

The Sebirwa language: a synchronic and diachronic account

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Introduction

Sebirwa (Birwa) is a Bantu language, spoken in the Bobonong sub-district in the eastern part of Botswana, and is commonly thought by its speakers to belong to the Northern Sotho group of Sotho languages which are classified according to Guthrie (1967-1971) in Group S (Sotho-Tswana). However, according to the *Ethnologue* (13th Edition 1998), Birwa is classified with Shona languages:

BIRWA [BRL] 10,000 (1993 Johnstone). East central around Selebi, Phikwe, and Bobonong, on the South African border. East of Kalanga, northeast of Tswapong. Also in South Africa. *Niger-Congo*, Atlantic-Congo, Volta-Congo, Benue-Congo, Bantoid, Southern, Narrow Bantu, Central, S, Shona (S.10). The population reported is for 'Shona' in Botswana. Survey needed.

On my estimation there are about twenty thousand thousand people who inhabit the villages of Bobonong, Molalatau, Mathathane, Semolale, Gobojango, Mothabaneng, Maunatlala, and various minor settlements in the sub-district, as well as in western Zimbabwe, who claim affiliation to this language group.

I am not aware of any analytical linguistic data on this language which could conclusively justify the linguistic affiliation to Shona group, and the evidence that is going to emerge will be critical in the debate about the classification of this language. I am going to apply the Proto-Bantu basic vocabulary much more closely to the interpretations of Guthrie (1967-1971, *idem*), and rely on the methods used by Creissels (1996) to analyze the Sebirwa data.

Methodology and Context of the Research

The research was conducted for a week by a research team from the Potchefstroom University for Christian Higher Education and myself, representing the Department of African Languages and Literature in the University of Botswana. The team was led by a senior researcher by the name of Prof. Kruger. The methodology for data collection was essentially the random interview type of a certain age group, with an average age of 75 years. The reason for this was to get data that was uninfluenced by people who underwent the present school system which excludes any minor language from the system. Research findings on related languages such as Hananwa, Dogwa, Setswana (Tucker 1929, also Doke 1933) were used to check the consistency of the lexicon and the morpho-syntax.

This method, though it permits researchers to rapidly constitute an elaborate data, has problems, but also advantages:

- * In the context of a minor language, it does not give a very high reliability on the lexical and phonological data
- * It permits comparisons with major related languages and this may influence informants
- * Data of historical significance may not clearly emerge with consistency
- * Its outcomes may only be descriptive, and may not be adequate for theoretical issues on syntax, tone, etc

Further, one major problem of such method is that many researchers who contribute to a project may cause a lot of inconsistencies: 'people do not listen with the same quality of the ear, or conceptualize with the same vision of the mind'. We had to recheck and cross check many items because of fundamental divergences from among the individuals in the researching team. After the gathering of data, the research team advisor had to spend long nights systematizing the data for the ease of analysis during the write-up.

Objectives of the field research and procedures

The initial research was based on general linguistic investigations of the phonology, morphology, and the structure of the Sebirwa. Though in this nature of research it is difficult to define the language Sebirwa, in view of many variations attested in the sub-district, we used a simple criterion which consisted of interviewing the elderly on the language spoken by themselves and their parents. The average age of this target group was 65+ years. There were not many of those, and the sample was made up of 10 informants.

The aim of this paper is to give an account of the phonology of Sebirwa in a historical perspective. I shall investigate diachronically the sound shift processes, and the synchronic and comparative phonology. I shall also investigate the outside influence of the Sebirwa phonology which may shed light on the processes that resulted in the present form of the language. This aim does not claim to bring about a new hypothesis, but rather to make those hypothesis that were applied to other related languages more precise and to contribute to certain problems of classification that are associated with this language.

The conceptual framework of the study

The analysis of Sebirwa data made in this paper is based on the comparative and historical linguistics framework. Linguistics differs from the natural science method of experimentation in that linguistics can not isolate a speech community and analyze its speech in laboratory conditions. The linguist must go out and observe data in the natural environment, formulate hypothesis and test them in methodologically imperfect but fruitful ways in order to reach scientifically valid conclusions (Arlotto, 1972, pp. 2). Linguistics may use either or both of its two main approaches, the theoretical and the descriptive approaches.

For little known or unknown languages, descriptive linguistics is the best because it allows the language scientist to account for the phonological, morphological and syntactic structures of the language under investigation. For instance, the phonological account will investigate processes and their possible evolution, and then attempt to present linguistic hypothesis that would allow for some coherent generalizations. The descriptive linguist uses informants in a natural situation to give information on the language. He may afterwards apply a theoretical analysis to the described language data to obtain further information on the nature of that language.

The historical linguistic method is important, but not exclusive, in the investigation of a language which is presumed to have some historical affinities with other studied languages. The data of the investigated language may be compared to that of the already known languages to make observations on their linguistic systems. It can also be compared to some hypothetical proto-forms to verify some historical sound shift processes. The underlying assumption is that language change does not occur in haphazard manner, but in patterns. It is possible for linguistics to speculate on the languages age (for example, the lexicostatistics postulate that cultural vocabulary will be lost at the rate of 20% in a thousand years) (Fédérique Francois, 1980: 309-317), date of separation with other related languages on the basis of the characteristics of the lexicon and the patterns of the linguistic forms. This way a linguist may discover facts about the development of a language during the periods when

there were even no written texts. Significantly the historical and comparative linguistics may allow some predictions of sound shift processes in view of the synchronic data.

There are many problems in attempting to apply wholesale the historical linguistic analysis on Sebirwa because its history is based on oral information which is very limited in many regards (cf. Dimpe, 1986), and there is no elaborate linguistic study of the language. On this basis, the account that I am presenting is based on observations made during the field work, and quite obviously may not be adequate.

The consonant system of Sebirwa

I have chosen to make some synchronic introductory remarks on the Sebirwa language for the reasons that this is one linguistic aspect that would provide language information which may interest various scientific analysis and comparisons, and indeed it will be difficult to consider evolution without a clear reference to what the modern state of the language provides.

The observation of the consonant system of a language is very important because it provides the basis for a phonological characterization: what type of sounds does the language possess? Is there any system that arises from the sound classification? And can there be a possible comparisons with ancient parent languages, or with some modern languages? Answers to such questions help linguists to conceptualize the history and the possible affinity of a language.

The following table presents the synchronic Sebirwa consonant phonemes according to their phonetic nature using the IPA symbols:

Table 1: Sebirwa consonant phonemes according to their phonetic nature

ph	th	th	ch	kh	(qχh)*	
pɤ						
p f	t	t̪	c	k		
b β	d	d̪	ɟ	g		
bɟ						
ɸ fs fɸ	s ts		ʃ		(χ)*	h
bz ps	ɗz		ɟ		w	
m mb	n l		ɲ ɳ	ŋ		
	r	ɽ				

The above consonantal table present some interesting features, first on the number of the inventory, and secondly on the clustering of consonants at certain phonetic zones. Further, the following points should be noted:

Extraneous Consonants

The phonemes that are marked with an asterisk (*) [χ] and [qχh] are rare and most probably very recent in the system or are a direct influence or borrowing from Setswana. In all regular cases, it is the [h] and [kh] that are used.

Laterals

Sebirwa has the alveo-dental lateral [l] and the palatal lateral [ʎ] which in certain contexts are in free variation and must be represented by the archiphoneme [L].

Complex consonants

Most of the consonants may also be involved in complex phonemic combinations with semi-consonants, semi-vowels, and with phonetic effects such as aspirations, nasalization, and affrications. For example:

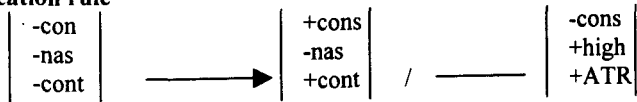
- bzwala 'to sow'
- bʒwala 'beer'
- gwa 'come from'
- ipʃina 'to enjoy oneself'
- mafʃwi 'milk'
- ndwa 'war'

Consonant clustering in the front

One remarkable phonological characteristic in Sebirwa is the clustering of consonants in the front region of the mouth, that is, the labial area, where in most languages in the S30 group one would attest p, b, f, β. Most of these consonants are made complex by the affrication, voicing and aspiration features (fʃ, fʃ̥, bʒ, bʒ̥, pʃ, pʃ̥), and some may be double articulations with the labial coming first and the palatal coming next (bʒ̥).

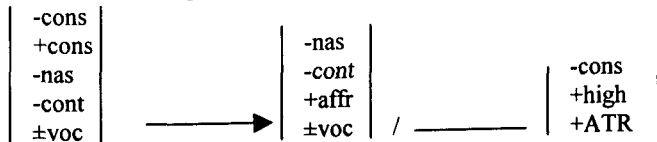
Phonologically this consonant clustering can be explained by positing that there was consonant proliferation arising from the modification of the super high vowels (ɪ̥, ʊ̥) in the Proto-Bantu by Proto-Birwa (Gowlett 1997).

Affrication rule



Derivation rule

The derivation from the proto-stops would be as follows:



Sound shifting stages rule

Evidence from studies in other Bantu languages give the following stages in sound shifting from the Proto-Bantu. Stages 3 and 3 involve a rule which adds a feature to the specification. Unlike in some Sotho-Tswana languages, the Sebirwa consonants that are involved in this consonantal proliferation do not involve stage 4 which changes the specification for the feature [cont], with concomitant deletion of the features [asp] and [affr].

Stage 1	Stage 2	Stage 3	Stage 4
+obs	+obs	+obs	+obs
-cont	-cont	-cont	+cont
±voc	±voc	±voc	±voc
	+asp	+asp	
		+affr	

These rules summarize processes that are otherwise very complex which also involve some intermittent stages, and in some cases certain processes remained fixed at one stage:

*p_i/u > pfhi/u > pshi/u

(alternatively followed by palatalization)

*b_i/u > bvi/u > bzu

(with diphthongization of the high vowel and alternatively with palatalization.

At some stages in the sound shifting processes the stage of *pfhi/u derived ϕ and the stage of bvi/u derived β .

Advanced tongue root deletion rule

-cons	→	-ATR
+high		
+ATR		

Positing this rule in the phonology of Sebirwa is important since the 7 vocalic phonemes in whatever context do not manifest the ATR feature.

The handling of the nasalization rule

Sebirwa has diachronically three nasalization rules. The difference in these rules are historical as well as grammatical.

The replacement of NC by C rule

This rule concerns mainly the class nine nasal prefix n-

pu_ɔi < *n-bu_ɔi

ku_ɔlube < *n-gu_ɔlube

The N#C rule in verb conjugation (N-C verb)

In verb conjugation there is an internal boundary between a nasal (mainly of pronominal nature) and the verb root:

m-bone 'see me'	< n-bone (assimilation of the nasal)
n-da _ɔ dele 'follow-me'	< n-la _ɔ dele

The non-modifying contexts present the following cases

n-da 'louse'	< *.da
n-dwa 'war'	< *.du-

Palatalization of alveolar stops

In addition to normal alveolar stops (t, d) and lateral (l), Sebirwa has palatalized counterparts (t̪, d̪) and also a palatalized lateral (l̪). The articulation of this et of consonantal sounds is clearly towards the soft palates with some flapping and constriction of the tongue. The existence of these sets of consonants may be accounted for by positing that they do not arise from the same consonantal reflexes in the proto-language. But exactly

which were those reflexes in the proto-language is difficult to account for synchronically. Some extensive data and comparisons with what obtains in other languages may assist to clarify this question.

Diachronic and synchronic Sebirwa phonology: consonantal transformations

The diachronic approach to study of the language is concerned with its historical evolution. While synchrony will be viewed as static, that is concerned with a determined moment, diachrony is more dynamic as it compares processes and periods. The aim of this section is to account for the possible historical phonological changes and interpretation of the Birwa language.

This aspect of the language may be tackled from essentially two points of view: the diachronic; and the synchronic perspectives; or both depending on the nature and quality of the data. Synchronically, there are various alternations that occur in the Sebirwa language, and most of them are triggered by the presence of a nasal. In Sebirwa the nasal can have the following effects in the context NC:

$N \rightarrow \emptyset / - C$

the Sebirwa consonants correspond to what obtains in Northern Sotho;

$C \rightarrow C \text{ strong} / N -$

the Sebirwa consonants regularly corresponds to Proto-Bantu consonants immediately preceded by nasals;

$C \rightarrow C \text{ weak} / V -$

the Sebirwa consonants regularly correspond to Proto-Bantu consonants not immediately preceded by nasals.

These phonological rules help to understand the so-called strengthening rule that is commonly found in Sotho-Tswana languages, and it is noteworthy that Sebirwa shares this phonological innovation with these languages.

A brief presentation of some main phonological rules may be made as follows:

a) The effects of the alveolar-dental nasal /n/ in the context of V initial verbs:

$\emptyset \rightarrow g / N - V$

-eɖɛla 'visit' ngeɖɛle 'visit me'

-alaɸa 'heal' ngalaɸe 'heal me'

b) The effects of the alveolar -dental nasal /n/ in the context of //:

$l \rightarrow d / N -$

-luma 'bite' ndume 'bite me'

-laɖɛla 'follow' ndaɖɛle 'follow me'

-laula 'control' ndaule 'control me'

-leleka 'chase' ndeleke 'chase me'

c) The non-effects of the bilabial nasal /m/ in the context of /b/:

$b \rightarrow b / M -$

-beɖa 'curve wood' mbedi 'carpenter'

-bufa 'rule' mbufi 'ruler'

-bulaɸa 'kill' mbulai 'killer'

d) The effects of the old class 9 prefix on defective verb 'ba/be' in conjunction forms:

ne → b / MB –

ne ba 'it being' mba / mbe 'but'

A quick observation from the above examples shows that some of these alternations are particular to Sebirwa. For instance a bilabial nasal will assimilate a voiced bilabial consonant in other Sotho languages, but not in Sebirwa. A voiced palatal consonant will be de-voiced in the context of a nasal in most Sotho languages, but in Sebirwa the nasal seems to be not having such an effect.

Table 2: The Sebirwa reflexes of Proto-Bantu in the absence of any conditioning

Types (phonetic)	bilabial	alveolar	palatal	velar
Consonants:	p → φ	t → r	c → th	k → h
	b → b	d → d/l	j → ø	g → ø / g
	m → m	n → n		

The following examples provide a diachronic presentations of the these phonological rules.

- p → φ

*-pà give-φà

*-pépò 'wind' -phéφò

*-pód- 'be(come) cool/cold' -φólà
- b → b

*-didi 'body' mbili

*-bin- 'dance' -bínà

*-bádà 'spot/colour' mbálà
- p → ps

*-pi- 'burn' psá
- t → r

*-kútà 'fat' ma-khúra

*-dóot- 'dream' lóra

*-tí 'tree' mù-rí

*-tì 'say' -rí
- d → d/l

*-bid- 'boil' -bílà

*-péd- 'end' -félà

*-kúd- 'grow' -húlà
- n → n

*-bon- 'see' -bòna

*-bìn- 'dance' -bínà
- c → th

*-còm- 'poke in' -thòmà

*-dác- 'throw away' -láthà

*-kócod- 'cough' -hóthola

8. $k \rightarrow h$
 *-jáká 'year' ŋwàhá
 *-kúd- 'grow' húlà
 *-tikù 'night' bùsihù
9. $g \rightarrow \emptyset / g$
 *-gùbù 'hippo' gùbù
 *-gàb- 'distribute' -àbà
10. $t \rightarrow r$
 *-kútà 'fat' ma-khúra
 *-tátu- 'three' -rárù

Sebirwa reflexes are fundamentally those of the S30 group. However, it seems that this language has evolved very slowly compared to other languages in the S30 group. It still retains some very ancient reflexes of the Proto-Bantu.

Consonant alternations conditioned by the presence of a nasal

In Sebirwa, the presence of a nasal before certain consonant types will cause alternations that respect the following order:

- $$\begin{aligned}\phi &\rightarrow ph \\ L &\rightarrow d \\ \int &\rightarrow t\int \\ r &\rightarrow t\end{aligned}$$

As noted earlier on, the voiced plosives are not altered by the presence of a nasal.

The above phonological processes seem to show that except for a few cases of borrowing, the Sebirwa consonantal phonology is a product of evolution than borrowing from neighboring languages. The proliferation of consonants was a result of this evolution. It can be posited that Proto-Birwa had possibly lot of allophonic instances where upon in the later stages there was a split arising from affrication and palatalization rules (cf. pages 242-243):

Comments on the vowel system of Sebirwa

Sebirwa makes a distinction between seven vocalic phonemes, but not between ϵ and e and \circ and o . The following table presents the phonemic vocalic elements in the system:

Table 3: Sebirwa vowels in IPA symbols

Type	front		back
closed	i		u
Semi-closed	ɪ/L		ʊ/ɔ
middle	e		o
closed	a		

With very minor feature modifications, that is, the super closed vowels (ɨ and ʉ) the Sebirwa vowels correspond in number to those of Proto-Bantu. In certain contexts certain vowels may raise, that is, they will be realized closed.

But there is still much to be done in the phonological analysis of these vowels in order that that a coherent system may emerge which will provide a better account of these phonemic segments.

Conclusions

The data that I have can not quite evidently lead one to make a conclusive decision on the history of the Sebirwa language. However, the analysis and the examination of the correspondences between the Proto-Bantu and the Sebirwa, and also in comparison with other languages in the Group S30 is quite interesting. Sebirwa, with its phonological reflexes with the Proto-Bantu is much akin to Sotho-Tswana with which it shares some common phonological innovations than Shona. Therefore, there are several points to be considered in conclusion. These are based on the morphological characteristics of the Sebirwa lexicon:

1. Sebirwa reflexes of the consonant alternations are closer to the proto forms than in the mainstream Sotho languages, and that it might be a much older language than most Sotho languages that are spoken today or that it existed isolated in the periphery of these languages for a longer time;
2. Sebirwa cannot be said to come from Sepedi, but from a common parent with Sepedi, but because of its geographical closeness to Sepedi, it has naturally borrowed from it, especially in the recent past;
3. Sebirwa has certain morphological characteristics of the lexicon which recall that of the Kgalagadi languages, an indication that they share a common ancestry which precedes that of modern main Sotho-Tswana languages.

Sebirwa and Setswapong and Sekgalagadi have been for centuries in the periphery of other Sotho languages, and that way were not involved in the evolution of many consonant alternations that characterize the rest of the Sotho languages.

Sebirwa has in the past hundred years experienced a massive 'Tswananization' through Sengwato, beginning with the massive tribal exile to Serowe during the late 19th-early 20th centuries (Bobeng 1976, Sekgwama 1987), and reinforced by the school system. Babirwa now speak a language that is closer to Sengwato than to Sebirwa spoken some hundred years ago which in many instances resembled the Setswapong language spoken today. One strong argument in this regard is that the Sebirwa of western Zimbabwe is much closer to Setswapong than to Sebirwa spoken in Botswana. The data also from Hananwa and Dogwa show some affinity and lead one to believe that these peripheral languages are historically related and their next of kin were the Kgalagadi languages.

The Shona lexical content in Sebirwa has a sociolinguistic explanation, that at a certain stage in history, falling within the Shona cultural and political influence (Westphal 1975), it borrowed these vocabulary items.

These points point to a general conclusion that can be made at this point in time: that Sebirwa is historically a Sotho-Tswana language. It might have had influence from some peripheral Shona languages, but that could have been limited to some vocabulary in certain cultural and religious domains which copied those of Shona.

The point made on Tswananization poses difficulties in the context of the present practice of the Sebirwa language: which Sebirwa? The one closer to what old people say is Sebirwa may be rejected on the basis of its similarities to Setswapong; the one closer to what is spoken now is almost Sengwato because it contains very few lexical items and phonological characteristics that are particular to the Sebirwa of the 65 years old people.

Sebirwa presents many phonological features that may be of interests to linguistic, sociolinguistic and historical research on the language. The preliminary research collaborative between myself and the Potchefstroom University may not be expected to be conclusive nor adequate as yet. There is need to broaden and deepen all aspects of the study of this language. Therefore, much remains to be done.

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