

DIALECTAL VARIATIONS IN DAGBANLI

Abstract

The paper discusses dialectal variations in Dagbanli, a Maba language spoken in the northern part of Ghana. It examines variations of Tomosili, Nayahili, and Nanunli as the major dialects of Dagbanli within the framework of generative phonology. The paper aims at advancing sound correspondence and sound alternation across the dialects. The focus is on segmental variation and based on primary data, it reveals the phonological units that account for dialectal variation in Dagbanli as well as those that distinguish them from one another. It argues that the alternations of the vowels [a]~[ɔ], [a]~[o] or [i]~[u] are the major source of dialectal variation between the dialects. The correspondence of the consonants /z/→ [dʒ]/___/v/ and /ɲ/→[n] /___/i/ are also attested as evidence of dialectal variation between the major dialects. Relational differences, Selectional differences and Distributional differences are categories of models employed to account for the observed difference between the dialects. The paper suggests that the chief source of segmental variations in Dagbanli is in vowel quality and dialectal variation is not about what the speakers think but it is based on linguistic evidence.

Keywords: Dagbanli, dialects, variation, model, segments

Introduction

Dialects are forms or varieties of a language arising from local peculiarities of vocabulary and pronunciation (Hawkins 1993). The classification of linguistic description of dialects is greatly hindered by the ambiguities attaching to the terms language and dialect. Language that partially displaced native words such as ‘tongue’ and ‘speech’ is described as the super ordinate while

dialect is referred to as the subordinate (Haugen 1966). This shows that in a language setting, X can be a dialect of language Y, or Y has the dialects X and Z but never will Y be a language of dialect X. This implies that every dialect is a language, but not every language is a dialect.

The paper examines dialectal variations in Dagbanli and describes Tomosili, Nayahili and Nanunli focusing on segmental variation. Realisation, Selectional and Distributional models are used to attest for the observed variations. Based on the available data, the paper reveals phonological units that account for dialectal variation in Dagbanli. The dialects differ at the segmental level showing differences in pronunciation of single segments. The paper intends to contribute to the budding field of broad-based study of dialectal variation in Dagbanli.

Dagbanli has thirty-three (33) consonant segments as in Table (1) and fourteen (14) vowel segments as in Table (2) considering the major dialects, Tomosili, Nayahili and Nanunli. The suffix variants are enclosed in []. The vowels are grouped according to class I [+ATR] vowels and class II [-ATR] vowels.

Table 1: Consonant inventory in Dagbanli

p	b		t	d[r]		k	g	kp[tp]	gb [db]	[ʔ]
	m			n	ɲ		ŋ		ŋm[nm]	
	f	v	s	z		ʃ	ʒ	[x]	[ɣ]	[h]
						ɸ	ɗ			
			l							
w[v]					j					

Table 2: Vowel inventory in Dagbani

Class I				Class II	
i i:		u u:		ɪ	ʊ
e e:		o o:	ɛ		ɔ ɔ:
				a a:	

Notice that the long vowel segments /i:, e:, a:, ɔ:, o:, u:/ in Dagbanli are represented by double vowels [ii, ee, aa, ɔɔ, oo, uu] in which the second V is a number marker in some cases. The short vowel segments /i, e, a, o, u/ are all underlying forms across dialects.

Segmental Variations

Distinctive features theory which is a component of generative phonology is based on the premise that the segments of a language can be analysed or broken down into a small number of components or features. These segments can be decomposed into a set of smaller units, or features which provide link between cognitive representation of speech and its physical manifestation (Hall 2007; Hawkins 1993).

Segmental variations in Dagbanli dialects can be described through linguistics models such as Realisational, Selectional or Distributional processes that give account of the differences in the distribution of the segments. These differences are realized in pronunciation of words in isolation or in connected speech but the changes which take place are mostly quite regular and predictable in showing dialectal variation. Segmental differences involve the pronunciation of single segments and the major source of segmental variation among Dagbanli dialects is in vowel quality.

Realisational Differences

The realisational differences model is the commonest types of variations between dialects which lie in the way particular vowels are pronounced. Consider for example the vowel /ɛ/ in the words /bɛ̀li/ ‘accompany’, /bɛ/ ‘be’, /ʃɛ́li/ ‘some’. In Tomosili, this vowel has the underlying quality of

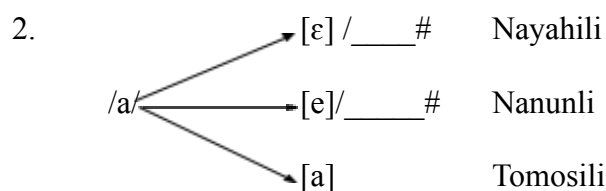
[a], a dialectal variant that occurs after palatalized [j] consonants. However, in Nayahili, /a/ is realized as /ɛ/ but in Nanunli, the vowel quality is more open as [e]. Thus, the vowel /a/ can be pronounced in a variety of ways: as [ɛ], [ja] or [e] depending on the dialect. Notice that the main concern here is relatively precise phonetic values; the aim is to describe these sounds as accurately as possible and this is done by referring to the vowel system of Dagbanli whose values are relatively stable. Notice that the dialectal differences of this kind are that they leave the vowel segment system unchanged. Dagbanli show contrast between words such as /tím/ ‘send’ and /tàm/ ‘forget’, /tèm/ ‘filter’ though the realisation of /a/ varies from dialects to another. The segment /a/ is frequent in all the dialects but its realisation varies in some few words as it appears as [ja] in Tomosili, [e] in Nanunli and [ɛ] in Nayahili as seen in the data.

1. /a/ realisations in the Dagbanli dialects

S/N	Tomosili	Nayahili	Nanunli	Gloss
a.	làbí	lèbì	lèbì	‘change’
b.	bàlì	bèlì	bélì	‘accompany’
c.	pám	pêṁ	pém	‘arrow’
d.	táhì	téhì	téhì	‘think’
e.	táli	tèlì	tèlì	‘flood’
f.	ǰálì	ǰèlì	ǰélì	‘some’
g.	zájá	zéjá	zéjá	‘stand-N’

The data in (1) show that it is easy to predict that if there are dialectal differences in the realisation of /a/ in some words. For instance, notice that /a/ is pronounced as [ɛ] in Nayahili, and

as [e] in Nanunli. This variation can be represented in the realization rule in (2). The contrast between /ε/ and /a/ is preserved due the pronunciation of /a/ as [ε] in the language.



Realisational differences are very common in occurrence and it is probably true to claim that any two dialects which are distinguishable will involve realisational variation to some extent; these differences usually pervade the whole vowel system and make up the distinguishing characteristics of a particular dialect. Realisation differences between two dialects calls for precise pronunciation of a particular phoneme or set of phonemes. They do not entail any difference in the overall. For instance, both consonant segments and vowel segments are realized differently across Dabanli dialects. Thus, one sound can be pronounced in a variety of ways depending on the dialect. Notice that the main concern here is relatively precise phonetic values; the aim is to describe these sounds as accurately as possible and this is done by referring to the sound system of Dagbanli presented in Table (1) and (2). Selectional differences and Distributional differences are the variation models used to account for the other segmental variations that occur at the level of the vowels and consonants.

Selectional Differences

A selectional differences arises where two dialects have the same set of phonemes but particular words select different phonemes. Tomosili, for example, have a phonemic contrast between /a/ and /ɔ/ in words like [dɔyɪm] ‘birth’ vs [dayɪm] ‘try-perf’, [sɔm] ‘bitter vs [sam] ‘mix’, just as

Nayahili and the rest of the dialects. The point about selectional differences is that there is usually no way of predicting which words will be affected and the number of words may be quite small. Consider the following data showing the sound alternation of [a~ɔ], [a~o] or [i~u].

3. /a/ → [ɔ] / ____ #

Nayahili	Nanunli	Tomosili	Gloss
báʔím	bahím	bóʔím	‘learn.sg’
váʔ-ó	váh-ó	vóʔ-ó	‘leaf.sg’
dáʔ-ó	dáh-ó	dóʔ-ó	‘stick.sg’
káʔ-ó	káh-ó	kóʔ-ó	‘antelope.sg’

The data in (3) show how vowel quality brings about dialectal variation in Dagbanli. It is clear that the underlying form /a/ in Nayahili is realized as /ɔ/ before a stem final coda consonant /ʔ/ in Tomosili while Nanunli prefer /a/ in the same environment. Though, Tomosili is considered the standard dialect, /ɔ/ in this context is the surface which can thus be pronounced in a variety of /a/ as the underlying form depending on the dialect. In Dagaare, a sister language, it is noticed that /a/ as in /paʔ-a/ ‘woman’ in Dagbanli is realized as [ɔ] as in [pɔka], which suggests that the realisation is due to the rounding feature of the vowel but not the linguistic environment. This is further attested in (4) in which in some selected words, Tomosili speakers select /a/ before coronal consonant /t/ and labial consonant /b/ while Nayahili and Nanunli speakers select /ɔ/ in the same linguistic environment. /a/ in this context can thus be pronounced in a variety of [ɔ] depending on the dialect. This variation can also be expressed by a realization rule as: /a/ → [ɔ] / ____ # where # is a consonant segment.

4. /a/→[ɔ]/_____ #

Tomosili	Nayahili	Nanunli	Gloss
bár-gí	bór-gí	bór-gí	‘lost’
lár-gá	lór-gá	lór-gá	‘corner’
lár-gí	lór-gí	lór-gí	‘untie’
dáblím	dóblím	dóblím	‘bravery’
záb-rí	zób-rí	ɖʒòb-rí	‘hair’
sáb-lí	sób-lí	sób-lí	‘rat’

Another example which attests for the rounding variation in this way is the sound /a/ in Tomosili confirmed in some words surfacing as [o] in Nayahili and Nanunli. For example:

5. /a/→ [o]/_____ #

Tomosili	Nayahili	Nanunli	Gloss
sàkól-ô	sòkól-ô	sòkól-ô	‘fufu’
gár-ó	gór-ó	gór-ó	‘bed’
zàb- rí	zòb-rí	ɖʒòb- rí	‘hair’
pàl-ó	pòl-ó	pòl-ó	‘plot’
sál-ô	sól-ô	sól-ô	‘crowd’
káló	kól-ó	kól-ó	‘enamel ware’

Another example of simplest type of selectional difference lies in a way the vowels /i/ and /u/ are pronounced. The realisation of /i/ in Tomosili is also pronounced as /u/ showing evidence of the rounding feature in Nayahili and Nannunli as illustrated below:

6. /i/ → [u] / _____ #

Tomosili	Nayahili	Nanunli	Gloss
tíl-gá	tól- gá	tól- gá	‘pestle’
díní	dóní	dóní	‘knee’
dínólí	dónólí	dónólí	‘door’
díl-gó	dól-gó	dól-gó	‘headache’
tím-ó	tóm-ó	tóm-ó	‘messenger’

The data in (6) show that in certain linguistic environments, Tomosili speakers select /i/ before voiced consonants /l, n, m/ while Nayahili and Nanunli pronounce /u/ in the same linguistic environment. In this context, /i/ is the underlying form and [u] is the surface form. This variation can also be represented in the realization rule: /i/ → [u] / _____ # where # is [l] or [n] or [m]. The realization here is not positional variants but a kind of dialectal allophone which varies according to regional, rather than position in the word. The rule only explains the data above. The realization rules describing the selectional differences in (3), (4), (5) and (6) can be generalized as in (7) where # is [+ant, -strid].

7. $\left[\begin{array}{c} - \text{ back} \end{array} \right] \rightarrow \left[\begin{array}{c} + \text{ back} \end{array} \right] / \text{ — } \#$

Sectional differences also account for Nasal Place Assimilation (NPA) in Dagbanli dialects. This applies word internally at morpheme boundaries where the realization of a stem final nasal is influenced by the consonant following it while the segment /a/ in the stem appears as [ɔ] before coda consonant. NPA in Dagbanli occurs between a stem and a suffix in all the dialect as illustrated below:

8. Word-internal assimilation: /m/ → [n] / ____ /d/

Root.SG	Tomosili	Nayahili	Nanunli	Gloss
bàhìm	bòhìn-dí	bàhìn-dá	bàhìn-dá	‘learning’
láhìm	láhín-dí	láhín-dá	láhín-dá	‘put together’
kárim	kárin-dí	kárin-dá	kárin-dá	‘reading’
sáhìm	sáhín-dí	sáhín-dá	sáhín-dá	‘spoiling’

Example (8) shows word internal assimilation where stem final consonant /m/ in the root changes to [n] before /d/ in all Dagbanli dialects. As illustrated in the dialects, it occurs in polysyllabic verb forms before the onset segment of the suffix /di/ in Tomosili, which appears as /da/ in Nayahili and Nanunli. The process from /m/ to /n/ does not occur in monosyllabic verbs before the suffix /-di/ in Tomosili and the suffix /da/ in Nayahili and Nanunli as shown in the data. The nasal place assimilation presented in the data above can be represented in a realisation general rule as:

$$9. \left[\begin{array}{c} +\text{nasal} \end{array} \right] \rightarrow \left[\begin{array}{c} \alpha \text{ place} \end{array} \right] / \text{---} \left[\begin{array}{c} \alpha \text{ place} \end{array} \right]$$

This rule is interpreted as a nasal become

s a nasal before a preceding consonant in which both the nasal and the consonant occur in the same place of articulation. This rule generalizes all the nasal place assimilations in Dagbanli dialects as also seen in the following data in which a stem coda dorsal nasal /ŋ/ is realized as a stem coda coronal nasal [n] before a suffix coronal /s/.

10. Word-internal assimilation: /ŋ/ → [n] / ____/s/

Root.SG	Tomosili	Nayahili	Nanunli	Gloss
dán-á	dán-sí	dán-sí	dán-sí	‘mosquitoes’
lón-á	lón-sí	lón-sí	lón-sí	‘drums’
bón-á	bón-sí	bón-sí	bón-sí	‘donkeys’
lán-á	lán-sí	lán-sí	lán-sí	‘nets’
tín-á	tín-sí	tín-sí	tín-sí	‘towns’
jín-á	jín-sí	jín-sí	jín-sí	‘homes’

The data in (10) show word internal assimilation where dorsal nasal /ŋ/ in the root changes to coronal nasal [n] before the suffix coronal /-si/. The assimilation occurs in all the dialects.

Many of the differences between Tomosili and Nayahili dialects can be classed as selectional, such as Tomosili prefers /a/ before voiced coronal consonants while Nayahili and Nanunli pronounce /ɔ/ in the same linguistic environment in /bar-gí/ ‘lost’, [bɔr-gí] ‘lost’, for /i/ rather than /u/ in /tíl-gá/ ‘pestle’, [tól-gá] ‘pestle’, for /a/ rather than /o/ in /sál-ô/ ‘crowed’, [sól-ô] ‘crowed’. The vowel segments /a/ and /ɔ/, /i/ and /u/ and /a/ and /o/ are found in all the dialects on both sides, therefore, there is no difference in the phoneme system: it is just a

different choice of phonemes in certain words. Consonants may also show segmental difference but their role is generally much smaller in Dagbanli dialects. The variation is mostly confined to presence or absence of a segment as discussed in the next section.

Distributional Differences

Distributional difference arises where two dialects have the same set of phonemes but there is a difference in the distribution of one (or several) segments. The distribution of a segment refers to the environment in which it may typically occur, for example, word-initial, word-medial and word final. The biggest distributional differences between dialects of Dagbanli involve consonant segments. The biggest single distributional differences between dialects of Dagbanli involves the coronal sound /z/. In Tomosili, which is considered the standard dialect, variety of Dagbanli, /z/ is pronounced in a word when it occurs in initially and medially but never in word-final. The same sound /z/ occurs in Nanunli as palato-alveolar affricate [dʒ] before vowels in similar environment of initial and medial. For example:

11. /z/ → [dʒ] / ____ [v]

Tomosili	Nayahili	Nanunli	Gloss
zɔʔ-ɔ	zɔʔ-ɔ	dʒɔ-hɔ	‘head’
zòn-zó-lí	zòn-zó-lí	dʒòn-dʒó-lì	‘warm’
zɔ̃ɲ	zɔ̃ɲ	dʒɔ̃ɲ	‘bats’
zòm	zòm	dʒòm	‘blind’
zón-ô	zón-ô	dʒón-ô	‘alien’
záb-rí	záb-rí	dʒáb-rí	‘hair’
zím	zím	dʒím	‘flour’

Notice the existence of /z/ in Tomosili and Nayahili but entirely missing in Nanunli in the same linguistic environment. This suggests that Nanunli lacks the segment /z/ though some speakers of the major dialect, Nanunli, use /z/ in rapid speech, which is completely missing in its sub-dialect, Jimansili. In this sub-dialect, there is the evidence of systemic difference arising between it and the major dialect which distinguish /zím/ from [dʒím] ‘flour’.

A distributional difference between the major dialects is also realized where the labial /b/ is frequently heard in Nayahili and Nanunli. For instance, in some words Nayahili and Nanunli, at the coda of a CVb root, the labial /b/ is replaced by the labial nasal /m/ in similar words in Tomosili as shown below. This distribution does not mean /b/ is not found in coda position in Tomosili, it does in some cases (e.g. /sáb/ ‘write’).

12. /b/ → [m] in CVb root

Nayahili	Tomosili	Nanunli	Gloss
zìb-sím	zìm-sím	dʒìb-sím	‘darkness’
tìb-sím	tìm-sím	tìb-sím	‘heaviness’
kób-sím	kóm-sím	kób-sím	‘cry.nom’
dáb-lím	dám-lím	dáb-lím	‘bravery’
ɲèvíl	ɲèvílî	nèvílî	‘soul’

Another common differences between the dialects and Nanunli in terms of pronunciation is in the use of the palatal nasal /ɲ/. In Tomosili and Nayahili, the palatal nasal /ɲ/ is pronounced in a

word when it occurs in initially and medially but not final. The sound /ɲ/ appears in Nanunli as alveolar nasal [n] before front vowels in similar positions of initial and medial. For example:

13. /ɲ/ → [n] / ____ [front vowels]

Tomosili	Nayahili	Nanunli	Gloss
ɲé:	ɲé:	né:	‘nostril’
ɲám	ɲám	nám	‘clean’
ɲín-á	ɲín-á	nín-á	‘teeth’
ɲám-á	ɲám-á	ném-á	‘clothes’
ɲú	ɲú	*nú	‘drink’

As seen in (13), the palatal nasal /ɲ/ occurs in Tomosili and Nanyahili and manifests as alveolar nasal [n] before front vowels in the same environment in Nanunli.

The point about distributional difference is that by contrast with a selectional differences, its occurrence can be generalized or example, one can say that in certain dialects /z/ is found word-initial and word-medial or that /dʒ/ is found after vowels. The possibility of a general statement like this distinguishes distributional from selectional differences, for otherwise it could be argued that they are the same thing; it could be claimed that Tomosili has /nasim/ ‘sweetness’, Nanunli has /nasim/ just as Tomosili has /a/, Nayahili has /ɔ/ in /bar-gí/ ‘lost’. The selectional differences, however, cannot be predicted by the phonetic environment: a statement to the effect that Tomosili dialect has /a/ while Nayahili has /ɔ/ is impossible. The [a ~ ɔ], [a ~ o] or [i ~ u] alternation across dialects is thus found in only a few words, which cannot be explained on the basis of distribution and will, therefore, be classified as selectional.

The dialectal variations discussed in Dagbanli dialects based on relisational differences, selectional differences and distributional differences are summarized in the table below:

Table 3: Categories of dialectal differences

1.Realisational		Tomosili	Nayahili	Nanunli
/a/	fàlí ‘any’	[a]	[ɛ]	[e]
2.Selectional				
/a/	bàr-gí ‘lost’	[a]	[ɔ]	[ɔ]
/i/	tìl-gà ‘pestle’	[i]	[u]	[u]
/a/	pàl-ó ‘plot’	[a]	[o]	[o]
/m/	bàhím ‘learn’	[m]	[n]	[n]
4. distributional				
/z/	zólí ‘hill’	[z]	[dʒ]	[z]
/b/	zìb-sím ‘darkness’	[m]	[b]	[b]
		[ɲ]	[ɲ]	[n]
/ɲ/	né: ‘nostril’			

Table (3) is used to account for dialectal differences in Dagbanli by providing summary of the model differences. Notice that all speakers of a particular dialect will not demonstrate the same dialectal variations as seen in the Table and a speaker may not always exhibit all the dialectal characteristics as some speakers may be able to code switch between dialects.

Conclusion

This paper examined dialectal variations in Dagbanli focusing on Tomosili, Nayahili, and Nanunli as the major dialects. The paper focused on the segmental variation and gave account of the phonological processes which account for the differences in the distribution of consonants and vowels in Dagbanli dialects and also provided data to support the claims. The paper made some significant types of contributions to knowledge. It contributed to the understanding of Dagbanli dialects–Tomosili, Nayahili and Nanunli by presenting comprehensive account of Dagbanli dialects that is more detailed. It revealed that Realisational differences, Selectional

differences and Distributional differences are models that account for dialectal differences in Dagbanli.

The paper observed that Dagbanli dialects are similar because they have the same set of sound segments across dialects and show evidence of contrast between long vowels (e.g. /e:/ as in /gbé:/ ‘hoe’) and short vowels (e.g. /e/ as in /gbé/ ‘sleep over’). The major difference across dialects resides in the vowel segments (e.g., /a/→[ɔ]/ ___#) and the consonant segments (e.g., /z/→[ɖʒ]/___v). The question now is whether the difference is predictable by a general environment (hence, distributional) or whether it applies only to the words and few others (in which case it would be selectional). This paper observes that the chief source of segmental variations in Dagbanli across dialects is in vowel quality while the consonants also show differences but their role is generally much smaller. The alternation of the vowel segments [a ~ ɔ], [a ~ o] or [i ~ u] across dialects is found in only few words, which cannot be explained on the basis of distribution. The alternation of the vowels is, therefore, classified as selectional. Note that selectional implies that the differences are entirely random while distributional implies that they are regular or rule-governed. The examples provided as data are good demonstration of the way in which linguistic behaviour can sometimes be neither entirely random nor entirely regular.

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