



SOCIOLINGUISTIC STUDY OF THE PHONOLOGICAL VARIATION OF / K/ AND /S/ IN GURENƐ

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Abstract:

This paper discusses a linguistic preference of GurenƐ, a Dialect of Farefari language spoken in two of the seven Districts in the Upper East Region in Ghana, with specific reference to phonological variance of /k/ and /s/. It is mainly focused on the causes of phonological variation and the effects it has on the language. The researcher in this study resorted to the use of ethnographic approach to getting his data and findings. This study presents a quantitative and qualitative analysis of the finding of a sociolinguistic study of phonological variation of /k/ and /s/ in GurenƐ of the Bolgatanga Community in the Upper East Region, Ghana. The findings among other things revealed that the variant /k/ is more dominant variant and used more by youth and students in the community than the aged. The /s/ variant had its highest users from the aged in the community. The study also revealed that the /k/ will be used in future and the /s/ faded off since the majority of its users are happened to be the aged.

Keywords: phonological variation, ethnographic study, sociolinguistic, Farefari language, GurenƐ dialect

Abbreviations

AFF	affirmative
DEM	demonstrative marker
FOC	focus marker
HAB	habitual
PL	plural
PRT	particle
SG	singular

1. Introduction

The earlier studies by Fischer (1958); Labov (1966); Lakoff (1974); Trudgill (1974); Eckert (1997); Dzameshie (2001) proved that, language use in society is not homogeneous and that there are overt and covert variations within and among individuals speech communities (Korsah, 2012).

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This paper discusses a similar linguistic preference of Gurenɛ, a Dialect of Farefari language spoken in two of the seven Districts in the Upper East Region in Ghana, with specific reference to phonological variance of /k/ and /s/. It is mainly focused on the causes of phonological variation and the effects it has on the language. The researcher in this study resorted to the use of ethnographic approach to getting his data and findings. in the Upper East Region in Ghana. It is mainly focused on the causes of phonological variation and the effects it has on the language. The researcher in this study resorted to the use of ethnographic approach to getting his data and findings. It is important to state that a Labovian's approach to ethnographic study has been used in this work. In Farefari (Gurenɛ), it is realized that, the variants /k/ and /s/ are used in the following words; *ki/si* "millet", *kiɲɛ/ siɲɛ* (go or walk) *kiim/ siim* (fry), *kelese/ selese* (listen) among others.

Bolgatanga is the capital town of the Upper East Region of Ghana. The two Districts that Gurenɛ is spoken in are the Bolgatanga municipal district which comprises of Danɲmeo, Tanzui, Tinduumɔlegɔ, Tinduusabelegɔ, Bukere, Zaare, Bolga-Soe, Bolga- Sherigu, Atulebabiisi etc and Bolgatanga East District which has its capital at Zuarungu.

Atintono (2011) notes that the term farefari often anglicised as Frafra is often used to refer to the cluster of dialects of which Talen, Nabt, Booni, Gurenɛ and Nankani are members. Farefari has been used as a cover term to refer to the five major dialects (Gurenɛ, Boone, Talen, Nabt and Nankani). These are spoken mostly around the following towns Bolgatanga, Bongo, Tongo, Peeligu/kongo and Nnavrongo respectively.

The language, Farefari is located in North Central Ghana. Its boundary to the East is marked by Red Volta, to the West the Buli and Mampruli language, to the North by Moore (in Burkina Faso) and the south by the White Volta (Nsoh, 2010).

The major towns in which Farefari is spoken include Bolgatanga municipal and Bolgatanga East districts (Gurenɛ), Boonɔ (boonɛ/Gurenɛ), Navrongo (Nikãɛ), Nangu'ut (Nabt), tɔɲ (talen) and even Yelewɔɔɲɔ (Nikãɛ) is the main language in Burkina Faso. Farefari is surrounded by the kusaal, Mampruli, Buli and Kasem languages in Ghana. (Nsoh 2010, Dakubu 2003)

The purpose of this study was to show quantitatively how the sound variants /k/ and /s/ are used in Gurenɛ and to predict the situation that is similar to the studies mentioned earlier, the significant phonological variants, /k/ and /s/. The study demonstrates the use of /k/ and /s/ can indicate linguistic and social orientation of the people in Bolgatanga municipality. It further tries to predict the future of language based on the variants /k/ and /s/.

The orthography of the language (1998), states that 'some words are pronounced with initial /k/, /s/ or /ky/. e.g. *kiɲɛ/ siɲɛ/ kyiɲɛ* (go). The document emphasized that 'all these spellings should be regarded as correct. However, most of the literature in the language is written in /k/ or /s/. e.g.

These are creative writings and long essays I have read through and this is what I have observed concerning variants /k/, /s/, and /ky/. I have realized the /ky/ variant has not been used in any of the literatures I read through. I purpose to investigate as per Table 1, the dominant variant in Bolgatanga municipality.

Table 1: Literature Survey

Title of book	Name of writer	Phonological variant	
		/k/	/s/
Wine ka baseri a wan tɔgele be	Barnabas A-ingkonge	✓	
Suŋa boi gee ti ka yeŋe bɔna	Akariboga Isaac	✓	
Zinnyaka	Abel Atanga	✓	
Adiku	Samuel Atintono		✓
Sukuu sine	Asaa Roger Atua		✓
Ayenzo'oya	Patrick Atanja Aduko		✓

2. Hypotheses

The following are the working hypotheses for the study.

- 1) /k/ is more dominant variant in Bolgatanga municipality
- 2) Which sound /k/ or /s/ is the original phonological sound of Bolgatanga municipality
- 3) Which of the two variables will dominantly use in Gurenɛ language in future, /k/. or /s/ ?

3. Related studies

William Labov in 1963, John Fishcher had 1958 published a findings of a sociolinguistic survey he had conducted among the children of New English (Mesthrie et al., 2009). He investigated how the variant /ing/ in for instance words like *fishing, coming, sitting*, etc. the realized variants /in/ and /inj/.

Labov (1966) investigated the frequency and the intensity of the variable /r/ (also “post-vocalic /r/”) in words like *fourth floor* in New York. It was revealed that the use of /r/ was more prevalent among people of high social class and thus the use of the variable was socially stratified. Trudgill (1974) investigated a similar phenomenon as Fischer i.e. [m] and [mŋ] in Norwich. He found that [mŋ] more by people high status in the society (Korsah, 2012).

3.1 Theoretical Approach

The theoretical approach to the study is the Labovian approach. Labov work in (1963, 1966, 1994) have shown that these variants are systematically structured to the extent that they can be characterized and explained in terms of the social differentiations in a given speech community, that which can be described as a ‘structured heterogeneity’. Previously, such linguistic variations were viewed as an instance of free variation (i.e alternate forms of the same expression) or dialect mixture (i.e. the existence of two or more dialects in a given speech community among which choice is dependent on occasion). But for Labov, these issues are crucial to understanding how language change and especially since the change is quantifiable. The primary assumption is that the frequency in something about speech community. The way of looking at the relationship between language and society is what has come to be known as varianist approach, quantitative paradigm; urban dialectology, Labov school etc. (Korsah 2012). The core of the Labovian paradigm is: the data are examples of ordinary speech produced (as far as possible) under ordinary conditions, and the patterns studied includes quantitative patterns –i.e. how often various linguistic forms are used (Hudson 2001).

3.2 Methodology and conceptual framework

The method that is used to collect the data was very simple but suits the hypotheses to be tested.

The study employed quantitative ethnographic research design. Like Labov, I went round the three communities, house -to -house, corn mill to corn mills etc, asking the following questions; what do you use the mortar outside the house for?, what fowl feed do you give to your fowls to look nice like this?, what does this corn mill use for?, knowing very well that, in each instance, the name 'millet' will be mentioned either using the /k/ or /s/. The data for the study is primary data and was gathered from complete oral interview conducted at various ethnographic situations that relate to words involving the variants /k/ and /s/. The researcher purposively investigated the phonological variants, /k/ and /s/ in three communities within Bolgatanga municipality, but the sampling technique used in sampling the three communities is purposive. However, random sampling was used for sampling respondents within the stipulated group range. The three research communities are Zuarungu from Eastern part of Bolgatanga municipality, Bolga-Sherigu from Western part and Bolga-soe from the northern part of Bolgatanga municipality. Questions and responses were conducted in Gurene but translated into English language for the sake of the study.

To ensure credibility, I sought for permission from participants before proceedings were recorded. People interviewed in each of the three communities were thirty people each(see Table 1 below) In all, ninety (90) people were interviewed. The data was analyzed using tables, percentages and bar graphs.

3.3 Interview

As mentioned earlier, oral interview was the data collection strategies that was used in this study. I used semi-structured interviews and open-ended questions to get some of the information. I created and maintained good interpersonal relationship with the interviewees. This made the interviewees feel free and answer my questions. The cordiality that existed between the researcher and the interviewees made the sessions natural and friendly. Hence, accurate and reliable data was gathered. Some of the data gathered from the interview and interactions revealed the phonological variable she/he is using. Thus /k/or/s/ and their responses are tabulated in tables 3 -7 below.

All questions were to be responded in Gurene and each participant was engaged in a casual conversation (formal greeting) with the interviewer for at least two minutes before the real interview question. Respondents were encouraged to carry on whatever they were doing while the interview went on. They were also made known before recording their voices. Each participant was entitled to only one question since all the questions have the same answer.

All the questions are geared towards one answer ki or si 'millet'. The only difference is the environment in which the respondent found him/herself e.g., at home, grinding mill etc. Even at home or where the question is used should be appropriate for the environment of the participant. The question, what feed do you give to fowls was only asked when the person was feeding fowls, selling fowls or have some fowls around her/him. The question of the mortar was limited to the houses that have millet threshing mortars outside the house.

4. Results and Discussions

Table 2: Participants consulted for data

Participants	Aged	Youth	Students	Total
Males	15	15	15	45
Females	15	15	15	45
Total	30	30	30	90

4.1 Data from the Interview Sessions

One noun that the phonological variants could be used is millet; /ki/ or /si/. So, my questions were designed to get the name mentioned by the interviewees.

1. At home:

Toore wa n zε yiŋa wa, ya tari e ita la beni?
 Mortar this PRT standing outside AFF 2PL take 3SG do FOC what?

a. What do you use the mortar outside for?

(Mortars outside the house are purposely meant for thrashing millet).

Beni ti fum tari bɔ'ora fu nɔɔsi la ti si ana suŋa bala?
 What that 2SG take give HAB 2SG fowls FOC that 3PL be HAB nice DEM

b. What feed do you give to your fowls that they look nice like this?

(Traditional fowl feed are; termites, millet and corn which is done concurrently)

2. At the grinding machine:

Ba tari banika wa niina la beni?
 3PL take corn mill AFF grind HAB FOC what?

What do they use this corn mill or grinding machine for ?

(Corn mills are mostly meant for grinding corn and millet in those communities).

3. A picture of millet was shown and asked:

Sela n boi foote wa puan la de la beni?

What PRT in picture AFF inside FOC is what?

What is the name given to what is in the picture?

Table 3a: Results from Bolga Sherigu. Those who use variant /k/

Participants	Aged	Youth	Students	Total
Males	00	03	03	06
Females	03	03	05	11
Totals	03	06	08	17
%	30 %	60%	80%	57%

From Table 3a reveals that among the five old men participants of Bolga –Sherigu, nobody uses the /k/ variant. However, three (3) participants of the old women, out of five participants use /k/. Three participants from both male and female youth of Bolga- Sherigu use /k/. Among the

students of Bolga-Sherigu, three (3) participant from the boys and five (5) girls use /k/. In summary, 30% aged, 60% youth and 80 % students use /k/ in Bolga-Shergu.

Table 3b: Results from Bolga Sherigu. Those who use variant /s/

Participants	Aged	Youth	Students	Total
Males	05	02	02	09
Females	02	02	00	04
Totals	07	04	02	13
%	70%	40%	20%	43%

In Table 3b, the respondents of /s/ shows that seven (7) people from the aged representing 70% use /s/. Four participants out of the youth group which represent 40% use the /s/ variant and only two people from the students representing 20% that use /s/.

Table 3: The overall data from Bolga -Sherigu

Respondents	/k/	/s/	Total
Female	11	04	15
Male	06	09	15
Total	17	13	30
%	57%	43%	100%

From Table 3, the data from Bolga-sherigu, the first hypothesis was confirmed. About 43 % of the respondents used /s/ while 57% of the respondents are used /k/. This confirms that more people in Bolga –Sherigu use /k/ more than the /s/. About 73% of the women respondents use /k/ while only about 33% of the men respondents use /k/ however; about 27% of the women use /s/ and 67% of the men use /s/. (see Table 3)

A further interview was conducted to find out the original variant used at Bolga – Sherigu. Two old men of the place were interviewed, and both confirmed that the /s/ is the original variant of Bolga-Sherigu. They said that their forefathers migrated from Pogemolego-sirigu in Kasena – Nankana West District where /s/ is used. On the question, why then the /k/ dominating, they unanimously said that the /k/ was transported from Bolga Central market where /k/ variant was dominating and the students also adopted the /k/ from their friends from school.

Table 4a: Results from Zuarungu. Those who use variant /k/

Participants	Aged	Youth	Students	Total
Males	05	05	05	15
Females	04	05	05	14
Totals	09	10	10	29
%	90%	100%	100%	97%

Table 4a, Zuarungu respondents on the variant /k/ shows that the ten aged presented, nine people representing 90% of the aged use /k/. The youth group and student- respondents were 100% users of /k/.

Table 4b: Results from Zuarungu. Those who use variant /s/

Participants	Aged	Youth	Students	Total
Males	00	00	00	00
Females	01	00	00	01
Totals	01	00	00	01
%	20 %	00%	00%	03%

The Table 4b represented those who use /s/ in Zuarungu. It has shown that only one woman from aged participant has used /s/. Apart from her, all the youth and student participants use /k/. So only one person representing 3% of Zuarungu participants use /s/.

Table 4: Results from the data collected in Zuarungu

Respondents	/k/	/s/	Total
Female	14	01	15
Male	15	00	15
Total	29	01	30
%	97%	03%	100%

From the data from Zuarungu, the first hypothesis was confirmed. About 03 % of the respondents use /s/ while 97% of them use /k/. This confirms that the people in Zuarungu who use /k/ are more than those who use /s/. About 80% of the women respondents use /k/ while 100% of the men respondents use /k/ however; about 07% of the women use /s/ and 0% of the men use /s/.

A further interview was conducted to find out the original variant used at Zuarungu. When I interviewed to know original variant use by the people of Zuarungu, I was told it is the /k/ that is the original variant of Zuarungu. On the question, why then the /s/ found among the respondents, the interviewees unanimously said that the /s/ respondent (s) may be a woman or women who transported the /s/ from where they came from into marriage. A follow up to the /s/ respondent to find out the truth of the answer and it was confirmed that the woman comes from Zorko in Bongo District where the variant /s/ is dominating but married to Zuarungu. So, it is transported from Bongo.

Table 5a: Results from Bolga-Soe. Those who use variant /k/

Participants	Aged	Youth	Students	Total
Males	03	05	05	13
Females	04	03	03	10
Totals	07	08	08	23
%	70%	80%	80%	77%

Table 4a tells me that three men and four women out of ten representing 70% of aged participants use the /k/variant. For the youth and the students ,all the men participants and three women forming eight people from each group and representing 80% each use the /k/ variant.

Twenty-three participants out of thirty representing 77% use /k/ in Bolga-Soe community.

Table 5b: Results from Bolga-Soe. Those who use variant /s/

Participants	Aged	Youth	Students	Total
Males	02	00	00	02
Females	01	02	02	05
Totals	03	02	02	07
%	30%	20%	20%	23%

The Table 5b which represent those who use /s/ in Bolga-Soe has shown that two men and one woman making 30% from aged participants are using the /s/variant. Apart aged, both the youth and student participants use /k/. So, seven people representing 23% of Bolga-Soe community use /s/ variant.

Table 5: Results from the data collected in Bolga-Soe

Respondents	/k/	/s/	Total
Female	10	05	15
Male	13	02	15
Total	23	07	30
%	77%	23%	100%

From the data from Bolga-Soe, the first hypothesis was confirmed. About 23 % of the respondents use /s/ while 77% of them use /k/. This confirms that more people in Bolga –Soe use /k/ more than the /s/. About 87% of the women respondents use /k/ while only about 67% of the men respondents use /k/ however; about 13% of the women use /s/ and 33% of the men use /s/

A further interview was conducted to find out the original variant used at Bolga-Soe. One old man and old lady of the place were interviewed, and both confirmed that the /k/ is the original variant of Bolga- Soe. On the question, why then the /s/ found among the respondents, they unanimously said that Bolga –Soe is the only community in Bolga with the largest number of strangers. Most of these strangers come from Kasena-Nankana, Bongo and Bawku districts. Those who come from Bongo and some of the Nankanas use the /s/ but those strangers from Bawku and the Kasenas who learnt the Language may choose to be part of /k/ or /s/.

Table 6: Results from the data of aged (males and females) collected in the three communities

Respondents	/k/	/s/	Total
Female	11	04	15
Male	08	07	15
Total	19	11	30
%	63%	37%	100%

In terms of age, the range was 40 years and above. It was realized (as indicated in table 5) that more people within that age group use /k/ variant, it is interesting to also know the highest users of /s/ is recorded in that group.

From the Table 6 above, it shows that among the aged, many people, 19 respondents representing about 63% use /k/ and only few, 11respondents representing about 37% of the respondents use /s/. The aged confirmed the hypothesis as their response revealed that most of them use /k/ than /s/.

Table 7: Results from the data of the youth collected in the three communities

Respondents	/k/	/s/	Total
Female	11	04	15
Male	13	02	15
Total	24	06	30
%	80%	20%	100%

Youth in this context is talking about people between the ages of 19 years and 40 years who have not attended school and therefore have not got formal education. The data in Table 6 shows that about 80% of the youth use /k/ while only about 20% of them use the /s/.

Table 8: Results from the data of the students collected in the three communities

Respondents	/k/	/s/	Total
Female	13	02	15
Male	13	02	15
Total	26	04	30
%	87%	13%	100%

In terms of students, I am talking about all students from Senior High School level to University level. Age is not a limitation here.

Table 7 shows that about 26 out of 30 students representing 87% use /k/ while only 4 students out of 30 students representing 13 % use /s/.

4.2 Overall Findings using tables 5, 6 and 7

Table 9: The total data from the 90 respondents are in favour of /k/

Respondents	Aged	Youth	Students	Total	Percentage
/k/	19	24	26	69	77%
/s/	11	06	04	21	23%
Total	30	30	30	90	100%

Table 9 discusses the overall data of the 90 participants in the three communities. Among the aged, it was realized that 19 of the 30 participants use /k/ while 11 out of 30 participants use /s/. This means that about 63% of the aged use /k/ and the rest of the 37% use /s/.

Twenty four (24) youth out of the thirty (30) participants use /k/ and only six (06) people out of the thirty use /s/. So, about 80% of the youth in Bolgatanga municipality use /k/ while about 20% of the youth use /s/.

For the students, 26 people representing about 87 % use the variant /k/ while only four (4) representing about 13% use /s/.

The figure 1 below, illustrates the data of the use /k/ in Bolgatanga municipality. The results from the 90 participants has shown that, 69 respondents use /k/ representing 77% and 21 respondents use /s/ representing 23%. The bar graph in figure 1 is ascending from aged 63%, youth 80% to students 87%.

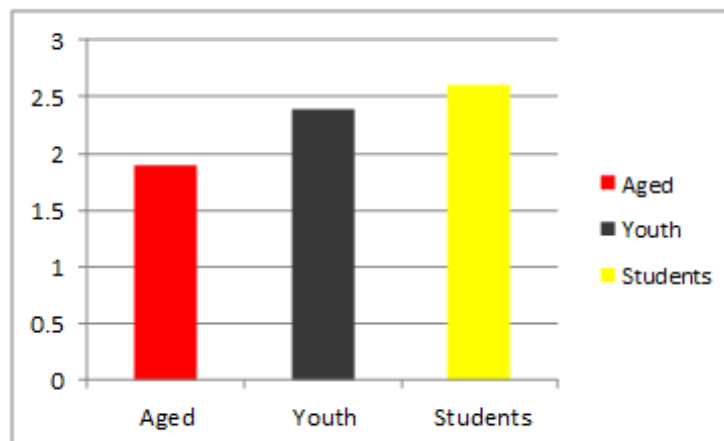


Figure 1

The scale for the bar graphs is *the number of respondents ÷ 10*.
 e.g. The aged is $19 \div 10 = 1.9$,

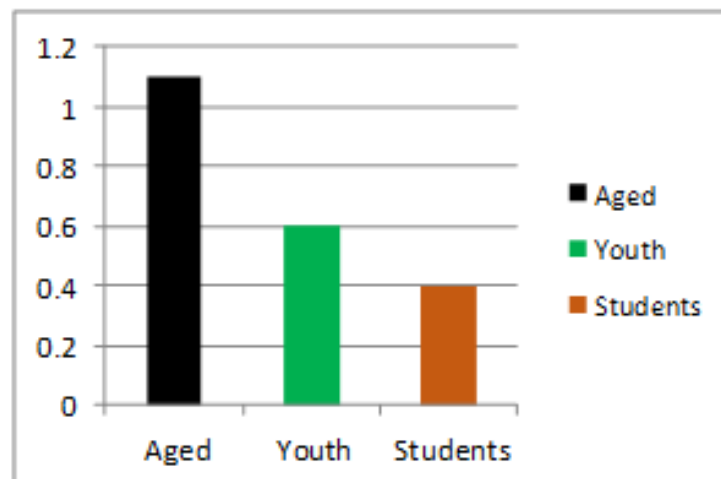


Figure 2

The figure 2 illustrates the data and the use of the variant /s/ in the Bolgatanga municipality. It has started descending from left to right indicating a fall in the use of /s/. It is only among the aged that 11 people representing (37%) of the group use /s/ but the youth were only 6 people representing (20%) and the students only 4 people representing (13%) respectively.

4.3 Proving the hypotheses

a. /k/ is more dominant variant in Bolgatanga municipality

This was confirmed in all the three research communities ; Bolga-Sherigu 17respondents (57%)that use /k/ as against 13 respondents (43%) that use /s/, Zuarungu 29 respondents (97%) use /k/ as against 1 respondent (3%) who use /s/ and Bolga-Soe 23 respondents (77%) that use /k/ and only 7respondents (23%) that use /s/. The overall data realized 69respondents out of 90 which represents (77%) while the overall respondents for /s/ is 21 respondents representing (23%).

b. Which sound /k/ or /s/ is the original phonological sound of Bolgatanga municipality

The data has revealed that the /k/ is original variant in Bolgatanga. I believe it so because when interview the old men at Bolga-Shergu, they said, they migrated from Pɔgemolegɔ- sirigu in the Kasena- Nankana West District to their current community and use /s/ variant but because /k/ is used in Bolga Town and they attend market there, the /k/ has now dominated their/s/.

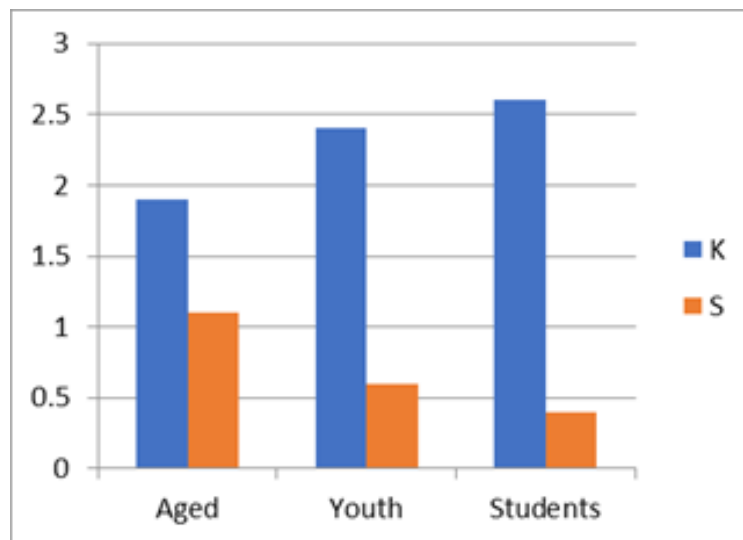


Figure 3

c. Which of the two variables will dominantly use in GurenƐ language in future, /k/ or /s/?

From Table 7, the results from the 90 participants have shown that, 69 respondents use /k/ representing 77% and 21 respondents use /s/ representing 23%.

The highest data record of /s/ is coming from the aged while the highest record of /k/ is coming from the youth and the students; let us call them the growing generation. As the aged is a dying generation and the youth and students are growing generation, the aged will automatically die with the /s/. Even if they don't die, the /k/ will grow to overshadow the /s/. It is therefore very clear that the /k/ has the future of overtaking the language in the Bolgatanga municipality while the /s/ will die out within the municipality in future.

5. Conclusion

This paper looked at the use of the two dominant variance /k/ and /s/ in the Farefari (GurenƐ) language in Bolgatanga municipality. Which of the two is most used variable and could dominate in Farefari (GurenƐ) language in future. The /k/ variant has an influence in the language and the people valued and prefer using /k/ to /s/. However, the finding of this work does not necessarily give a full picture of language since it only covers Bolgatanga municipality and so, it is only a prediction of what could be happening in the language based on this work.

Conflict of interest statement

The author declares no conflicts of interests.

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