moribund language may be the result of influence from linguistic aspects of the dominant languages. Before the encroachment of Mandarin Chinese in the 1950s, Oroqen had had lengthy and persistent contact with the Dagurs resulting in the borrowing of certain grammatical structures. A case in point is the emphatic reduplication strategy to mark intensity, which is no longer present in the grammatical system of younger speakers of Oroqen as is discussed in section two above. Whaley and Li (2000) demonstrated convincingly that Oroqen borrowed the emphatic reduplication strategy from Dagur, a Mongolic language.

Dagur has a formally identical reduplication strategy which copies the first syllable and inserts [b] or [m] in the coda position of the prefix (Zhong 1982), as is illustrated in the examples in (12).

(12)	xulaːn	'red'	xub xulaːn	'thoroughly red'
	tʃiɣaːn	'white'	tʃim tʃiɣaːn	'very white'
	dasuŋ	'sweet'	dab dasuŋ	'really sweet'
	səruːŋ	'cool'	səb səruːŋ	'really cool'
	xorduŋ	'fast'	xob xorduŋ	'very fast'

Like Oroqen, Dagur employs reduplication to indicate intensity. However, the process in Dagur is fully productive and operates on adjectives denoting different sorts of properties, not just colors.

Dagur speakers have been in contact with Oroqen speakers for centuries, in a symbiotic relationship. The traditionally nomadic Oroqen relied on the sedentary Dagur for certain agricultural goods, while in exchange supplying the Dagur with pelts and meat. The commercial relationship, while mutually beneficial, established Dagur as the dominant language, and it became the norm for Oroqen speakers to learn to speak Dagur.

Consequently, the Oroqen lexicon has taken on many Dagur words, and Oroqen grammar has borrowed from Dagur, particularly in the area of derivational morphology. Thus, the borrowing of reduplication can be seen as part of a more general Dagur influence on Oroqen grammatical structure.

The sort of structural influence that Dagur has had on Oroqen requires an extended period of relatively intimate contact. It is useful here to review the history of these groups which points to just this type of interaction.

Both the Dagurs and the Oroqens are believed to originate from the region north of the Amur River in present-day Russia. They both crossed the mighty Amur River several hundred years ago (most likely in the 1600s) and spread over the Greater and Lesser Hinggan Mountains in Manchuria. Janhunen (1997) suggests that migrations of small Dagur populations occurred in tandem with the Oroqen and Solon migrations. Regardless, it is widely accepted that all these groups have co-existed harmoniously in Inner Mongolia and Northeast of China for several centuries. Since the borrowing being discussed here is structural rather than lexical in nature, massive bilingualism on the part of the Oroqen speakers in the lending language persisting over a long period of time is a crucial prerequisite.

Another social factor frequently invoked in accounting for borrowings across languages, especially languages belonging to different families, is the prestigious status of the source language. As Moravcsik (1978) puts it, in perhaps an overstatement, "nothing can be borrowed from a language which is not regarded [as] prestigious by speakers of the borrowing language." The Dagur people have historically held the necessary position of prestige: according to Janhunen (1997), "since Qing times (1644-1911), the Dagurs have been known as an ethnic group interested in acquiring higher learning through dominant languages such as Manchu and Chinese." This may help explain why the Qing emperor entrusted the Dagurs with the control of the diaspora army sent to guard Chinese borders against the potential invaders in bordering areas.

Dagur is not the only contact language that has had an impact on the structure of Oroqen. In more recent times, Mandarin Chinese has undoubtedly influenced Oroqen. Although the period of time that Mandarin Chinese has been in intense contact with Oroqen is relatively short, it seems to have had a strong impact on its grammatical structure. We found that for most speakers of Oroqen, the plural marker is no longer required, which could be the consequence of Chinese influence (cf. Grenoble and Whaley to appear). Although Hu (1986) documented both *-l* and *-sal* as plural markers in Oroqen, they are no longer readily attested in any of the Oroqen dialects. As Grenoble and Whaley (to appear) pointed out, a zero morpheme is the unmarked, preferred plural marking in all of the Oroqen dialects. They also noted that Oroqen is the only Northwestern Tungusic language in which unmarked plurals are more common than suffixation. Assuming that Hu's (1986) description is accurate, it is noteworthy that Oroqen has moved further on its path to losing the plural marker. We have yet to elicit any naturally occurring examples of Oroqen in which the plural markers are employed. The informants we have worked with from southeastern, western, and central Oroqen dialect regions occasionally very reluctantly accepted the plural marker *-l* and *-sal* in a highly restricted number of lexical items, most of which denote animate beings with a high frequency of occurrence. The only informant who readily accepted forms with the plural markers *-l* and *-sal* was from the northeastern Oroqen

dialect region, specifically from Baiyina. Some of the examples are: *kumaxa-l* 'deer', *utə-l* 'sons', *ilga-l* 'flowers', *bəyə-səl* 'persons', *ahi-səl* 'women', *utə-səl* 'sons'. Even for her, the preferred form is the analytic construction exemplified by *baran kumaxa* 'many deer'. It is highly likely that this loss is contact induced.

4. Conclusion

These phenomena pose the questions of what factors led to these changes and why the changes took place in such a remarkably short period of time. The complex set of conditions responsible for the restructuring are only partly explainable by internally and externally motivated principles proposed in the literature. A profound understanding of the situation must take account of the dynamic changes that take place in not only linguistic structures but in social conditions as well.

The conditions responsible for the changes in Oroqen are mostly sociological in nature. Oroqen was surrounded by several languages for centuries without suffering any attrition, which is attributable to the cohesion of the community, its self-imposed rule forbidding intermarriages with other ethnic groups and its strong adherence to traditional lifestyle and values. However, dramatic social changes in the 50s and 60s quickly resulted in Oroqen's alarmingly rapid ceding to the superstratum language of Mandarin Chinese. The construction of a railroad, massive Chinese migration to the area due to the development of the logging and mining industries, resettlement of the Oroqens, schooling in Chinese, extensive intermarriages with nearby ethnic groups, abandonment of traditional values and lifestyle, and the local government's lack of interest in maintaining the Oroqen language and cultural traditions led to a situation characterized by an increasing use of Mandarin Chinese in more and more situations, which eventually brought about a proficiency continuum determined by age among those who still speak Oroqen. The diminishing use of Oroqen severely limits the younger generation's exposure to the language, which is the major cause for their imperfect learning of their obsolescing first language. It is quite obvious that the Oroqen language is on an irreversible course to its demise, and we are far short of attaining a full picture of the confluence of factors that led to its current sad state of affairs.

In this paper I only presented a few salient characteristic features. I would like to emphasize that what is discussed here is barely a sampling which should not be construed as an attempt to provide a full picture, but rather as a requisite component to attain the ultimate goal of uncovering all the attrition and contact phenomena in this language undergoing rapid attrition, contributing to the general effort to achieve an adequate account of changes attendant upon the attrition process.

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