Hypotheses on the Diachronic Development of the Akan Language Group

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Abstract

Historical linguists have already established the constituent varieties of the Akan language group as well as their relationships with other languages. What remains to be done is to reconstruct the Proto-Akan forms and this is what this paper sets out to accomplish. One remarkable observation about language is that languages change through time. This is not to obscure the fact that it is at least conceivable that language could remain unchanged over time, as is the case with some other human institutions e.g. various taboos in some cultures or the value of smile as a nonverbal signal. Be that as it may, the mutually comprehensible varieties of the codes that constitute the Akan language group have evidently undergone some changes over the course of time. However, they lack adequate written material that can take us far back into the history of the Akan language to enable any diachronic or historical linguist to determine hypotheses on their development. Besides, if empirical data from the sister Kwa languages or from the other daughters of the Niger-Congo parent language were readily available, then the reconstruction of the Proto-Akan forms would be quite straightforward. But, unfortunately, these are also hard to come by, at least, for the moment. Nevertheless, to reconstruct a "proto-language, historical linguists have set up a number of methods, which include the comparative method, internal reconstruction, language universals and linguistic typology among others. In view of the unavailability of written evidence and empirical data from the languages that are genetically related to the Akan language group, we will apply the Comparative Method (since it is the archetypal and the surest method of dealing with change and determining earlier forms) in determining, in this paper, the hypotheses on the diachronic development of the Akan language group.

1.0. Introduction

The Akan language group comprises mutually comprehensible varieties that do not have adequate written material to enable any diachronic or historical linguist to determine hypotheses on their development. However, historical linguists have methods of reconstructing the history of the languages of preliterate communities like Akan where adequate written material is lacking. In this paper, we will adopt the same methods, especially the methods of reconstruction, to come out with hypotheses on the development of the Akan language group. We fundamentally zero this study in on the “Uniformitarian Principle” which states (in the words of Hock, 1991: 630): “The general processes and principles which can be noticed in observable history are applicable in all stages of language history”. We believe strongly in line with the basic tenets of this principle that observing change in progress at the present time presents insights that can be applied for untying aspects of language development in the past into which we have no other foundation for insight; in other words, “with the Uniformitarian Principle we are licensed to make educated guesses about the past generated by our study of the present” (Joseph, 2003).

Prior to carrying out this study, we deem it necessary to point out the distinction between the Akan people and the speakers of the Akan language inasmuch as
1. the label *Akan* is used both linguistically and ethnographically,
2. not all the Akan people speak the Akan language and
3. not all the speakers of the Akan language are wholly ethnographical Akan.

### 1.2. The Akan Language and People

In the literature, the term *Akan* is used with both linguistic and ethnographic senses which, to some extent, creates bewilderment in the works of anthropologists and sociologists who, respectively, carry out anthropological and sociological studies of the Akan people, and linguists who conduct linguistic research into the Akan languages (Obeng, 1987; Abakah, 2003).

There exist further inconsistencies in the linguistic use of *Akan*, and to illustrate these inconsistencies in relation to the classification and description of Akan and its dialects, let us closely study the following listing arranged in chronological order. The authors and the year of publication are boldfaced and underlined. On the next line, the label given to the groups of codes referred to as Akan by the author is boldfaced, italicized and underlined. This is followed by a bulleted list of dialects constituting what a particular author refers to as Akan.

**Christaller (1875, 1881)**

*Tshi? Amina? Akan?*

- Fante, Akuapem, Asante, Akyem, Wassa, Akwamu and Brong.

**Delafosse (1904)**

*Kyi (Okyi), Akan*

- Awutu (Obutu), Fante (Fandi), Akuamu (Akouambu), Anum (Anoum), Asante (Asandi) and Abro (Abono)

**Acquaah (1939)**

*Akan*

- Fante (Mfantse), Asante (Esuantse), Akuapem (Ekuapem), Akyem, Akuamu, Kwahu, Assin, Agona, Wassa and Bono.

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1 The question marks on these labels are explained in the fifth bullet point under comments, § 1.1, below.
Manoukian (1964)

Akan


Owusu et al (1964)

Twi

- Akwapim, Asante, Akyem, Brong, Fante and Kwahu.

Akrofi (1965)

Twi

- Akan, Asante, Brong, Fante and Kwahu.

Dolphyne (1965)

Akan

- Akuapem, Asante, Fante, Akyem, Kwahu and Brong.

Dolphyne (1988)

Akan

- Akuapem, Asante, Fante, Akyem, Kwahu, Brong, Wass and Agona.

1.1 Comments

The following comments can be made on the above lists.

- With the exception of Acquaah (1939), Manoukian (1964) and Dolphyne (1965, 1988), some scholars, in their classification of Akan, systematically employ the term Twi as a superordinate label under which the “dialects” of Akan are listed.
- The varied lists of codes and labels indicate that there is lack of consensus in terms of the identification and classification of these varieties of the same language, which Greenberg (1966) refers to as Volta Comoe. In his book, The Languages of the World, Katzner (1986) considers Fante and Twi as diverse but related languages by asserting, “The most important languages (in Ghana) are the closely related Twi and Fante.”
- According to Manoukian, Akan comprises “two major language groups” namely Twi and Anyi-Baule. He classifies Fante, Asante, Akyem and Akuapem under Twi and posits that: “Twi is the generic term for a group of dialects found … between Rivers Tano and Volta.” and then lists Ahanta,
Nzema and Sefwi under Anyi-Baule. There are cases in the above list, such as Delafosse (1904) and Akrofi (1965), where *Akan* has been used for Akuapem.

- With the exception of Manoukian who specifies that his classification is based “purely on linguistic factors” these authors do not make any reference to the criterion upon which each one’s classification has been based. It is therefore not clear whether or not these labels are crucially ethnic labels. It is difficult to know the criteria by which these classifications had been done.

- Christaller (1875, 1881) does not settle on one name for the language because he is not certain of its name. He is even at a loss as to what name to use for the language. He accordingly uses *(Tshi) Twi, Amina* as well as *Akan* as labels for one and the same language. He at times refers to the same language as *Twi and Fante language* and not languages. All this is possible because, in the words of Schachter and Fromkin (1968:5), “Until very recently when Akan became the official name for the *dialects spoken by all the Akan people*, there was no generally accepted name for the language as a whole.” (boldface, our emphasis). Indeed, as we will soon see under the Ethnographic Akan subsection, all the Akan people do not speak the same language, that is to say, *not all the Akan people speak the Akan language*. Certainly Schachter’s & Fromkin’s (ibid.) “all the Akan people” must necessarily refer to speakers of present day Akan, if not, then it is an overstatement.

- Dolphyne (1988) does not state in explicit terms that her classification of Akan is linguistic; nevertheless paraphrasing of her *Akan* label as *Twi and Fante language* straightforwardly shows that her use of the term *Akan* is linguistic rather than ethnographic.

- Moreover, both Christaller and Akrofi use the term Twi to refer to the dialects of ‘Linguistic Akan’ for their works on the grammar of the Akuapem dialect. It therefore comes as no surprise that Dolphyne (1965) argues, consequent upon that practice, that

  Twi came to be normally understood as referring to Akuapem, a language spoken by the people occupying the Akuapem ridge which lies to the north of Accra.

  Dolphyne (ibid.) has further noted, “All the various dialects of the Akan people are now referred to as *Akan*.” This statement, like Schachter and Fromkin’s (op.cit.), bold-faced above, on which we have already commented, is an overstatement. The Ahanta and the Nzema, for instance, do speak the Ahanta and the Nzema languages, respectively, and never Akan, albeit they all speak the Akan language as their L₂. Dolphyne (1988) has rectified this so-
called overstatement by distinguishing between ethnographic and linguistic Akan in the following words: “speakers of Akan are only a sub-group of the Akan people”.

- It comes out clearly from the labels above that the authors list different numbers of dialects for the same language. This complicates the issue and results in real classificatory problems. As a matter of fact, the use of the label Akan as a superordinate linguistic term for the languages listed under Acquaah, Dolphyne, Owusu et. al., Christaller and Akrofi dates back only to the 1950’s. The label Akan, as used by Manoukian (1964) and others, has ethnic meaning and therefore highlights the controversies which surround its use. To clear up the confusion in which the use of the term Akan is shrouded, we draw the distinction between the Akan people (ethnographic Akan) and the Akan language (linguistic Akan).

1.2.1 The Akan People (Ethnographic Akan)

The inhabitants of most of the area lying between the Volta River in the eastern part of Ghana and the Bandama River in Côte d'Ivoire call themselves Akan (see Map 1 adapted from Dolphyne, 1988:196). These people share similar cultural traits, which serve to differentiate them from other ethnic groups in West Africa. For instance, the languages and or dialects they speak are closely related, having in common a large number of lexical items. The Akan people include the Baule, the Aowin (Agni), the Sefwi (Sanvi), the Nzema, the Ahanta, Wass, Fante, Akwamu, Denkyira, Kwahu, Assin, Akyem, Asante and Brong. There is no differentiation between the name of an ethnic group and the name of the language or dialect the people speak, i.e. the Nzema people speak the Nzema language, the Assin people speak Assin etc.

However, earlier linguists like Westermann and Bryan (1952), Greenberg (1963), Manoukian (1964), among others, used the term Akan to refer to the above group of languages. Stewart (1966, 1971) has labelled this group, the Tano languages because they spread to the east and west of River Tano (see Map 1). The ethnographic Akan therefore refers to a very large group of people living in Côte d'Ivoire and Ghana who speak languages and or dialects classified under the Tano language family to which the Akan language belongs.³ It is important to note that even though the Akuapem people, speak the Akan language, they cannot be said to be completely ethnographic Akan by reason of the fact that their system of inheritance is patrilineral whereas all the constituent groups of the ethnographic Akan are matrilineal.

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² Map 1 and Map 2 constitute appendices 1 and 2, respectively.
³ See Obeng (1987) for a more detailed study of linguistic and ethnographic Akan.
1.2.2. Tano Language Group

Stewart (1972) classifies the languages spoken by all the Akan people dichotomously as Bia and Akan. All the codes that constitute the Akan language (see § 1.2.3) are mutually intelligible but not all those constituting the Bia language group are said to be mutually intelligible. Undeniably, Nzema, Evalue, Sefwi and Aowin/Agni can be said to be dialects of the same language but they are not classified under a superordinate label. Each one is spoken of as a different language. Ahanta, Baule and Chakosi, on the other hand, are not mutually comprehensible with the above-mentioned set of Bia tongues (J. Crosby Annan: p.c.). It is interesting to note that most Ahanta speakers understand and can speak Nzema but the Nzema do not understand Ahanta even though the two linguistic communities share a common geographical border (Kusaga Essien: p.c.). We present the language family table of the Tano Language Group below.4

Table 1.2. The Tano Language Group

<table>
<thead>
<tr>
<th>Bia Language Group</th>
<th>Akan Language Group/Dialects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chakosi</td>
<td>Assin</td>
</tr>
<tr>
<td>Baule</td>
<td>Akyem</td>
</tr>
<tr>
<td>Aowin/Agni</td>
<td>Asante</td>
</tr>
<tr>
<td>Sefwi</td>
<td>Kwahu</td>
</tr>
<tr>
<td>Nzema</td>
<td>Akwamu</td>
</tr>
<tr>
<td>Evalue</td>
<td>Akuapem</td>
</tr>
<tr>
<td>Ahanta</td>
<td>Fante</td>
</tr>
<tr>
<td></td>
<td>Bron</td>
</tr>
<tr>
<td></td>
<td>Wassa</td>
</tr>
<tr>
<td></td>
<td>Denkyira</td>
</tr>
</tbody>
</table>

The lists of the dialects that make up the Akan language are not exhaustive. For further information on the ethnographic Akan, see Sarbah (1906) and Manoukian (1964).

1.2.3. The Akan Language (Linguistic Akan)

Map 2, also adopted from Dolphyne (1988), captures the distribution of the Akan language and its dialects. Comparison of maps 1 and 2 plainly shows the linguistic and ethnographic Akan and the geographic location of the Linguistic Akan. Akan is spoken in Ghana by 44 per cent of the Ghanaian population (2000 census) as their mother tongue (L1) in the Brong Ahafo, Ashanti and Central Regions as well as in parts of the Western, Eastern and Volta Regions of Ghana. Akan is made up of

4 We will not discuss the sociolinguistic factors responsible for this state of affairs.
three main dialects, Asante, Fante and Akuapem. Other subdialects include those listed in table (1.2). The non-Linguistic Akans (all located in the Western Region of Ghana (see table 1.2) and the Coastal Guans, comprising the Efutu, Awutu and Senya as well as the Eastern Guans, that is, the Anum, Kyerepong, Larteh and Buem) speak Akan as second language (L₂) (Abakah, 1993). Apart from the Nzema speaking area, Akan is not only taught in the schools but it is the medium of instruction in the Lower Primary schools in these non-linguistic Akan communities where, again, Akan is used in the church and also as the language of trade. Akan is also an important language of trade in the Ga-speaking state capital, Accra (Dolphyne, 1988; Abakah, 1993).

1.2.4. The Akan Language: A Lingua Franca in Ghana?

Just as the average educated person in the world today communicates in the English language, so does the average person in Ghana today communicate in Akan, a fact which the quotation from Boadi’s (n.d.) below gives credence to. Apart from the identifiable ethnic groups listed above, numerous ethnic groups also speak Akan as L₂. Osam (2003), for instance, argues that a sizeable number of Ghanaians speak Akan as L₂ but it is impossible to determine the right size of these speakers since no research has been conducted in this area. Boadi (n.d.) asserts that

It would probably not be an exaggeration to say that it is possible to travel from the coast to the extreme tip of the north without much difficulty in communication if one speaks Akan.

In the course of our field trips, we came into contact with elderly Ghanaians who had come from the extreme tip of the Upper East to the south (the coastal town of Winneba) for the first time to visit their “children”, and they were able to communicate in Akan with absolute ease. From these people we got to know that Akan is used for commercial purposes in the north.

This piece of information actuated us to make a trip from the coastal town of Winneba in the south to Burkina Faso through the northernmost part of Ghana (via the Northern and Upper East regions of Ghana) to assay how extensive the use of Akan in the northern part of Ghana might be. In the following prominent towns in northern Ghana: Tamale, Bolga, Navrongo and the border town of Paga, we consciously communicated in Akan with every person we interacted with. The result was so revealing; we communicated effortlessly in the Fante variety of Akan with every non-Akan person that we interacted with, most of whom had never travelled to any Akan speaking community.⁵ Speaking in Fante only, even in the first few settlements into

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⁵ We got to know this when we commented on the quality of Akan, specifically, the Twi variety that they spoke. Only a few had travelled to the Akan speaking communities of Kintampo, Techiman, Kumase, and the Gold Mining town of Obuase before.
Burkina Faso from Ghana border town of Paga, we were understood to the core and we bought a few items of trade without any hitch. Everything we found about the use of Akan across the entire length of Ghana really gives credence to Boadi’s (n.d.) assertion quoted above. We, as a matter of fact, discovered that Akan has largely dislodged Hausa, a foreign language, as the lingua franca in the northern part of Ghana.

We undertook a similar research across the breadth of the country across our borders to La Cote d’Ivoire on the West and Togo on the East of Ghana. The result was the same as our findings in northern Ghana. Our journey to the West did not hit any new discovery because all the districts we covered right into parts of La Cote d’Ivoire were either Ethnographic Akan (eg. the Ahantas and Nzemas who speak Akan as second language) or Linguistic Akan (the Brongs in the Agniberekuro district in La Cote d’Ivoire that share a border with the Dormas in the Brong Ahafo Region of Ghana right down south through the Ethnographic Akan districts of the Agnis and Nzemas to Abidjan, the Ivorian capital on the coast). Our journey to the East took us through the Ga, Dangme, and Ewe speaking districts to Togo. In all these districts, speaking in Fante only, we did not encounter any difficulty interacting with all non-Akans. This is not to suggest that every non-Akan we interacted with spoke impeccable Akan; even though almost every person we spoke to understood us perfectly well, some interactants responded in affected Akan, which was expected. It is interesting to note that even in the Togo capital city of Lome, using Fante as the sole medium of communication, we were surprisingly understood up to the hilt. We did not experience much difficulty in interrelating with traders and shoppers alike in the central market (agora) where we bought items of trade with unanticipated ease. We later learnt that in that market Ewe, Akan, and French are all the languages of trade.

We found out through our interaction in Fante with our students who hail from the districts in Ghana which we could not cover in the course of our research trips that Akan is understood and used maximally in some communities whereas in others it is averagely used as lingua franca. We also discovered during our trips across the length and breadth of the country that Akan is, in reality, the language which non-educated people from different language areas in Ghana choose to communicate in. Hence, based essentially on our own research, we can safely conclude that Akan is, to a great extent, the lingua franca in Ghana, today.

1.2.5. The Akan Language: Its Genetic Relationships

We begin by looking at the Akan language and the languages with which it is genetically related. According to Greenberg (1963, 1966), the Akan language group genetically belongs to a group of languages of West Africa known as Kwa, which in
turn belongs to a larger family of languages which he has labelled *Niger-Congo*. Since the publication of Greenberg (ibid.), the composition of Kwa has undergone comprehensive modification. Stewart (1989) and Williamson (1989) constitute the most up-to-the-minute published statement on the place of Kwa in the Niger-Congo family. For our present objective, it is adequate to state that Greenberg’s (ibid.) entire Eastern Kwa as well as Kru, Ijo and the Togo Remnant languages have been detached from Greenberg’s (1963) original Kwa and re-assigned to his original Benue-Congo. On the strength of this proposal the “new-fangled” Kwa is, to all intents and purposes, Greenberg’s Western Kwa.

A vital subgroup contained in Greenberg’s original Western Kwa or the “new-fangled” Kwa is his “Akan”. This has sometimes been referred to in the literature as *Volta-Comoe*. The taxonomic position of the Akan language and its dialects at levels below Kwa is more certain. The most recent phylogenetic classification of Stewart (1966, 1970) has proposed that Volta-Comoe or Greenberg’s Akan be re-labelised Tano as the following family tree diagram shows.

Following Christaller (1875), Greenberg (1963: 8) applies the term *Akan* to refer to a subgroup of his Kwa. He then catalogues *Twi, Anyi, Baoule, Guang, Metyibo* and *Abure* as representing Akan. While recognising Fante and Twi as closely related
dialects, Westermann and Bryan (1952: 78), on the other hand, group them with other languages as follows:

i. Twi-Fante
ii. Anyi-Baoule
iii. Guang

This grouping is identical with Greenberg’s Akan, except for the fact that it highlights the linguistic unity of *Fante-Twi* (Boadi n.d.). Westermann and Bryan (ibid.) have argued that Akan was originally the collective name used to cover the inhabitants of Akuapem, Akyem, Asante (Ashanti), Akwamu and some other territories but it is now used by Europeans to denote the whole group of people speaking the language of this group.

1.2.6. The Akan Language Group: True Dialects not Separate Languages

Some scholars lament over the fact that although, for all practical purposes, Fante and Twi constitute one and the same language on the strength of the concept of mutual intelligibility, there exists an inclination to lay emphasis on the distinctions between them. And for this reason, diverse versions of the Holy Bible have, for instance, been published in Fante and Twi. What is more, at all levels of education in Ghana, Fante and Twi have separate entries on the class timetable and are handled by separate teachers/experts. We believe that all perceivable distinctions between the so-called dialects of Akan are the direct result of lack of an operative unified orthography for the so-called Akan language group.

The theory of mutual intelligibility is not enough to classify two or more codes as variants of the same language. All the world over, codes that are known to be mutually intelligible are classified as separate languages if each has its own separate orthography. There are also codes between which exists zero percent intelligibility but are considered as dialects of the same language because they use one and the same orthography. Norwegian, Swedish and Danish are archetypal examples of the former while Mandarin and Cantonese in China illustrate the latter. Thus, even though we emotionally refer to Fante, Akuapem and Asante as being dialects of one and the same language, orthographically they are separate languages. It is therefore natural that the Holy Bible is published in Fante and Twi and also teachers are trained to teach Fante and Twi separately in academic institutions. If the Holy Bible were written in Fante, Twi speakers would not be able to read and understand it and vice versa (Dolphyne, 1988).
It is obvious from the foregoing that the constituents of the Akan language group could be argued to be technically three distinct languages as well as dialects of the same language, depending upon how one looks at them from the sociolinguistics standpoint. However, our use of the term *Akan* in this paper reflects the standard usage adopted by the government of Ghana, the Bureau of Ghana Languages and the universities of Ghana that the names *Fante* and *Twi* should designate the dialects of a language known as *Akan*. To the average Ghanaian today, the language referred to as Akan comprises the Fante and Twi dialects.

It is important to note that the activities of the Wesleyan and Basel missions in the Gold Coast which began as far back as the 19th century brought about the theory that these two dialects constitute two diverse languages. During that period, these missions embarked upon vigorous literary work on the coast and in the inland of the Gold Coast colony, respectively. They never ever consulted with each other on the matter of orthography and the production of grammars and dictionaries of these dialects in their respective mission areas (Boadi, ms). The Wesleyans labelled the coastal variety of Akan *Fante* by reason of the fact that the speakers referred to themselves and their variety of *Akan* by this name. The Basel missionaries, on the other hand, labelled the varieties spoken on the Akuapem Hills and Akyem in the colony *Twi*. The name *Twi* is nowadays used as a label for the varieties of Akan spoken in such areas as Akuapem, Akuamu, Akyem, Assin, Asante, Bono, Denkyira, Kwahu and Wass, while Fante refers to the coastal varieties (Boadi ms).

### 1.7. The Akan Language: Classification

The Akan language is classifiable dichotomously as Fante and Twi inasmuch as all the non-Fante dialects are collectively referred to as Twi - this classification is clearly reflected in the title of Dolphyne (1988), “The Akan (Twi-Fante) Language: Its Sound Systems and Tonal Structure”. Since the Twi speakers of Akan are located inland and the Fante on the coast, the Akan language is classifiable dichotomously as Coastal and Inland Akan (Abakah 1993, 2002). The following family tree captures this classification.
2.0. Diachronic Development of the Akan Language Group

Languages are not static, but they are constantly changing. In the words of Fox (1995: 1)

the latest slang comes and goes, our own language is subtly but noticeably, different from that of our grandparents, and the further back we go in time the more remote and incomprehensible the language seems to be.

We also notice that some languages such as Norwegian, Swedish and Danish share similarities with one another which historical linguists assume to be the direct result of the common origins of these languages. Over the course of time, languages (say, English, German and Dutch) which might have been originally very similar like the Scandinavian languages are today, could diverge to the point where they would be mutually unintelligible. It behoves linguistics, specifically diachronic (or historical) linguistics, to attempt to answer questions relating to why and how these changes come about and the means that can be applied to find out.

Joseph (2003: 121) has remarked that scholars have long been intrigued by the mix of diversity and similarity that human languages show; and that one of the most promising among the hypotheses that have been advanced to explain this mix claims that, at least, some of the known languages show certain similarities because they represent later instantiations of a once single speech community. In other words, it has been hypothesized that a single speech community, through the accumulation of changes brought about by several linguistic factors aided by migration, resettlement and physical split in the community, can over time divide and spawn numerous separate and ultimately distinct speech communities. These resulting languages are
said to be genetically related (indeed, where *genetic* has its etymological sense pertaining to *origin* not the more modern biological sense) and the original speech community is referred to as proto-language (or parent language) for its several offspring languages.

2.1. The Methods of Reconstruction

To reconstruct a proto-language, historical linguists have established a number of methods. These include the comparative method, internal reconstruction, Language universals and Linguistic Typology. In historical linguistics, The Comparative Method and Internal Reconstruction are classical orthodox traditional methods (Fox 1995: vi), and, they “remain the most important methods of reconstruction” (Fox, 1995: 7; Trask, 1996: 248). Joseph (2003: 123) has also remarked that critical to the establishment of relatedness is the issue of methodology and here, the most important method is the Comparative Method. Lehmann (1973: 75) has also argued, “A surer method of dealing with change and determining earlier forms … is known as comparative method.” We also think that for us to come out with hypotheses on the historical development of the Akan language group, we cannot dispense with the Comparative and Internal Reconstruction methods.

2.1.1. The Comparative Method

The constituent varieties of the Akan language group have already been established as being related by historical linguists. Their relationships with other languages have also already been taken care of. What remains to be done is to reconstruct the Proto-Akan forms and this is what this paper sets out to do within the framework of the comparative method (CM). By the CM corresponding features, more usually segmental sounds in corresponding words but also morphemes and even syntactic structures are compared with an eye to determining a set of systematic relationships that hold among the languages being compared. When such systematic correspondences can be found, then one can also draw inferences about the source from which the related languages arose.

According to Joseph (2003), “when the CM works, it is possible to make hypotheses about earlier states from which the related languages developed and to reconstruct (aspects of) ancestor languages that gave rise to the set of related languages in question”. For example, the recurring correspondence set involving /p/ in Greek, Latin and Sanskrit matching /f/ in Germanic (under certain conditions) has led most Proto-Indo-Europeanists to a reconstruction of /p/ for the sound in the source language (Proto-Indo-European) that gave rise to offspring languages.
If an element A in one language can be systematically compared to a non-
identical element B in another (putatively related) language, and the hypothesis is 
made that they derive from a reconstructed element C (usually affixed with * to 
indicate that the reconstruction is a hypothesis not an attested form), then at least one 
change has occurred – either A has changed and B reflects the reconstructed element 
faithfully, or B has changed and A has not or both A and B have changed, in different 
directions. Thus, if we reconstruct the Proto-Indo-European *p for the set of Sanskrit  
p equals Germanic f, we are committing ourselves to the hypothesis that Germanic is 
innovative in this case. Had we reconstructed something like an affricate *pf then 
there would have been change in all the languages being compared.

3.0. Diachronic Study of the Vowels of the Akan Language Group

Synchronically, Akan appears to have ten vowels if the oral/nasal distinction is 
disregarded. These vowels are - i, ɪ, e, o, ɛ, ɔ, a, æ, u and ʊ. However, a close study 
of research on the Akan vowel harmony (VH) suggests that there is controversy over 
the number of vowels contained in the Akan vocalic inventory. Some scholars claim 
that Akan has 9 vowels at the systematic phonemic level but 10 distinct ones at the 
systematic phonetic level. Others argue that Akan has 9 vowels at both phonemic and 
phonetic levels. Linguists who posit that Akan has 10 distinct phonetic vowels include 
identify the following 10 distinct vowels [i, ɪ, e, ɛ, u, o, ɔ, a, æ] in the complete 
corpus of Akan and analyze them as being autonomous phonemes with the exception 
of the last one, ɛ, which is considered as an allophonic variant of a and indeed a 

Some Scholars, including Carr (1993), Archangeli & Pulleyblank (1994), 
Clements (1981), also argue that Akan has 9 vowels in its vocalic inventory at any 
level of representation. Clements (1981) argues convincingly that what some scholars 
refer to as [+ATR] counterpart of the low vowel is in fact not a [+ATR] vowel at all. 
He states categorically that

<table>
<thead>
<tr>
<th>Sanskrit</th>
<th>Greek</th>
<th>Latin</th>
<th>Gothic</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>pita</td>
<td>pater</td>
<td>pater</td>
<td>fadar</td>
<td>father</td>
</tr>
<tr>
<td>padam</td>
<td>poda</td>
<td>pedem</td>
<td>fotu</td>
<td>foot</td>
</tr>
</tbody>
</table>
The contrast between the vowels a and à is not phonemic in Asante. [a] is raised and fronted low vowel (often transcribed [ə]) which approaches [ɛ] in articulation, occurs to the exclusion of [a] in the following environments... (114)

The environments listed with long lists of examples point to the fact that à occurs in Asante in the environment of a following [+ATR] floating or nonfloating P-segment. Clements (ibid: 154) then goes on to posit that:

The set 2 vowels /i u e ð a/ have the raised variants [i ð e ð a] when the first syllable of the following word begins with a [+high, advanced] vowel. In this context, set 2 high vowels merge completely with set 1 vowels: that is, [i u] = [i u], respectively. However, nonhigh vowels do not merge completely with set 1 vowels...

Clements (ibid: 156) further argues that:

It should be apparent that the rule ... determining the occurrence of low vowel [a] is nothing but a special case of Vowel Raising. Notice that only /a/ is subject to the effect of Vowel Raising word-internally, since nonlow vowels will always undergo VH.

These linguists agree that the vowels of Akan, on the strength of their distributional pattern, are classifiable into two matching sets, Set I and Set II. Those linguists who claim that Akan has 10 distinct vowels at the phonetic level classify the ten vowels as follows:

(2)  
| Set I vowels | /i, u, e, o, æ/ |
| Set II vowels | /i, u, e, ð, a/ |

Those who claim Akan has 9 vowels classify the vowels differently as follows:

(3)  
<table>
<thead>
<tr>
<th>Set I</th>
<th>Set II</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>i</td>
</tr>
<tr>
<td>u</td>
<td>u</td>
</tr>
<tr>
<td>e</td>
<td>e</td>
</tr>
<tr>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>ð</td>
<td>ð</td>
</tr>
<tr>
<td>a</td>
<td></td>
</tr>
</tbody>
</table>

The above classification, (3), seems to suggest that these scholars identify 4 [+ATR] vowels, 4 [-ATR] vowels and one neutral vowel; that is, the low vowel belongs neither to Set I nor to Set II. It is, therefore, not surprising that Kenstowicz (1994), Lee (1994) and others argue that besides being opaque in Akan, “the low vowel /a/ is neutral with respect to the vowel harmony” (Lee 1994: 85).
Be that as it may, we assume that regardless of the number of vowels contained in the Akan vocalic inventory, Proto-Akan had only seven vocalic melodies, namely *i, *u, *o, *e, *a and *æ in its segmental inventory. This fact will be made clear in the relevant portions of this paper. Let us study the following data containing words which are historically related in the Akan language group.

### (4) Nouns

<table>
<thead>
<tr>
<th>Orthography</th>
<th>Iguae</th>
<th>Boka/Anee</th>
<th>Agona-Wasa</th>
<th>Akuapem Twi</th>
<th>Asante Twi</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Òpanyin</td>
<td>òp'ẹnị́n</td>
<td>òp'ẹnị́n</td>
<td>òp'ẹnị́n</td>
<td>òp'ẹnị́</td>
<td>òp'ẹnị́ ‘adult’</td>
</tr>
<tr>
<td>b. Òbarimba</td>
<td>òb'erimà</td>
<td>òb'erimà</td>
<td>òb'erimà</td>
<td>òb'erimà</td>
<td>òb'erimà ‘man’</td>
</tr>
<tr>
<td>c. Badu</td>
<td>òdù</td>
<td>òdù</td>
<td>òdù</td>
<td>òdù</td>
<td>òdù ‘child’</td>
</tr>
<tr>
<td>d. Òbanku</td>
<td>òb'ẹnjù</td>
<td>òb'ẹnjù</td>
<td>òb'ẹnjù</td>
<td>òb'ẹnjù</td>
<td>òb'ẹnjù ‘food item’</td>
</tr>
<tr>
<td>e. Afua</td>
<td>òfùa</td>
<td>òfùa</td>
<td>òfùa</td>
<td>òfùa</td>
<td>òfùa ‘name’</td>
</tr>
<tr>
<td>f. Ampire</td>
<td>òmp’ire</td>
<td>òmp’ire</td>
<td>òmp’ire</td>
<td>òmp’ire</td>
<td>òmp’ire ‘contest’</td>
</tr>
</tbody>
</table>

A close examination of the examples in (4) will reveal that in all contexts where Iguae has ò, Wasa-Agona consistently has ò while Akuapem and Asante have ò and Boka ò. It must also be noted that ò in Iguae is ò which is raised to ò in order to agree with the vowels following it in being advanced vowels. ò in Asante and Akuapem is basically an ò that is raised, but not to the point of attaining [+ATR] status, when it occurs before an advanced vowel. Thus it is simply a raised version of ò (Clements, 1981; Archengeli & Pulleyblank, 1994; Abakah, 2003). In the related Kwa languages of Dangme, Ga and Ewe (4e) is produced as bâŋkù. Linguists generally claim that Ewe, Ga and Dangme do not operate the VH system in their phonologies; for this reason, we do not expect ò to alternate in order to agree with the following advanced vowel in being [+ATR].

Moreover, it is also rare to find the ò sound in any Akan verb root. All the vowels of Akan can constitute the syllabic peak of any CV syllable but not ò or ò or ò. Furthermore, ask any Akan to come up with verbs in which the ò sound features

---

6 It is in the Boka variety of Fante that ò constitutes the syllabic peak in two or so CV words.
regardless of quantity of syllables and s/he cannot get you any. Data (5) contain examples of Akan verbs with CV and CVC structures and we can see that words containing e are lacking. None of the Akan varieties that are written has any verb whose root vocalism is e. Anytime e emerges in any verb or often in any word belonging to any class then it is /a/ that is conditioned by an adjacent [+ATR] vowel. It must be noted that none of the varieties of Akan has the ae vowel in phonological representations apart from the Boka variety of Fante. æ appears at the Akan phonetic surface much in the same way as e and a in the other varieties as (4) demonstrates.

It is therefore plausible to hypothesize that Proto-Akan does not have æ and e and that these vowels developed from the proto-Akan form *a. Another vowel that behaves in the same way as e and æ is o. It also occurs in a few words but cannot be found in any Akan verb in any of the three Akan orthographies. Let us consider the following data:

(6) Orth. | Iguae | W. Ag. | Boka | Ak. | As. | Gloss
--- | --- | --- | --- | --- | --- | ---
a. bio | bijew | biem | b’o | b’o | biem | again (adv)
b. muoko | mukuo | mukuo | muoko | mako | mako | pepper
c. nyew | iñow | iñow | iñow | jiw | ____ | yes (adv)
d. ekoo | ekuow | akoo | ãkoo | ãkoo | ãkoo | parrot
e. ewia/owia | ewia | ewia | owia | owia | owia | sun
f. bɔ ti | abotsir | abutsir | ãbortsir | abotiri | abotire | headgear
g. abomu | abom | abomu | abom | abomu | abom | stew

(7) Orth. | Iguae | W. Ag. | Boka | Ak. | As. | Gloss
--- | --- | --- | --- | --- | --- | ---
a. dwe/dwo | dzqi | dzqi | guo | dzquo | dzqu | to cool
b. kɔ mu | kom | komu | kom | kom | kom | enter
c. sɔ mu | som | somu | som | som | som | hold it
d. bɔ mu | bom | bom | bom | bom | bom | knock at it

Apart from a few nouns that appear to have o as the root vocalism, as reflected in (6b) and (6d), there is no common vowel in the Akan varieties in the list and even where o is not in the orthography some of the dialects have it (ɔ) as the stem vocalism. Indeed, there is no verb in Akan that has o as its root vocalism and that all verb stems that have o as root vocalism happen to be compound words in which the o occurs in the environment of a [+ATR] vowel. The orthographical forms in the first column reflect this fact. By this we mean to say that o appears at the phonetic surface in many words in Akan as a result of the Akan VH process whereby a [+ATR] vowel assimilates i into o. This brings us to the conclusion that Proto-Akan did not have [+ATR] mid vowels and that e and o developed out of the VH process in Akan. For æ many scholars who have studied the VH process in Akan, as noted above, claim that
Akan does not have it. Like e and o, it has also developed into the language group via the VH process.

Having assumed that this o vowel did not occur in Proto-Akan, we need, at least, one or two other conclusive pieces of evidence to enable us to confidently hypothesize as to whether or not o developed into the present day Akan from some other vowel as a result of the VH process in Akan. These kinds of evidence are

- documentary evidence that takes us far back into the history of the Akan language, and
- empirical data from the sister Kwa languages or from other daughters of the Niger-Congo parent language.

In the absence of such evidence, we cannot come out with any hypothesis except to assume that o entered into the Akan language recently. How recent is, for the moment, hard to tell.

However, there is one particular word in Akan whose etymology is highly discernible and, seeing it has not completed the metamorphosis that it is undergoing, it provides evidence that reinforces our hypothesis that e and o were not part of the Proto-Akan vocalic inventory but actually entered into the Akan language over the course of time. This word which means *an enchanter/a Muslim/a Mohammedan* in Akan has three distinct realizations at the phonetic level. These phonetic representations are 1) kramoni (Ig/Bk.)/kramoni (all the other varieties of Akan), 2) kræmoni (all varieties of Akan) and 3) kræmoni (Ig./Bk./kræmoni(An/Ag). It is a compound word made up of the following elements, kramo ‘to pray/to enchant’ + ni ‘person/the agentive morpheme’. It could be easily argued that the a and the o in kramo should naturally become e and o, respectively, in line with the Akan VH process by which any vowel that is specified as [+ATR] spreads leftwards to all the preceding vowels that have [-ATR] specification in their matrix within a specified domain. Hence, when ni/ni is attached to kramo on the right, the i in ni being a [+ATR] vowel, as you would expect, spreads to all the vocalic melodies of the preceding u-level element, kramo, thereby yielding [kræmoni]/[kræmoni]/[kræmoni]/kremoni ‘Muslim’ at the p-level.

Let us illustrate this account graphically with the following derivation:

(8) [-ATR]       [+ATR]  Underlying Representation

\[
\begin{array}{c}
\text{k r a m o} \\
\text{n i}
\end{array}
\]
This account, looked at in isolation, may not actually give credence to our hypothesis because \( \text{a} \) and \( \text{o} \), occurring in an identical phonetic environment, will naturally become \( \text{æ/e} \) and \( \text{o} \), respectively, due to the VH effect. However, it is interesting to note that the term for ‘the Islamic religion,’ has three discrete pronunciations as the following \text{kramo/kraemo/kremo} and exhibits the mutation of the Proto-Akan word-final \( \text{u} \) of kramu to \( \text{o} \) via vowel lowering process. Based on the various ways by which the \( \text{o} \) vowel surfaces at the Akan phonetic level, it is conceivable to assume that \( \text{o} \) developed quite recently into the Akan language group from \( \text{a} \) and \( \text{o} \) and probably other vowels that occurred in the environment of a \([+ATR]\) in the Proto-Akan.

The fact that this word has three diverse phonetic representations is explicable by the fact that it (the word) has not fully gone through the process of metamorphosis. With some speakers of Akan, the \( \text{a} \) is yet to mutate to either \( \text{æ/e} \) or \( \text{e} \), while with others the change has already taken place. But then it is fascinating to note that those speakers who have already replaced \( \text{a} \) in kramu with either \( \text{æ/e} \) or \( \text{e} \) are often found to pronounce it with the \( \text{a} \). This therefore seems to suggest that most speakers of Akan use kramo, kraemo and kremo interchangeably. This word, needless to say, largely demonstrates how \( *\text{a} \) transforms to \( \text{æ/e} \) in Akan, thereby reinforcing our hypothesis that \( \text{æ/e} \) did not occur in the Proto-Akan but originated from \( \text{a} \) via vowel raising and VH process. It also demonstrates how underlying \( \text{o} \) transmutes to \( \text{o} \), thereby providing us with near conclusive evidence that \( \text{o} \) could have come into the Akan language group out of \( \text{a} \) and \( \text{o} \) and possibly other Proto-Akan vowels through the VH process.

4.0. Diachronic Study of the Consonants of the Akan Language Group

Akan has the following 14 systematic phonemes \(/\text{p, b, t, d, k, g, m, n, r, f, s, h, j, w/} \). See Eshun (1993) and Abakah (2004, forthcoming a). We assume that all these consonants occurred in the Proto-Akan segmental inventory even though some scholars, including Schachter (1962) and Schachter and Fromkin (1968), argue that \( \text{r} \) did not occur in Proto-Akan but was rather borrowed from the English language. This argument has been proven to be untenable and not reflecting the true state of affairs
by Eshun (1993) and Abakah (1993, 2003, 2004, forthcoming a) with primary data plus secondary data from Dolphyne (1988). These Proto-Akan consonants invariably undergo secondary modifications when they occur in the environment of a following vowel. So, quite a number of phonetic consonants appear at the phonetic surface in Akan synchronic phonology. However, not all the phonetic consonantal melodies in Akan are synchronic. Some have occurred in the language diachronically and, in this section, we will demonstrate how such consonants developed diachronically into the Akan consonantal inventory. Let us begin by looking at the data below.

### (9) Orth. Iguae | Anee | Boka | W.Ag | Ak. | As.
---|---|---|---|---|---
| a. bue | bwei | bwei | bwee | bue | b güc ‘open’ |
| b. pue | pwei | pwei | pwee | pue | p güc ‘go out’ |
| c. tue | twei | twei | twei | tțe | tțe ‘to punch a hole’ |
| d. kuaw | kuaw | kuaw | kuaw | ku | kṳ ‘farming’ |
| e. guaw | g”ua | g”ua | g”ua | g”ua | dzʋ ‘market’ |
| f. afuwa | afuwa | afuwa | afuwa | afuwa | afuwa ‘female name’ |
| g. mua | mʋa | mʋa | mʋa | mʋa | mʋa ‘whole’ |

### (10) Orth. Iguae | Anee | Boka | W.Ag | Ak. | As.
---|---|---|---|---|---
| a. dua | dʋia | dʋia | dʋia | dʋia | dʋia ‘tree’ |
| b. tua | tʋia | tʋia | tʋia | tʋia | tʋia ‘to pay’ |
| c. nua | nʋia | nʋia | nʋia | nʋia | nʋia ‘sibling’ |
| d. doa | dʋia | dʋia | dʋia | dʋia | dʋia ‘to arrest’ |
| e. toa | tʋia | tʋia | tʋia | tʋia | tʋia ‘join’ |
| f. noa | nʋia | nʋia | nʋia | nʋia | nʋia ‘to cook’ |
| g. soa | sʋia | sʋia | sʋia | sʋia | sʋia ‘carry’ |
| h. boa | bʋa | bʋa | bʋa | bʋa | bʋa ‘to help’ |
| i. mpoa | mʋ’wa | mʋ’wa | mʋ’wa | mʋ’wa | mʋ’wa ‘to defy/challenge’ |
| j. angoa | aŋ’ua | aŋ’ua | aŋ’ua | aŋ’ua | aŋ’ua ‘cooking oil’ |
| k. koa | k”wʋa | k”wʋa | k”wʋa | k”wʋa | k”wʋa ‘bend’ |
| l. moa | m”wʋa | m”wʋa | m”wʋa | m”wʋa | m”wʋa ‘to narrow’ |

### (11) Orth. Iguae | Anee | Boka | W.Ag. | Ak. | As.
---|---|---|---|---|---
| a. hua | eʋu | eʋu | eʋu | eʋu | eʋu ‘beggar’ |
| b. hue | mi | mi | mi | mi | mi ‘to pour’ |
| c. hoa | mʋwa | mʋwa | mʋwa | mʋwa | mʋwa ‘to fade’ |
| d. hor(o) | mʋr | mʋr | mʋr | mʋr | mʋr ‘to wash’ |
| e. huw | mʋw | mʋw | mʋw | mʋw | mʋw ‘to blow air’ |
| f. hnx | ṟi | ṟi | ṟi | ṟi | ṟi ‘boundary’ |
| g. hnxn | ṟi | ṟi | ṟi | ṟi | ṟi ‘vehicle’ |
| h. ahī | ahī | ahī | ahī | ahī | ahī ‘annoying’ |
According to the Neogrammarian Hypothesis (a conclusion based on successful use of the comparative method) reconstruction revolves around the notion that sound change is mechanical and exceptionless. If a *proto-\( /p/ \) becomes /\( f/ \) in a daughter language, it does so in a regular fashion. If there are exceptions, there must be some other conditioning factor. The data I have just given above give weight to the Neogrammarian Hypothesis in that the phonological changes are very regular. The exceptions are also conditioned by phonological factors. If we look at (9) through (10c) we see that any consonant that occurred before a \( CV_1V_2 \) word where the \( V_1 \) is \( u \) and the \( V_2 \) is either \( e \) or \( a \) the \( C \) became labial palatalized in Asante. Some of the Proto-Akan phonemes can be established, based on the above data.

From the first two columns in (9), for instance, it is realized that the Akuapem and Wassa spoken in Wassa-Agona is closest to the Proto-Akan form and from this form the \( b \) and \( p \) *Proto-phonemes have become the labial palatalized \( bu \) and \( pu \), respectively. If we take the data column by column from (9c-10c), we can easily establish the Proto-Akan phonemes and these are confirmed by the orthographical representation in the first row. The Proto-Akan phonemes are \( t, n, k, g, f, m, \) and \( d \). If we go further to the first two columns in (11), we realize that the *Proto-phoneme \( h \) changed to \( cu \) when it occurred in the same phonetic environment. All these consonants regularly changed in Asante and Akuapem, becoming labial palatal(ized) without any trace of how the process of labial palatalization came about in the language. Hence, these consonants have received promotion to the labial palatal status in the Akuapem and Asante dialects of Akan. This may be stated as \( p > pu, b > bu, t > tu, n > nu, k > ku, f > fu, m > mu, d > du \) and \( h > cu \), meaning that Proto-Akan phonemes have become labial palatalized. We note that the change is regular but with exceptions and these exceptions are conditioned by a certain phonological factor in line with the Neogrammarian Hypothesis. The only time that the change to labial palatalized form failed to materialize in Asante was when the high back vowel following the \( C \) is specified as \( [-ATR] \). Consider examples (10d)–(10k) and (11c) for illustration.

There is also a regular changing of Proto-Akan alveolar consonants to labial palatalized forms in the Akuapem dialect and the Iguae, Anee and Boka varieties of Fante when the \( C \) preceding the high back vowel in a \( Cu/a/Cu\) string is specified as [CORONAL] irrespective of the [RADICAL] value of the \( U \) in the string. Let us study (10a-g) for illustration. With coronals in this position, the change to labial palatalized form in all the dialects is completed but to a limited extent. Apart from the three varieties we have looked at, all the remaining varieties of Akan do not experience this change when the \( U \) in question is \( [-ATR] \). Thus Proto-Akan phonemes \( d, t, n, \) and \( s \) became \( du, tu, nu \) and \( su \), respectively, in Fante. We can therefore hypothesize
that the development of labial palatalized consonants that have become labial palatal from their respective Proto-Akan phonemes were occasioned by different phonological factors in different dialects. Whereas it occurred in Asante only when the C preceded an advanced vowel, in Iguea, Anee and Boka the C in question had to be alveolar only.

4.1. Development of Voiced Plosives into Nasal Consonants

Some nasal consonants in Akan developed into the language out of voiced plosives in Proto-Akan. A sequence of two nasal consonants does not occur in the language as a result of consonant germination but rather, as demonstrated by the data below, via the assimilation of voiced plosives by a preceding homorganic nasal consonant. This development has occurred in all the Twi varieties of Akan diachronically to the extent that it is impossible to have a N-VPl\(^7\) sequence in Twi. In Fante, on the other hand, such a development has started recently and could be found in a very few morphemes most of which constitute the data below. Hence, morphemes that have a sequence of N and VPl in phonological representations in all the varieties of Fante have two interchangeable phonetic representations, one representing the ongoing change and the other representing the Proto-Akan forms still in use as the data below illustrate. In this data, the homorganic nasal consonant and the following voiced plosive are underlined.

(12) | *Proto forms | Twi | Fante | Gloss |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. hëmba</td>
<td>hëmba/hâmba</td>
<td>hëmmâ/hâmmâ</td>
<td>canoe</td>
</tr>
<tr>
<td>b. shimbaa</td>
<td>shimmâa</td>
<td>shimbaa</td>
<td>queen</td>
</tr>
<tr>
<td>c. amba</td>
<td>ammâ</td>
<td>amba/ammâ</td>
<td>name of female</td>
</tr>
<tr>
<td>d. amboa</td>
<td>ammôã</td>
<td>ammôwâ</td>
<td>male name</td>
</tr>
<tr>
<td>e. tambaa</td>
<td></td>
<td>tambaa/tômmâ</td>
<td>female (cloth) belt</td>
</tr>
<tr>
<td>f. andô</td>
<td>anôô</td>
<td>andô/annô</td>
<td>male name</td>
</tr>
<tr>
<td>g. ndam</td>
<td>nnam</td>
<td>ndam/nnam</td>
<td>sharp</td>
</tr>
<tr>
<td>h. ndaamba</td>
<td>ndaamba</td>
<td>ndaamma</td>
<td>the future</td>
</tr>
<tr>
<td>i. ngô</td>
<td>nn*ôô</td>
<td>ngôô</td>
<td>cooking oil</td>
</tr>
<tr>
<td>j. nga</td>
<td>nnå</td>
<td>nga</td>
<td>sore at corners of mouth</td>
</tr>
<tr>
<td>k. ngo</td>
<td>nn*ôo</td>
<td>ngôô</td>
<td>kerosene/oil</td>
</tr>
</tbody>
</table>

\(^7\) N and VPl stand for nasal consonant and voiced plosive, respectively.
It is discernible from the above data that the Proto-Akan N-VPl sequence has developed into an N-N sequence in all the Twi varieties of Akan. In the Fante varieties, this development has taken place relatively recently in a few morphemes whose post-N voiced plosive is either bilabial or alveolar. It is evident that morphemes with voiced velar plosive as the post-N consonantal segment has not received any development in Fante at all even at the present time. Moreover, it is clear from data (12) above that the Fante morphemes whose post-N /b/ or /d/ has developed into a nasalized consonant identical to the preceding /m/ or /n/, respectively, are relatively minimal on the low side. Here, the *proto forms and the changed forms are used interchangeably, as the examples illustrate. But the voiced velar plosive has not undergone any form of change in any of the Fante varieties in the same phonetic environment, as noted above, and there is no trace of its undergoing this kind of development.

Consequently, Proto-Akan consonantal sequences *mb, *nd and *gg became mm, nn and gg, respectively, in Twi. In other words, a postnasal voiced noncontinuant in Akan developed into a nasal consonant identical to the N it precedes in the Twi varieties of Akan. The following phonological rule gives a graphical representation of the diachronic/developmental process in question:

\[
\text{Twi} \begin{bmatrix}
\alpha_{\text{Back}} \\
\beta_{\text{Anterior}} \\
\text{C} \\
\text{-Continuant} \\
\text{+Voiced}
\end{bmatrix} \rightarrow [+\text{nasal}] \begin{bmatrix}
\text{C} \\
\text{+ Nasal}
\end{bmatrix}
\]

This rule says that a voiced plosive, whether back or anterior, in Twi became a nasal consonant in the environment of a preceding nasal consonant. This development has since begun in the Fante varieties of Akan. The changes, specifically the first two situations (i.e. *mb > mm, and *nd > nn) are relatively recent and evidently the development is ongoing even as there is no trace at all of the last change (i.e. *gg > gg) in any known Fante variety.

4.2. **Sibilantization/Assibilation of Alveolar Plosives in Fante**

The Proto-Akan alveolar plosive consonants *t and *d became assibilated to ts and dz, respectively, in most of the Fante varieties of Akan when they occurred in a palatalizing environment, specifically when they preceded a palatal/front vowel. In other words, these consonants changed to spirants via a process generally referred to as assibilation which Abakah (2003, Forthcoming b) has variously referred to as spirantization, sibilantization and affrication. The Twi varieties of Akan, on the other hand, have not gone through any consonantal shift, thus sticking to the *proto forms of these consonants as the following data illustrate:
In the above data, the alveolar plosives in examples (13v-viii) have not undergone assimilation inasmuch as they do not occur in the phonetic environment that elicited assimilation. But in (13i-iv) *t in all the Fante varieties has been assimilated to ts with the exception of the Agona variety which has palatalized it to tc.

With regard to the voiced alveolar plosive, *d, the assimilation process has not been completed in all the Fante varieties inasmuch as the assimilated forms are not completely associated with the Anee, Agona and Breman speakers of Fante. However, a number of Anee, Agona and Breman speakers use the Proto-Akan form and the assimilated form interchangeably. This development seems to suggest that the change, *d > dz, in Fante might have been preceded by the *t > ts change and for that reason the *d > dz change is in progress in the Anee, Agona and Breman varieties.

5.0. Conclusion

In this paper, we have attempted to reconstruct how certain autonomous phonemes and allophones both vocalic and consonantal alike developed into the Akan language group. We have posited that Proto-Akan had seven vowels namely /i, u, i, o, e, a, a/ in its vocalic inventory but over the course of time /e, o, æ-a/ developed into the Akan language group via the VH process. We have also argued that Proto-Akan had 14 consonantal phonemes but there are presently as many as 64 systematic phonetic and systematic phonemic consonants in Akan. A number of consonants has been added to the Proto-Akan consonantal segments and are redundantly autonomous phonemes. Examples of the additional autonomous/systematic phonemic consonants which, indeed, developed into the Akan language group through varied phonological processes, traces of which cannot be found in the synchronic phonology of the language, have been tacitly referred to in Dolphyne (1988) and Abakah (1993).

We have also demonstrated in this paper that some nasal consonants in Akan are indeed nasalized consonants, by reason of the fact that any sequence of identical nasal consonants (i.e. N1-N2) in Akan does not reflect consonant germination but rather the N2 happens to be an underlying voiced plosive assimilated into a nasalized consonant

<table>
<thead>
<tr>
<th>(13)</th>
<th>Twi</th>
<th>Iguae</th>
<th>Boka</th>
<th>Anee</th>
<th>Agona</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>i.</td>
<td>*t &gt; ts</td>
<td>tie</td>
<td>tseì</td>
<td>tsìe</td>
<td>tìe</td>
<td>to listen</td>
</tr>
<tr>
<td>ii.</td>
<td>*t &gt; ts</td>
<td>tì(w)</td>
<td>tìrw</td>
<td>tìrw</td>
<td>tìrw</td>
<td>to pluck</td>
</tr>
<tr>
<td>iii.</td>
<td>*d &gt; dz</td>
<td>di</td>
<td>dìzì</td>
<td>dìzì</td>
<td>dì</td>
<td>to eat</td>
</tr>
<tr>
<td>iv.</td>
<td>*d &gt; dz</td>
<td>dìn/dìŋ</td>
<td>dìzn</td>
<td>dìzn</td>
<td>dìn</td>
<td>hard</td>
</tr>
<tr>
<td>v.</td>
<td>*tɔ</td>
<td>tɔ</td>
<td>tɔ</td>
<td>tɔ</td>
<td>tɔ</td>
<td>to buy</td>
</tr>
<tr>
<td>vi.</td>
<td>*tu</td>
<td>tu</td>
<td>tu</td>
<td>tu</td>
<td>tu</td>
<td>to dig/fly</td>
</tr>
<tr>
<td>vii.</td>
<td>*da</td>
<td>da</td>
<td>da</td>
<td>da</td>
<td>da</td>
<td>sleep/day</td>
</tr>
<tr>
<td>viii.</td>
<td>*adomò</td>
<td>adöm</td>
<td>adöm</td>
<td>adöm</td>
<td>adöm</td>
<td>grace</td>
</tr>
</tbody>
</table>
diachronically. In other words, in a sequence of an identical N₁-N₂ consonants in Akan, the N₁ is invariably phonemic whereas the N₂ is phonetic. Furthermore, we have, in this paper, also shown that Proto-Akan coronal consonants *t and *d developed/assibilated into ts and dz, respectively, in Fante. These changes have been assumed to come about much recently. However, while the change of *t to ts is comparatively extensive, that of *d to dz is less extensive. It has been illustrated that these changes are systematic, thereby giving credibility to the Neogrammarian concept of systematic and exceptionless changes.

We assume that in view of the fact that diachronic study of Akan linguistics, like the phonologies of most African languages, has received scant attention in the literature probably due to the fact that written evidence of historical changes in all our languages belonging to preliterate societies is lacking, this study will challenge scholars to take up research into the diachronic linguistics of the various Ghanaian / African languages in order to promote diachronic studies of our languages.
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