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Topic: Attributive Adjective Ordering: A Comparison of Akan And English.

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ABSTRACT

When multiple adjectival modifiers occur in the English Noun phrase, speakers of the language have an intuitive idea of how they are to be sequenced. Linguists such as Hetzron (1978), Dixon (1982), Scott (2002), Sproat and Shih (1991), claim that this order of sequencing the adjectives is universal. According to Sproat and Shih (1991), "when Adjective Ordering Restrictions occur in a language, the ordering hierarchy is, at least to a first approximation, the one observed for English". However, there are special patterns like (i) phonological re-ordering (ii)focus re-ordering (iii) indirect modification (iv) parallel modification that allow speakers of English to deviate from the proposed basic hierarchical order. Akan which is a language belonging to the Kwa language group and spoken in Ghana West Africa has not been widely studied when it comes to the ordering of adjectives. The study done reveals a relatively free ordering of Akan adjectival modifiers in the noun phrase. This work is a further investigation on whether Akan follows the proposed hierarchical order or exhibits one or more of the special patterns for deviation.

Data for this work is the interview of 40 speakers of Akan using questionnaires on their intuitive judgment on how they sequence multiple adjectival modifiers in the Akan noun phrase. The outcome of the study shows that multiple adjectival modifiers in Akan seem to follow the basic hierarchical ordering for adjectives to a large extent, but Akan also exhibits characteristics of parallel modification which seem to hide any effect of the basic hierarchical order for multiple attributive adjectives.

DEDICATION

I dedicate this work to my mother Rosaline Gaye and my daughter, Rosaline Baaba Saka

ACKNOWLEDGMENT

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ABBREVIATIONS

SUBJ	-	Subject
OBJ	-	Object
DET	-	Determiner
COMPL	-	Completive
DEF	-	Definite Article
POSS	-	Possessor
PERF	-	Perfect
PROG	-	Progressive
HAB	-	Habitual
FUT	-	Future
PLU	-	Plural
CONS	-	Conservative
SG	-	Singular
IP	-	Inflected Phrase
PST	-	Past
REL	-	Relative Complementizer
CD	-	Clausal Determiner
NP	-	Noun Phrase
N-N	-	Noun-Noun

A-N	-	Adjective-Noun
CONJ	-	Conjunction
ADJ	-	Adjective
N	-	Noun
AP	-	Adjective Phrase
E	-	Empty Category
INDEF	-	Indefinite Article
AUX	-	Auxiliary

Chapter One

1.1 Introduction

When multiple adjectives are used to modify a noun in English, speakers of the language have intuitions about how they are to be sequenced. According to Dixon (1982), (Hetzron 1978) and (Scott 2002), these adjectives are mainly put together based on the meaning (semantic class) of the adjectives. They in addition to other linguists like Hill (1958) and Seiler (1978) saw the issue with explaining adjective ordering facts as a task for linguists. They have come out with proposals to show the existence of meaning – based hierarchies that explain the order that adjectival modifiers are to follow. This hierarchy they propose is considered universal and is assumed to cater for adjectival modifiers in languages. Sproat and Shih (1991:569) have observed that "when *Adjective Ordering Restriction (AOR)* occur in a language, the ordering hierarchy is, at least to a first approximation, the one observed for English". Akan which is a language belonging to the Kwa language group and spoken in Ghana West Africa seems to have its adjectival modifiers freely ordered. This thesis investigates the order of elements of adjectival modifiers in the Akan noun phrase in Comparison with English as the latter is quite clear on how adjectives that modify a noun ought to be arranged. The focus of this thesis is going to be on adjectival modifiers that occur before the noun phrase in English. The order of adjectives that occur as pre-modifiers in the English noun phrase which are described as attributive adjectives differ from how they would occur in a language like Akan that has the adjectives occurring after the noun (Dixon 2001: 17; Hetzron 1978: 170-172). They predicted that languages (eg. Akan) that have post-modifiers will be the reverse order of English Pre-modifiers.

This chapter is going to centre on what linguists have discovered on adjective ordering and a brief mentioning of the special patterns that allow speakers of English to deviate from the proposed order. Also, the class of adjectives and its properties in English will be looked at. It will also include a brief description of the background of the Akan language and where it is spoken. There will also be a discussion on some relevant grammatical features of the Akan language to the topic under discussion including how adjectives are used in the language. The importance and aim of the study are also going to be outlined and lastly, this chapter will state how this thesis has been structured.

Linguists like Hetzron observed data from languages such as English, German, Hungarian, Hindi, Polish, and Turkish that have adjectives occurring before the noun. Languages like Persian,

Indonesian and Basque that had the adjectives occurring after the noun were also considered. He also observed languages like Italian and Latin that have the noun occurring in between the adjectives. Looking at all these different languages, he concluded that even though some of the languages are genetically unrelated, they all seemed to follow a basic hierarchical order for arranging adjectives. Based on his findings, he suggested that there seemed to be a general principle with adjective ordering. He also stated the possibility of other ordering systems including languages that do not have an ordering system at all. A typical example that belongs to the latter is Somali that has very few basic adjectives and where the sequencing of adjectives is determined by factors such as context and emphasis. The focus of this thesis, however, is on English and Akan.

As language is governed by a set of rules and principles that determine the order of words in sentences, Chomsky coined the term Generative Grammar to refer to those rules of language that allow us to understand the sentences we construct. Chomsky and other linguists who buy his idea of Generative Grammar believe that the over 5000 languages that exist in the world have a set of rules and principles that are common to them known as the Universal Grammar. They believe that there are certain syntactic principles that are universal to all languages and this could explain the idea of a universal hierarchy that governs the order for multiple attributive adjectives in a noun phrase.

Also, as suggested by Whorf (1945) in Sproat and Shih (1991:588) there is the possibility that speakers of a language order multiple attributive adjectives based on the INHERENCE (ie. An attribute that cannot be disputed) of the adjective. He sees this kind of ordering as a cognitive principle. He suggests that in English, COLOUR adjectives are more 'inherent' and as a result occur after QUALITY adjectives that are less inherent. The arrangement of adjectives using this principle has nothing to do with the grammar rules of the language and is seen as part of the work of the human brain. Sproat and Shih also add that absolute adjectives like COLOUR or SHAPE are usually closer to the head noun compared to relative adjectives like SIZE or QUALITY. The focus of this thesis is to investigate how universal the basic order proposed is in explaining attributive adjectives in Akan as it does in English.

There are special patterns that allow the speakers of languages such as English deviate from the basic hierarchical order for multiple attributive adjectives (Sproat and Shih 1991). Constructions that are produced under these circumstances are considered as grammatical by speakers of English.

The first special pattern is **Phonological re-ordering**, where two adjectival modifiers can be reordered based on the length of the syllables involved and it will still be acceptable even if it does not follow the proposed hierarchical order. The second mechanism is **Focus re-ordering** and with this, the reordered adjectival modifiers are accepted if the speaker is speaking within a special type of context. Also, for the order to be accepted, the first adjective in the construction must be stressed (Alexiadou and Wilder 1998). Also, **Indirect modification** is another type of special mechanism that allows multiple attributive adjectives to be ordered freely. In languages that exhibit this characteristic, the adjectival modifiers according to Alexiadou and Wilder (1998: 308) are claimed to be reduced relative clauses and so do not occur directly with the noun. Also, these adjectives have to be predicative adjectives as non - predicative adjectives cannot occur as indirect modifiers. Lastly, **Parallel modification** is claimed to be one of the special ways that allow multiple attributive adjectives to be ordered freely. As stated by Sproat and Shih (1991: 578-9), when the adjectives are parallel, they are treated as separate units and thereby modify the head noun independently. They also do not follow any order of arrangement. Adjectival modifiers that are parallel to each other also encode the meaning of coordination where the adjectives have equal status and are put together by the conjunction (and).

Linguists like Christaller (1875), Dolphyne and Dakubu (1988) and Kweku Osam (1999) have identified Akan as a language that has a lot of basic adjectives. Multiple attributive adjectives in Akan could be expected to follow the basic universal order for ordering Adjectives in the noun phrase. Pokua (2003) carried out the first major study in Akan which seems to suggest that Akan, unlike English, has a relatively free ordering of adjectives. Since not a lot of work has been done on the ordering of Adjectives in Akan, this work is a further investigation into the phenomenon of adjective ordering in Akan using two adjectival modifiers. It also analyses Akan considering the special patterns that allow the languages to deviate from the basic hierarchical order. Hetzron (1978) identifies this area of linguistic research as very delicate because of the confusion that respondents find themselves in when the construction involves a lot of adjectives. In his experience, he finds that the judgment of the respondents most at times become impaired.

1.2 The class of Adjectives in English

Adjectives are words that are basically used to modify a noun, they also describe some property of the thing that is being referred to by the noun, such as its origin, size, shape, colour, age, value or the impression it gives (Hurford 1994: 8). The adjective class is a part of speech just like nouns,

verbs, prepositions, and adverbs. Adjectives as a word class exhibit a considerable difference in size with some languages having an open class whiles others have a small closed class (Dixon and Aĭkhenval′D 2004). Some basic English Adjectives are *old, beautiful, fat, priceless, purple* among others. There are certain properties that adjectives can be identified by such as the suffixes -ful, -less,-ive in words like *beautiful, careless and constructive*. Most adjectives are also gradable and can be preceded by words like less and very (*less expensive and very beautiful).*

According to Aĭkhenval′D and Aikhenvald (2015), there are four core semantic types of adjectives and they are associated with large and small adjective classes. These adjective types exist in almost all languages that have adjectives.

(i) Dimension – 'big', 'small', 'wide', 'deep', 'tall', etc.
(ii) Age- 'new', 'old', 'young', etc
(iii) Value- 'good', 'bad', 'lovely', 'perfect', etc
(iv) Colour-'black', 'white', 'red', etc

Further semantic types are also associated with languages that have medium-sized as well as large adjective classes.

(v) Physical Property- 'hard', 'soft', 'heavy', 'wet', 'rough', 'unripe', etc
(vi) Human Propensity- 'jealous', 'happy', 'kind', 'clever', 'generous', etc
(vii) Speed- 'fast', 'quick', 'slow', etc

Below are more adjective classes that can be found in languages with a large class of adjectives

(viii) Difficulty- 'easy', 'difficult', 'tough', 'hard', 'simple', etc
(ix) Similarity- 'like', 'unlike', 'other', etc

According to Aĭkhenval′D and Aikhenvald (2015), adjectives perform two major syntactic functions and (i) is to modify the head noun in a noun phrase. In terms of their distribution in English, the adjectival modifiers that occur in noun phrases mostly occur before the noun and these types of adjectives are attributive. Let us consider some examples below:

1(a)The big ball   (b) the beautiful car

 (c)The young man   (d) the white curtain

Adjectival modifiers can also occur post-nominal ie. after the head noun in noun phrases.

According to Sadler and Arnold (1994), adjectives are a type of adnominal that occur in the post-head position. He states that when adjectival modifiers occur in the pre-nominal position, they are interpreted as characteristic, timeless or defining property of the noun whiles they signal a temporary quality or property in the post-nominal position. Let us consider the examples they provide below.

(2a) The navigable rivers are all inaccessible.

 (b) The rivers navigable (at this time of year) are all inaccessible.

 (c) We need to find a responsible person.

 (d) We need to find the person responsible (for this mess).

For example, (navigable) as used as a prenominal modifier in (2a) (navigable rivers) shows a constant property that does not change. It means the rivers are always navigable at every time. On the other hand, navigable as used as a post-nominal modifier in (2b) shows that the said rivers are navigable at that particular time of the year. It implies that it might not be navigable at another season of the year. Similarly, responsible as used before the noun in (2c) portrays a person who is reliable or dependable in carrying out a duty. whereas used after the noun suggests the person who carried out some particular action.

Sadler and Arnold also argue that adjectival modifiers that occur after the noun are essentially predicative and are reduced relative clauses. In examples (3a) & (b) below, both mean essentially the same thing.

(3a) the rivers navigable   (b)the rivers which are navigable

Sadler and Arnold also observed that non-predicative adjectives cannot occur in the post-nominal position and this supports the idea that adjectival modifiers that occur in the post-nominal position are essentially predicative as said earlier. Adjectives like *utter, main, latter, former* among others that are regarded as non-predicative adjectives cannot occur in the post-nominal position as shown below.

(4a) utter folly   (b) *folly utter   (c) *This folly is utter

(5a)former policemen   (b) *policemen former   (c) *Those policemen are former

Another major syntactic function of adjectives is (ii) stating a property by occurring in a clause as a copula complement. In English, some adjectives can be found in predicative adjective positions. In this position, the adjectives occur after the copular verb (to be) as can be seen in the examples below.

   6(a) the ball is <u>big</u>   (b) the dog is <u>beautiful</u>

   (c) the man is <u>young</u>   (d) the curtain is <u>white</u>

According to Hurford (1994), majority of the adjectives found in English can occur both in the attributive as well as predicative positions. Some adjectives like mere, latter, however, can occur only in the attributive position and not in the predicative position.

   (i) The <u>latter </u>example   (j) *the example is <u>latter</u>

   (k) A <u>mere</u> letter   (l) * the letter is <u>mere</u>

As stated by Goldberg (2006) cited in Coppock (2008), some adjectives are limited in their use in that some adjectives cannot be used predicatively and can occur only in the attributive positions. Also, some adjectives cannot occur in the attributive position and must be used predicatively. This brings us to the concept of predicative adjectives and non- predicative adjectives.

Predicative adjectives are those that can be used predicatively even when they occur in the attributive position and both uses are grammatical. Some examples of predicative adjectives are *beautiful, tall, dark* among others. Let us consider the examples below.

(7a) the beautiful dress - the adjective (beautiful) has been used attributively

  (b) the dress is beautiful - the adjective (beautiful) has been used predicatively

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(8a) the tall man　　　　　- the adjective (tall) has been used attributively

　(b) the man is tall　　　- the adjective (tall) has been used predicatively

Non- predicative adjectives are those adjectives described by Hurford (1994) that cannot be used predicatively but can only occur in the attributive position. Some examples as stated by him are *latter* and *mere*. Coppock (2008) further states adjectives like *main* and *utter* as adjectives that cannot also be used in the predicative position.

(9a) the *main* idea　　　　　　　　(b)* the idea is *main*

(10a) the *latter* example　　　　　　　(b)* the example is *latter*

(11a) she is a *mere* imitation　　　　　　(b)**Don't worry, she is only *mere*

Coppock also talks about adjectives that can only be used predicatively and cannot be used attributively in a noun phrase. She gives the adjective (*aghast*) as one such adjective.

(12a) * there were several *aghast* members of the audience

(b) Several members of the audience were *aghast*

In the light of adjectives that can only occur predicatively and cannot be used attributively, Hoffher and Matushansky (2010) also identified adjectives like *asleep* and *ready*.

(13a) * the *asleep* man　　　　(b) the man is *asleep*

(14a) * the *ready* woman　　　(b) the woman is *ready*

 When you have more than one adjective modifying the head noun in a noun phrase in English, they follow a basic hierarchical order as to how they are to be sequenced. When these adjectives are reordered without any special pattern that makes it acceptable, they result in ungrammatical constructions. These special patterns will be discussed further in chapter two. Let us look at examples that have more than one adjective modifying a noun in the noun phrase.

(15a) The big red ball　　　　　　　　　　　(b) *the red big ball

(16a) The big round ball   (b) *the round big ball

From the examples illustrated above, both examples in (b) are unacceptable by speakers of the English language because they do not conform to the proposed universal basic hierarchical order for ordering adjectives. In our introduction, we stated that linguists like Sproat and Shih have observed that adjectives like COLOUR and SHAPE that have inherent properties tend to occur closer to the noun. Those of QUALITY and SIZE occur earlier in the sequence not directly closer to the noun if there are inherent adjectives.

Let us also consider the order of adjectives proposed by Dixon (1977), Value > Dimension > Physical Property > Speed > Human Propensity > Age > Colour > Noun. We realize from his proposed order that COLOUR adjectives are expected to occur closer to the noun as compared to QUALITY adjectives.

When we also consider the more fine-grained order proposed by Scott (2002) below, we also realize that adjectives like COLOUR that have inherent properties are expected to occur closer to the noun.

DETERMINER$^{(the/this)}$>SUBJECTIVE COMMENT$^{(nasty/magnificent)}$ >SIZE$^{(big/small)}$ > LENGTH$^{(long/short)}$ > HEIGHT$^{(tall/high)}$ >SPEED$^{(fast/slow)}$ > WIDTH$^{(fat/thick/thin)}$> WEIGHT$^{(light/heavy)}$> TEMPERATURE$^{(hot/cold)}$> AGE$^{(modern)}$> SHAPE$^{(round)}$> COLOUR$^{(white)}$> NATIONALITY/ORIGIN$^{(German)}$>MATERIAL$^{(wooden)}$>NOUN

On the other hand, adjective ordering restrictions do not apply to adjectives that occur in the predicative position. This is because multiple adjectives that are used predicatively must be coordinated by a conjunction. Coordination is the only structure possible for multiple adjectives that occur in the predicative position. When the adjectives are coordinated, they are put on an equal status and considered parallel to each other and therefore a hierarchical ordering is not needed. Let us consider these examples of multiple adjectives in the predicative position.

(17a) the ball is big and red   (b) the ball is red and big

(c) the dog is beautiful and black   (d) the dog is black and beautiful

(18a) *the ball is big red   (b) *the dog is beautiful black

With the examples in (17) above, the presence of the conjunction (and) places both adjectives on an equal rank thereby making either order acceptable by native speakers of the English language. (18a) &(b) are considered ungrammatical because the adjectives have been put together without a conjunction and that is not structurally possible.

We have realized from the discussion above that English follows a basic hierarchical order when multiple adjectives modify the head noun in a noun phrase. We will go on to look at Akan in section 1.3 below.

1.3 Some Background about Akan

In this section, there will be a brief description of the Akan language and its geographical location. The various aspects of the grammar of Akan that are relevant to this study will also be discussed briefly. Lastly, there will be a discussion on how adjectives behave in Akan.

"Akan forms part of the languages that occupy a continuous geographical area from the south-eastern part of the Ivory Coast to the Volta River in the eastern part of Ghana" (Dakubu 1988). The Akan language group forms part of the indigenous languages in Ghana that are related and belongs to the Kwa group of the Niger-Congo language family (Dolphyne and Dakubu 1988). Akuapem, Fante, Asante, Wasa, Agona, Akyem, Bron/ Abron, Kwahu, and Gomua are classified as dialects that belong to the Akan language group. There has been a difficulty by many linguists such as Agbedor (1996), Bodomo (1997), and Laitin (1994) in estimating the number of languages spoken in Ghana. Simons (2017) in a recent study brought the number of languages spoken in Ghana to 81 of which eight are non-indigenous. Figure 1 as shown below is a display of the language map of Ghana by Lewis, Simons et al. (2009) that shows some of the languages spoken in the country. Twi is most often used as a term to refer to the major non-Fante dialects of Akan which are Asante, Akuapem, Akyem, and Kwahu. According to Dolphyne (1988), "Fante and Asante Twi are mutually intelligible" and for the purposes of my work, I will, therefore, refer to Asante, Akuapem, and Fante as the main dialects of Akan.

According to a census report by the Ghana Statistical Service (GSS) in 2010, the largest ethnic affiliation with approximately 47.3% of the country's population is Akan. By the census, Asante

is spoken by the majority of the people in the country and this is evident in many areas. This is also confirmed by Dakubu and Ford (1988) who state that "Akan is the most widely spoken single language in Ghana, spoken by about 40% of the population as a first language and by a considerable number of the remainder as a second language.

It is seen as a prestigious language even in the language areas adjacent it to the extent that it is used in Schools, church, and trade in the Anyi, Sehwi, Nzema and Ahanta areas to the west. When you come to the south where the main speakers are, Akan is also used in areas like schools, church, trading, in the media (both radio and television), and in the courtroom. Aside from English which is the official language spoken in the country in every sector, we see the use of Akan as a major language in everyday life and this makes it a language worth researching into. About 44% of the Ghanaian population use Akan as a second language. Even in the Dangme, Ga, and Ewe-speaking areas of Ghana have borrowed a lot of words from Akan into their sea-fishing, statecraft and food Kropp Dakubu (1973). Akuapem, Fante and Asante dialects of Akan have different types of orthographies that are recognized officially and many publications (Dakubu and Ford 1988). I could go on about the prestige that Akan as a language enjoys in Ghana. With the little said, it is without a doubt that it is a language worth studying.

Just as speakers of English can use multiple adjectives attributively to modify a noun, Akan as a language can also have more than one adjective modifying the head noun in noun phrases. Little work has been done on adjective ordering in Akan and this study looks at the order in which adjectives appear in such situations. For this work, all the examples used will be drawn from Asante, my native dialect.

FIGURE 1 A LANGUAGE MAP OF GHANA LEWIS, SIMONS ET AL. (2009)

1 Abron
2 Adangbe
3 Adele
4 Ahanta
5 Akan (4)
6 Akposo
7 Animere
8 Anufo
9 Anyin
10 Avatime
11 Awutu
12 Bimoba
13 Bissa
14 Bondoukou Kulango
15 Buli
16 Chakali
17 Chala (2)
18 Cherepon
19 Chumburung (3)
20 Dagbani
21 Dangme (2)
22 Deg (2)
23 Delo
24 Dwang
25 Éwé
26 Farefare
27 Ga
28 Gikyode
29 Gonja (4)
30 Gua
31 Hanga
32 Jwira-Pepesa
33 Kamara
34 Kantosi (3)
35 Kasem
36 Konkomba (2)
37 Konni
38 Kplang
39 Krache
40 Kusaal
41 Larteh
42 Lelemi
43 Ligbi
44 Logba
45 Mampruli
46 Nafaanra
47 Nawuri
48 Nkonya
49 Ntcham
50 Nyangbo
51 Nzema
52 Paasaal (2)
53 Safaliba
54 Sehwi
55 Sekpele
56 Selee
57 Siwu
58 Southern Birifor
59 Southern Dagaare
60 Tafi
61 Tampulma (2)
62 Tumulung Sisaala
63 Tuwuli
64 Vagla
65 Wali
66 Wasa
67 Western Sisaala

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WIDESPREAD LANGUAGES
Akan
Éwé
Ghanaian Sign Language
Hausa
Maasina Fulfulde

0   25   50   75   100 km

OFFICIAL LANGUAGE
English

Language Families
Gur
Mande
Kwa

Notes:
1. White areas are sparsely populated or uninhabited.
2. Brackets show the number of times a language's number appears on map, if more than once.

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1.4 Grammatical features of the Akan language

1.4.1 Word Order

Akan specifically Asante Twi just like the English language has an SVO (subject verb object) word order. Let us consider the example below:

(19a) Papa(SUBJ)   no   bo-o(VERB)   akwadaa(OBJ) no

      Man   DET   beat-COMPL   child   DEF

      The man beat the child

(b) me   papa   nim   maame   no

     POSS   father   know   woman   DEF

     My father knows the woman

1.4.2 Serial Verb Constructions

In simple terms, serial verb constructions are those constructions that have multiple verbs or verb clauses in a single construction. Schachter (1974:254) describes a serial verb construction as "A sentence that consists, on the surface at least, of a subject noun phrase followed by a series of two or more verb phrases, each containing a finite verb plus, possibly, the complement(s) of that verb". Let us consider an example below;

(20) Baaba   yɛ́ – ɛ́   aduane   má-á   Kofi

    Baaba   do-COMPL food   give-COMPL Kofi

    Baaba cooked for Kofi

1.4.3 Nominals

Nouns in Akan are mostly made up of stems but can sometimes be made up of affixes with the prefixes being either a vowel or a nasal. According to Dolphyne (1988: 79), the stems in Akan are classified into two namely; simple stems and compound with compound stems made up of different words put together or a word that has been reduplicated. Let us consider some nominals in Akan below;

(21) word	prefix	stem	suffix	gloss
Abofra	a-	abofra	-	'child'
adidie	a-	di,di	-e	'eating'
Efie	e-	fi	-e	'house'
Sika	-	sika	-	'money'

According to **(Appah 2013),** the prefixes in Akan are either derivational or inflectional and these prefixes are used to mark a noun as either singular or plural. Suffixes, on the other hand, are derivational. He further states that the prefixes that mark singularity are vowels while those that mark plurality are either vowels or nasal sounds with mass nouns having nasal prefixes. Let us consider the examples provided by Appah (2013) below:

(22) Singular	gloss	plural	gloss
a-bofra	'SG-child'	m-bofra	PL- children
ɛ-dan	'SG-house'	a-dan	PL-houses
i-dua	'SG-tree'	n-dua	PL-trees
n-su-(o)	'water'		

Since the thesis mainly focuses on how multiple adjectives are ordered in the noun phrases, we want to look briefly at the structure of the noun phrase in Akan including everything that can be found in the noun phrase namely adjectives, determiners, possessors and relative clauses.

1.4.4 The structure of the Akan noun phrase:

According to Aboh (2010), Akan a language belonging to the Kwa language group can display bare nouns in all contexts unlike other languages like (Romance and Germanic) that require a determined noun. He also stresses that Akan noun phrases can also have determiners that make the noun more specific. The Akan noun phrase can also have adjectives, relative clauses, and possessors which will be briefly described below.

(23) **word**   **gloss**   **word**   **gloss**

   Anoma   'bird'   papa   'man'

   ɔkyerɛkyerɛfoɔ   'teacher'   akwadaa   'child'

The noun phrase in Akan can also occur with **determiners** with the noun occurring first before the determiner. It behaves just like other modifiers such as adjectives, numerals, and demonstratives. The determiner in Akan is realized as (no).

(24a) anomaa   no   (b) papa   no

      Bird   DET   man   DET

      The bird   the man

  (c) ɔkyerɛkyerɛfoɔ   no   (d) sukuunii no

      teacher   DET   pupil/student DET

      the teacher   the pupil/ student

Possessors in Akan according to Christaller (1964) denote the owner or possessor as well as place or time of something. They basically answer the question whose? of who? and of what? Possessive noun phrases or pronouns occur before the head noun in Akan. This is unlike other modifiers such as adjectives, determiners and relative clauses that occur after the noun in Akan. Possessive pronouns in Akan include me (my), wo (thy), ne (his, her, its), yen (our), mo (your) won (their). Let us consider some examples of possessive noun phrases and pronouns in Akan below:

(25a) me maame kɔ   (b) ne   paapa   a - da

     My mother be+go   his/her father PERF-sleep

     My mother is gone   his/her father is asleep

(26a) Abena Ataadeɛ no   (b) Kofi mpaboa no

   abena dress   DEF   Kofi   shoe DEF

   the dress of Abena   the shoe of Kofi

Adjectives in Akan basically modify nouns just as they do in other languages. They basically occur either attributively or predicatively. According to Aboh (2010), attributive adjectives in Kwa languages are a few and most often denote *shape, size or colour*. The adjectives occur after the noun and before the determiner or the demonstrative. Let us consider some examples below:

(27a) papa   tuntum   no   (b) maame   keseɛ   no

   Man   dark   DET   maame   fat   DET

   The dark man   the fat woman

Saah (2010) states that **relative clauses** in Akan are mainly restrictive and usually follow the demonstrative and typical have the structure below:

(28a) [IP Me - hu - u [NP ɔbáá [CP áà [IP Kofi   wáré-e   no]   nó]]].

      1SG -see-PST woman   REL   kofi   marry-PST 3SG   CD

      " I saw the woman whom Kofi married"

(b) [IP [NP ɔbáá] [áà [IP ɔ - wáré-e   Kofi]   nó]   fi   Aburi].

      Woman REL 3SG marry-PST Kofi   CD   be. from   Aburi

      " the woman who married Kofi is from Aburi"

The examples according to Saah (2010) reveal that Akan relative clauses occur after the noun and have the following important features:

i.   A head/antecedent NP

ii.   An obligatory relative clause marker áà

iii.   A resumptive pronoun in the relativized position

 iv.   A clause-final determiner

This section discussed the structure of the Akan noun phrase beginning with the fact that the noun phrase in Akan can be a bare noun. It can also occur with a determiner, a possessor, an adjective, and a relative clause with a structure like [NP Possessor + N + AP + DET + REL. CLAUSE + CD]

1.4.5 Coordination in Akan

Coordination is a phenomenon that basically combines two words, phrases or clauses of the same type to give them equal status. According to Amfo (2007), when noun phrases are coordinated in Akan, a distinction is made between two conjunctions used (ne/na). According to her, this is a dialectal difference with one belonging to Asante (Twi) and the other belonging to Fante and these are two major dialects of Akan. When the conjunction (ne) '*and*' belonging to the Asante twi dialect is used, it could have either a comitative or coordinative use. Let us consider the example given by Amfo (2007) below:

(29) Àkósúá   **né**   Kòfí   sà -è

      Akosua CONJ Kofi dance – COMPL

       ' Akosua and Kofi danced.'/ ' Akosua danced with Kofi.'

The example above could be interpreted as an event where both Akosua and Kofi danced as a pair. On the other hand, it could mean that both danced at a single event but not necessarily as a pair.

Fante uses two conjunctions, (nye) which encodes a comitative meaning with the pair participating together in a single event and (na) which encodes a coordinative meaning. With the use of (na), the two individuals both participate in an event but not as a pair. This is seen in the examples below.

(30a) Éśi **nyé**   Kòfí   dzí-ì   àgóŕ

      Esi COM Kofi eat – COMPL   game

     'Esi played with Kofi'

(b) Éśi **nà** Kòfí   dzí-ì   àgóŕ

   Esi CONJ Kofi eat – COMPL   game

   'Esi and Kofi played'

Clauses in Akan are also conjoined with the low- toned (nà) as has been illustrated below:

(31) Mè dìdí -í   nà   mè dá -è

   I   eat-COMPL CONJ   I   sleep-COMPL

   'I ate and I slept

When **Adjective phrases** are coordinated however in the predicative position, there is no overt realization of a conjunction. Let us look at the examples below.

(32a) Esi   yɛ tuntum Ø tiatia   (b) John yɛ kɔkɔɔ Ø tietia

   Esi   be dark   slim   John be red   short

   'Esi is dark and slim'   'John is fair and short'

1.5 Adjectives in Akan

As mentioned earlier on in this chapter, adjectives as words are basically used to modify nouns, describe some property of the thing that is being referred to by the noun, such as its origin, size, shape, colour, age, value or the impression it gives. In Akan, specifically Asante twi, adjectives belong to the open class and have a large size of adjectives. According to Osam (1999) following Dixon (1982), Akan has all the four-core semantic type of adjectives that are associated with large and small adjective classes including other types of adjectives. These adjective types exist in almost all languages that have adjectives.

(i)Dimension – *kɛseɛ* (big), *ketewa* (small), *tɛtrɛtɛɛ* (wide), *donkodonko* (deep), *tenten* (tall), etc

(ii)Age- *foforo* (new), *dada* (old), *kumaa* (young), etc

(iii)Value- *papa* (good), *fõ* (useless) *bone* (bad), *fɛfɛɛfɛ* (beautiful), *kamakama* (nice) etc

(iv)Colour- *tuntum* (black), *fitaa* (white), *kɔkɔɔ* (red), *akokɔsradeɛ* (yellow) etc

(v)Physical Property- *denden* (hard), *mrɛmrɛɛmrɛ* (soft); *duduudu* (heavy), *hyehyeehye* (hot), *bunu* (unripe), etc

(vi)Human Propensity- *ahoɔyaafoɔ* (jealous), *anigye* (happy), *anibrɛ* (greed), *ayamyɛ* (kind), etc

(vii)Speed- *hare* (fast), *ntɛm* (quick), *nyaa* (slow), etc

Dixon (2004) suggests that even though adjectives share certain morphosyntactic features with other word classes like nouns and verbs, adjectives can be distinguished from nouns and verbs using certain grammatical features:

One morphological feature that helps to identify adjectives is its position in construction. Adjectival modifiers follow the head noun in Akan. Adjectives can also serve as copula complements in Akan.

(33a) Abofra tuntum no   (b) Abofra no yɛ tuntum

    Child black DEF   child DEF COP black

    'the dark child'   'the child is dark'

Another morphological feature that helps to identify adjectives in Akan is its agreement in number with the head noun. If the noun is pluralized, the adjective also tends to be pluralized. The plural markers that are used to mark plurality in nouns are also used to mark plurality in adjectives. In Akan, the nasal prefixes (m-/n-) or the prefix (a-) are those usually used to mark plurality. Let us consider the examples below as given by (Amfo, Boateng et al. 2007).

(34a) Ɔbaa kɛse no   (b) M-baa   a-kɛse no

    Woman big DEF   PL.woman   PL.big DEF

    ' the fat woman'   ' the fat women'

(35a) Abɔfra ketewa   no   (b) M- bɔfra   n-ketewa no

    Child   small   DEF   PL- child PLU-small   DEF

    ' the small child'   ' the small children'

Also, adjectives in Akan can make up an entire NP under certain discourse conditions. In this instance, the head noun is not explicit but the construction can be understood from the context (Amfo, Boateng et al. 2007). Let us consider some examples they give below:

(36a) Dua kɛse no   a-bu   (b) Kɛse no   a-bu

    Tree big DEF PERF-break   big DEF PERF-break

    ' the big tree is broken'   ' the big one is broken'

(37a) Buuku foforo no a-te   (b) Foforo no   a-te

    Book   new DEF PERF-tear   Book DEF PERF- tear

    ' the new book is torn'   ' the new one is torn'

In addition, there are certain adjectives in Akan that can occur as heads of Noun Phrases in Akan. When they occur as heads of NPs, they are preceded by a possessive pronoun in an example below.

(38) Ne tuntum yɛ me fɛ

    Her black COP ne nice

    ' I admire her darkness'

Furthermore, when comparative or superlative degrees must be expressed, it can be done by using a verb which can mean 'exceed/surpass'. The speaker can decide to use an adjective or its adjectival verb counterpart in this context. (Amfo, Boateng et al. 2007).

(39a) Kofi wa   sen   Ama   (b) Kofi yɛ tenten sen Ama

    Kofi is. tall surpass Ama   Kofi COP tall   surpass Ama

    'Kofi is taller than Ama'   'Kofi is taller than Ama'

1.5.1 Adjectival Verbs

According to Amfo, Boateng et al. (2007), some words which occur as heads of intransitive predicates in Akan, express adjectival meanings. According to Dixon and Aĭkhenval′D (2004), these words can be classified as adjectives even though they may exhibit properties of verbs. He also identifies the position of intransitive clauses as one syntactic position for adjectives to occur. These forms have a reduced verbal morphology even though they occur in positions typically occupied by verbs. These forms could be classified as verbs instead of adjectives. These words that are regarded as verbs have adjectival counterparts which can be used to express the same meaning as stated above. We see this in the illustration below:

Verb		**Adjective**	
So	'to be big'	kɛse	'big'
Wa	'to be tall'	tenten	'tall'
yɛ	'to be good'	papa	'good'

1.5.2 Attributive Adjectives In Akan

In Akan, adjectives also modify heads of NPs just as it happens in English. In Akan however, the adjective immediately comes after the noun it modifies. When the adjective modifies the noun directly, it is termed as used attributively. Let us consider some noun phrases in Akan that have adjectives used attributively to modify the noun phrase.

(40a) Papa tenten no   (b) akwadaa ketewa no

    Man   tall   DEF   child   small   DEF

  ' the tall man'   ' the small child'

From the above examples, it is evident that the adjectives in Akan occur after the head noun.

When it comes to the use of multiple adjectives to modify the head noun in the noun phrase, Akan also uses multiple adjectives just as was discussed earlier in English. However, Akan seems to have a free ordering of the adjectives and more than one adjective can be used to modify the head noun in a noun phrase. Let us consider the examples below:

(41a) Papa tenten tumtum no   (b) Papa tumtum tenten no

    Man   tall   dark   DEF   Man dark   tall DEF

    ' the tall dark man'   ' the dark tall man'

Looking at the example above, both (a) & (b) are accepted as grammatical by speakers of the Akan language. On the other hand, speakers of English would regard example (41b) as ungrammatical because going by the basic hierarchical order for adjective ordering, the COLOUR adjective must be the one close to the noun when it occurs with SIZE adjectives.

(42a) akwadaa   tiatia kumaa no   (b) akwadaa kumaa tiatia no

    child   slim young DEF   child   young slim DEF

    ' the slim young child'   'the young slim child'

With these examples too, both (a) & (b) are accepted as grammatical by speakers of the Akan language. On the other hand, speakers of English would regard example (42b) as ungrammatical because going by the basic hierarchical order for adjective ordering, the AGE adjective must be the one close to the noun when it occurs with SIZE adjectives.

Although in English, there is an ordering restriction on multiple adjectives used attributively, there seems to be a free ordering of this concept in Akan.

1.5.3 Copula Sentences with Predicative Adjective Phrases

Akan as a language also has predicative adjective phrases that occur after a linking verb. The adjectives that occur in these constructions can be single as well as multiple. When the adjectives are used predicatively, no ordering restrictions are expected because multiple adjectives that occur in the predicative position must be coordinated by (and) and can, therefore, be in any order. One interesting phenomenon with adjectives used predicatively in Akan is that there is no overt realization of the conjunction (ne). Let us consider the examples below;

(43a) abofra no   yɛ tuntum   (b) Abrantɛ no yɛ obolo

    Child DET is   dark   man   DET is   fat

    The child is dark   the man is fat

(44a) abofra no yɛ tuntum tintin   (b) abofra no yɛ tintin tuntum

    Child DEF be dark   tall   Child DEF be tall dark

    ' the child is dark and tall'   ' the child is tall and dark'

(45) Ataadeɛ no yɛ kɛseɛ kama   (b) Ataadeɛ no yɛ kama Keseɛ

    dress   DEF be big   nice   dress   DEF yɛ nice big

    ' the dress is big and nice'   ' the dress is nice and big'

With examples (44) & (45) the adjectives can be interchanged and would still be accepted because they have been coordinated.

When we discussed English earlier on in the chapter, we stated that adjectives such as *main, latter, mere* were adjectives that occurred only in the attributive position. Akan, on the other hand, does not have adjectives that occur in the attributive position only. We also mentioned that adjectives like *asleep* and *ready* are predicatively-only adjectives in English. Akan, on the other hand, does not have predicatively-only adjectives. In Akan, all adjectives can occur in both positions.

The last grammatical property of Akan we want to look at is the difference between Modifiers and compounds. We want to establish the fact that using multiple adjectives as modifiers of nouns should not be regarded as compounds where two separate words are put together to form a single meaning. Modifiers do not form a single meaning.

1.5.4 Modifiers vs. Compounds

Compounding basically is the act of putting together two words that occur separately on their own to form a single meaning or expression. And there are instances where the compound is made up of an adjective and a noun. Appah (2013) stresses that the adjectives found in these adjective-noun compound constructions do not modify the noun per se and should however not be treated as attributive or predicative adjectives. He classifies them as "N-N compounds with nominalized adjectives as left-hand constituents and this he analyzes in two ways. Firstly, these adjectives occur with prefixes and the prefixes, however, nominalize the adjectives. We must note that adjectives that act as modifiers of nouns do not occur with prefixes. Secondly, the distribution of these nominalized adjectives differs from the adjectival modifiers. The nominalized adjectives occur on

the left side of the nouns whiles the adjectival modifiers occur on the right side of the noun. In conclusion, however, these adjectives found in the A-N constructions should not be treated as attributive or predicative adjectives. Let us consider the examples below:

(46) hwimhwim adze   'things quickly got'

Balmer and Grant (1929: 224), are treating this example as an adjective-noun compound with (hwimhwim) as the adjective and (adze) as the head noun but Appah does not analyze (hwimhwim) as an adjective because it cannot occur either as an attributive modifier or a predicative modifier.

 (47a)*adze no yɛ hwimwhim   b. * adze   hwimhwim

      thing DEF be swift   thing   swift

1.6 Statement of the problem

As Christaller (1875), Dolphyne and Dakubu (1988) and Kweku Osam (1999) have identified Akan as a language that has a lot of basic adjectives, and as Akan allows more than one adjective to modify a single noun, it could be expected to follow the basic universal order for ordering Adjectives. Pokua (2003) carried out the first major study in Akan which seems to suggest Akan, unlike English, has a relatively free ordering of adjectives. The set of Adjective classes that Pokua (2003) employed in her work was that proposed by (Dixon 1982). Hetzron (1987) in his investigations recognized that the set of adjective classes as listed above in the introduction was not comprehensive enough as it did not cover a lot of adjectives. In Pokua's study, she did not consider all the special patterns that make orders that deviate from the proposed order acceptable. So, this work is a further study of multiple attributive adjectives in Akan.

1.7 Importance of the study

As important as the Akan language is to the people of Ghana, it plays a major role in our everyday life. Knowing the correct or proper usage of the language will help us communicate in the language and as stated earlier, Akan is used in areas such as education and the media in Ghana.

Knowing if ordering exists in Akan as it does in English will contribute to the current body of knowledge in the Akan language. An earlier study shows that ordering does not exist in Akan but

the possibility of knowing that special patterns in the language hides the effect of ordering in Akan will open more areas of research into the language for linguists.

1.8 Aims of the Study (Research Questions)

The aim of this research is to know if native speakers of Akan follow any order when they use two adjective modifiers in noun phrases and the reasons for the lack or presence of a basic hierarchical order for adjective ordering. The aim will be achieved if I can answer the following questions:

1. Does data in Akan show the existence of adjective ordering in the language since it is regarded as universal to all languages?
2. What are the implications of coordinated predicative use of adjectives on attributive adjectives in Akan?
3. If data in Akan does not clearly show the existence of an order for adjective sequencing, could it be because of the presence of a special mechanism that allows for deviation from the proposed order?

1.9 Thesis Structure

The structure of my thesis is as follows: Chapter 1 introduces the concept of Adjective Ordering and the idea that it is universal to all languages. The chapter also acknowledges the fact that English being one of the languages under discussion follows the basic hierarchical order proposed by Linguists, but available data show that Akan which is the second language under discussion has a relatively free ordering when it comes to the ordering of adjectives. Chapter 2 discusses the theoretical framework of this thesis and the expectation that all adjective orderings can be explained using the proposed framework. This chapter also includes a discussion on 4 special patterns/mechanisms that English speakers employ when they want to deviate from the basic ordering hierarchy. Chapter 3 presents an earlier research carried out by Pokua (2003) in Akan as well as my research findings. In Chapter 4, the data for the thesis is analyzed considering the 4 special mechanisms that English speakers employ for deviating from the basic order. Chapter 5 which concludes the study highlights the major findings of the study including a recommendation for future research.

Chapter Two Theoretical Background

In this chapter, I discuss the behavior of multiple adjectival modifiers in a noun phrase, how they are ordered in terms of the basic hierarchical order they follow and the special circumstances under which they deviate from the proposed hierarchical order and are still accepted as grammatical.

2.1 Introduction

Adjectives, as used in modifying or describing nouns, can occur in various positions; they can occur before the noun or after the copula verb (to be). Adjectives that occur before the noun in languages like English are pre-modifiers and those that occur after the noun are known as post-modifiers. More than one adjective attributively modifying the same noun is seen to occur in an order and Authors such as Dixon (1977), Hetzron (1978), and Scott (2002) believe that there is a universal adjective ordering pattern that languages follow and as a result have come out with various proposals regarding the order in which these adjectives are to occur. Even though they suggest differently the number of adjectives involved including the semantic categories involved, they all agree that the adjectives are categorized based on their meanings. They also agree that there are special patterns where these ordering restrictions do not apply. The source of the evidence for proposing these hierarchies are the intuitive judgments of native speakers concerning what is and is not an acceptable order when you have more than one adjective modifying a single noun.

The various hierarchies that these authors have proposed consist of many different semantic classes which can occupy many different positions when strung together in a single noun phrase construction. As Hetzron (1978) has noted, testing several of these constructions on native speakers as he puts it 'rapidly impairs the judgment of the informant and the informant becomes confused. Let us consider the illustration below by using three semantic classes taken from that proposed by Dixon (1977);

Dimension>Human Propensity>Age

If we were to construct sentences with these three adjectives classes, the options are going to be a lot and the native speaker would have difficulty processing all the options before deciding on one but if we are considering just two of the adjective classes above, it is easier to decide. For instance;

(a)The tall clever boy vs. The clever tall boy

With the example above, the native speaker is less likely to have any difficulty coming out with the preferred one and it should be adequate to test for the presence of the hierarchy should it exist. To avoid the problem suggested by Hetzron, native speakers were tested using two adjectives at a time. The hierarchy order proposed by Scott (2002) was employed in this study.

In English the adjectives are put in between the determiner and the noun in the structure below;

Det Adj Adj N

When multiple adjectives are used predicatively, they occur after the copula (be) but they are not put together in a stacked order and so no ordering effect is expected. By stacking I mean that they are not put together in a hierarchical form where one becomes higher than the other. They are rather coordinated with a pronounced conjunction 'and'. This, however, shows no ordering effect as they can occur in any order.

Below is an illustration of the predicative use of adjectives

(48a) The girl is beautiful and dark/ the girl is dark and beautiful

(b)*the girl is beautiful dark/ *the girl is dark beautiful

From the examples above, we realize that both constructions in (a) are grammatically correct because a conjunction has been put in between the adjectives and the adjectives can be interchanged one for the other and the sentence will still be correct. However, when we take an example (b), the constructions are ungrammatical because they have been strung together without a conjunction.

2.2 Attributive adjectives with ordering effects

As Scott (2002) has noted, due to the disagreements among researchers regarding the fundamental issues with respect to adjectives, only a few linguists have studied stacked adjective ordering in detail. Authors like Sproat & Shih (1991) have stated that a basic order exists when adjectives are stacked but the use of comma intonations hides the effect of the hierarchical ordering. By comma

intonations, I mean that the adjectives can be separated by commas and the commas show that they are coordinated. This can also result in a free ordering of the adjectives depending on the intended meaning of the one speaking. Scott (2002) however looks at the basic order of stacked adjectives where no special or specific meaning is intended. He further states that as has been noted in X'-theory that stacked adjectives are adjuncts, they are actually not, as adjuncts have a free ordering with no restriction (Freidin 1992, 43) as well as relative clauses. Stacked adjectives and adverbs result in ungrammatical choices when ordered freely. Below are examples to illustrate the above scenarios.

(49a)A book [about physics][in German]

(b)A book [in German][about physics] (Freidin 1992, 43)

The above phrases are adjuncts and can be ordered freely without any restriction

As noted by Scott (2002), relative clauses can also be ordered freely and he provides an example from (cook and Newson 1996, 145)

(50) the man [who paid the bill] [wearing a stripy scarf] [of medium build] [with a gold tooth]

Looking at the example above, the clauses that are in brackets can be rearranged in an order and the outcome is still accepted.

However, when stacked adjectives are ordered freely, it results in ungrammatical constructions in the examples below.

(51a) a big fat hen

(b) *a fat big hen

Scott also states that though adjective ordering restrictions exist, it is usually difficult to judge which order is the most acceptable if a single construction has more stacked adjectives at the same time. He finally states that the best thing to do is to use less adjectives at a time and adopts the list by Kingsbury and Wellman.

DETERMINER > SUBJECTIVE COMMENT > SIZE > AGE > SHAPE > COLOR > NATIONALITY/ORIGIN > MATERIAL > COMPOUND ELEMENT > NOUN (1986,40)

Let us consider some examples below given by Kingsbury and wellman that follows the basic hierarchical order they propose:

(52a) Big old black English dog   (b) Ugly old   red   dress

 Size> age> color> nationality> noun   Subjective comment> age> colour> noun

 (c) Small round table   (d) * round small table

    size>shape>noun

The examples (a-c) above are all accepted by speakers of English as grammatical and it is obvious that they follow a hierarchical order. Example (d) on the other hand as seen as ungrammatical because per the hierarchy, SIZE adjectives are to occur before SHAPE adjectives and reordering them without any special pattern makes the construction ungrammatical.

Scott (2002) further states that the list of categories suggested by Kingsbury and Wellman is still not able to account for some category of words such as temperature, speed among others. According to him, a list of multiple adjectival modifiers involving SIZE and TEMPERATURE will have SIZE occurring before TEMPERATURE.

 (53a)   Long hot summer   (b) *hot long summer

       size>temperature>noun

we however, realize from the example above that a category TEMPERATURE can be used to

describe nouns but that is not captured in the list produced by Kingsbury and Wellman. We can

also see from the example above that the adjectives follow an order and have not just been put

together.

It has also been noted by Hinton and Marsden (1985, 80) as stated in Scott (2002) that a category such as size is quite broad because it can further be divided into at least two more categories HEIGHT and WIDTH with (height) preceding (width). With the examples below we realize that if we arrange the adjectives in a different way, it results in an ungrammatical construction.

(54a) Tall fat man   (b) *fat tall man

(c) High thick wall   (d) * thick high wall

   Height > Width

 Scott (2002), further states that LENGTH and WEIGHT are adjectives that are also related to SIZE and they also seem to follow Adjective Ordering Restrictions with LENGTH coming before all other categories. This is illustrated with examples below:

 (55a) a long wide skirt   (b) *a wide long skirt

 (c) a long heavy canoe   (d) * a heavy long canoe

    Length>Weight

The extensive research done by Scott (2002) further reveals that the adjective WEIGHT seems to follow all the other categories under SIZE particularly the category WIDTH. Below are some instances provided by Scott to illustrate this;

(56a) Fat heavy book   (b) *heavy fat book

(c) a slim light volume   (d) *a light slim volume

Width>Weight

Based on the analysis made by Scott (2002), the category size entails length, height, width and weight and they follow each other in the order Length>Height>width>weight. The order of these adjectives should be able to produce a noun phrase like (a short wide heavy desk) and it would be grammatically correct unless the speaker is trying to emphasize a feature about someone or something then that adjective would be the one nearest to the noun.

SPEED has also been suggested by Dixon (1982, 24) to be one of the categories that obeys Adjective ordering restrictions and should be treated as a category on its own. This he says should come after the category PHYSICAL PROPERTY which entails (*hard, heavy, hot, rough*) but before

the categories HUMAN PROPENSITY and AGE. Below are examples produced by Scott (2002) to prove that indeed SPEED takes part in Adjective ordering restrictions;

(57a) Fast new car   *new fast car

 (b) a fast old horse   * an old fast horse

SPEED > AGE

 (58)   A long slow river   (b) *a slow long river

LENGTH > SPEED

From the examples above we realize that SPEED comes before AGE and an attempt to bring it after AGE results in ungrammatical constructions. In terms of its position in the ordering hierarchy, Scott (2002) suggests that it comes in between LENGTH and HEIGHT but before WIDTH and WEIGHT and below are examples to illustrate this phenomenon.

(59a) a tall fast athlete   (b)* a fast tall athlete

HEIGHT > SPEED

(60) a short quick sermon   (b)* a quick short sermon

LENGTH > SPEED

 (61) a slow fat man   (b)* a fat slow man

SPEED > WIDTH

Scott finally reveals that as far as English is concerned, there are adjective order restrictions on adjectives that belong to the TEMPERATURE category of words. He also states that they occur before adjectives describing SHAPE and occur after adjectives that belong to SUBJECTIVE COMMENT and SIZE and observed that adjectives that belong to the category TEMPERATURE occur before AGE adjectives.

(62a) a beautiful long hot summer   * a beautiful hot long summer

 (b) a cold square lump of ice   * a square cold lump of ice

SUBJECTIVE COMMENT>LENGTH>TEMPERATURE>AGE>SHAPE

(63a) an extremely hot old oven   * an extremely old hot oven

(b) a cold young puppy   * a young cold puppy

Examples (63a) and (b) show that TEMPERATURE adjectives occur before AGE adjectives.

English as a language has a basic structure when it comes to adjective ordering in noun phrases. When more than one adjective modifier occurs in a noun phrase, the rules of English is clear on the specific order in which the adjectives are to be arranged as given by Scott (2002).

Below is a proposed universal hierarchy of Adjective-related functional projections (a first approximation) by Scott (2002):

DETERMINER$^{(the/this)}$>SUBJECTIVE COMMENT$^{(nasty/magnificent)}$ >SIZE$^{(big/small)}$ > LENGTH$^{(long/short)}$ > HEIGHT$^{(tall/high)}$ >SPEED$^{(fast/slow)}$ > WIDTH$^{(fat/thick/thin)}$> WEIGHT$^{(light/heavy)}$> TEMPERATURE$^{(hot/cold)}$> AGE$^{(modern)}$> SHAPE$^{(round)}$> COLOUR$^{(white)}$> NATIONALITY/ORIGIN$^{(German)}$>MATERIAL$^{(wooden)}$>NOUN

Using Scott's hierarchy an example (*that beautiful tall dark girl*) will have the structure below:
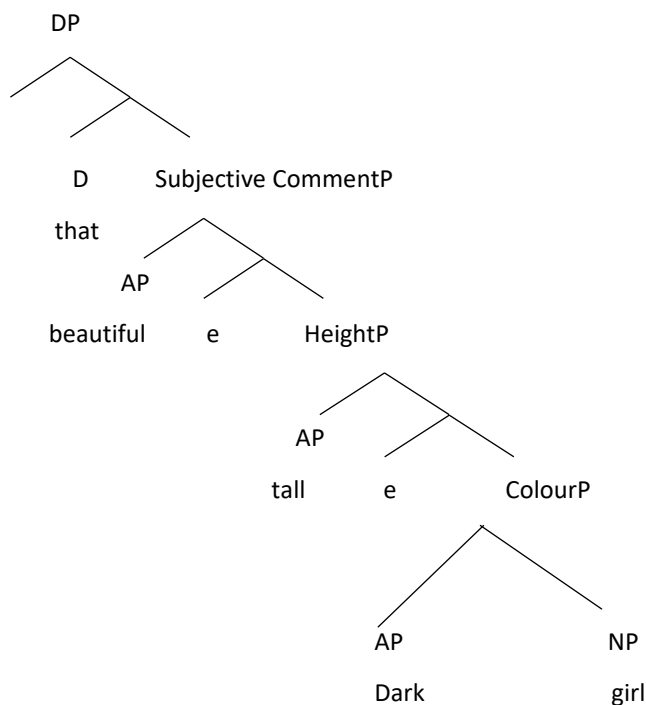
2.3 Ways in which adjective order can deviate from the normal hierarchy

English, as well as some languages, allow for a deviation from the proposed hierarchical order under special circumstances. Alexiadou and Wilder (1998: 308) emphasize that orderings that do not observe strict ordering restrictions can be considered acceptable under special circumstances. Linguists have however come out with various concepts to explain the mechanisms that underlie these differing acceptable orders and for the purposes of this thesis, we will be looking at four. (i) **phonological reordering** where the adjectives are reordered based on the length of the adjective, with this deviation the longer adjective follows the shorter adjective even if it is not the expected order. (ii) **focus reordering** where there is a special context involved and if the first adjective is stressed it becomes acceptable even if it does not follow the preferred order. (iii) **indirect modification** where the adjectival modifier is claimed to be a reduced relative clause and as a result does not directly combine with the noun so can, therefore, be reordered and acceptable. (iv) **parallel modification** where the modifiers are parallel structures and as a result do not have to follow a specific order because the adjectives modify the head noun independently. Adjectival modifiers put in a parallel structure are coordinated structures.

2.3.1 Phonological reordering

As we mentioned in the introduction to this section, this mechanism allows adjectival modifiers to be ordered freely without following the proposed hierarchy. Based on the length of the syllables of the adjectives involved, a longer adjective can follow a shorter adjective and the order will still be acceptable even if it is not the expected order. Sproat and Shih (1991: 588-589) seem to suggest that the grammar of English allows for reordering of adjectives when the property being discussed is 'absoluteness'. When two absolute adjectives modify a noun, there is the tendency for the phonologically longer adjective to come after the shorter adjective even if that order does not conform to the expected order. For instance, adjectives that describe QUALITY and SIZE belong to the same level of absoluteness so even though the grammar of English has an order of QUALITY>SIZE, it can be re-ordered to have SIZE>QUALITY and it will still be acceptable. Let us consider an example they provide below;

 (64a) QUALITY, SIZE: beautiful large house

(b)   SIZE, QUALITY: large beautiful house

The two examples above are both accepted by the native speakers of English and this according to S&S (1991), is due to phonological constraints that can allow the adjective with the longer syllable to follow the shorter syllable. This concept works in English but does not occur in Akan. Let us consider an example in Akan below:

(65) N < COLOUR < SIZE (Assuming Akan is a mirror image of what happens in English)

  (a) Ataadeɛ fitaa kɛseɛ no   Fitaa (2-syllable), kɛseɛ (2-syllable)

     Dress white big DEF

     The big white dress

  (b) Ataadeɛ kɛseɛ fitaa no

      Dress big white DEF

     The big white dress

Looking at the example above, both adjectives are 2-syllable words, but they are both accepted by speakers of Akan. Even though most Akan speakers prefer the order that has COLOUR adjective occurring close to the noun, the reverse order is equally acceptable. The basis of accepting the reverse order has nothing to do with the length of the syllables involved.

2.3.2 Focus reordering

As mentioned above, this phenomenon involves special patterns where adjectival modifiers can be reordered and it will be accepted. This can, however, occur if the speaker is speaking within a special type of context. Also, for the order to be accepted, the first adjective in the construction must be stressed as described by (Alexiadou and Wilder 1998: 308). Scott (2002) also describes this phenomenon as '*focus preposing*'. He argues that an order that has the first adjective '*marked*' and receives contrastive and focal stress is accepted as grammatical even if it does not conform to the basic hierarchical order for sequencing multiple adjectives. The information focused must be contrastive with another in the context. This phenomenon differs from phonological reordering in that the syllables here can be single words that have equal phonological length. Let us consider the illustrations below:

(66a) the small white house

(b) * the white small house

From the examples above, we realize that in the normal sense, example (59b) is not accepted by speakers of English and is considered ungrammatical because it deviates from the proposed order. If we introduce a special context, then it can become grammatical. Let us consider the context below. This concept works in English but does not occur in Akan.

(67) You pass by a group of houses with a friend. Many of them are large but two are small. One small house is red, one is white. You tell your friend that your sister lives in one of the houses. You ask your friend to make a guess, and she says that she lives in the small house which is red. You then say: "No. She lives in the WHITE small house." (Wilder,p.c.,Feb.2018).

You notice that the adjective that is stressed has been written in capital letters, so in the special context type in English, we will have the sentences below:

(68a) * the white big house (which is regarded as ungrammatical)

(b)   the WHITE big house (in a special context)

(69a) Ataadeɛ fitaa kɛseɛ no   (b) Ataadeɛ kɛseɛ fitaa no

Both examples in (69) are accepted without any special context. You do not also need to stress a particular adjective or give it a special emphasis in order for that sequencing to be accepted in Akan.

2.3.3 Indirect Modification

Indirect modification is also another phenomenon that explains the behavior of multiple adjectival modifiers. In languages that exhibit this characteristic, the adjectival modifiers according to Alexiadou and Wilder (1998: 308) are claimed to be reduced relative clauses and so do not occur directly with the noun. Sproat and Shih also argue that indirect modifiers are reduced relative clauses and one language that exhibits this property is Mandarin Chinese. In Mandarin, multiple adjectives that modify nouns do not follow the basic hierarchical ordering for multiple adjectives

when they are accompanied by a particle (de) which also serves as a relative clause marker. One other feature of indirect modification is that the adjectives involved must be predicative adjectives. Therefore, adjectives that cannot occur in the predicative position cannot occur as de-modifiers. In this language, however, bare adjectives can also modify noun phrases without the presence of the morpheme **de** (Li and Thompson, 1981,pp.117-8) in Sproat and Shih (1991). In these cases, the basic ordering restrictions found in English are also exhibited here. Let us consider the illustrations below:

(70a) SIZE>COLOUR

    (i)Xiaǒ-de   lǜi-de   huāpíng   (ii) lǜi-de   xiaǒ-de   huāping

     Small-DE   green-DE   vase   *green-DE small-DE   vase*

    Small green vase   small green vase

(b) SIZE>COLOUR

    (i)Xiǎo lǜ   huāpíng   (ii)*lǜ   Xiǎo huāping

    Small green vase   *green small vase*

    Small green vase   small green vase

When we consider the examples above, (70a) (I and II) are both accepted because the adjectives with the particle **de** are reduced relative clauses, so they do not directly occur with the noun. On the other hand, the example (70b) (II) is seen as ungrammatical because the modifiers are bare adjectives and as a result are direct modifiers which follow the order restrictions in the English language.

2.3.3.1Reduced relative clauses
As S&S have described the adjectives with the particle **de** in Mandarin as a reduced relative clause, these reduced relative clauses are adjective phrases that do not modify the noun directly. These types of relative clauses do not contain the copula verb and do not have a relative pronoun.

Let us consider below, examples of noun phrases that contain a relative clause and those that have reduced relative clauses to better understand how the reduced relative clause works in indirect modification. (Wilder,p.c.,Feb.2018)

    (a)   An NP that contains a full relative clause will have the structure below:

[NP a vase[clause [which is [AP green]]]

With the NP that contains the reduced relative clause, the adjectival modifier forms part of the clause and as a result, does not directly modify the noun (vase). It is seen as the predicate of the clause whose subject is empty = [e].

[NP a [clause which is [AP green]] vase]

Below is also an NP that contains a noun phrase that is not part of the clause thereby directly modifying the noun (vase):

[NP a [AP green] vase]

Usually, adjectives that come after the noun are assumed to be contained in a reduced relative clause in English and we consider an illustration by (Wilder,p.c.,Feb.2018) below:

[the only doctor[clause[e] [AP available]]] = the only doctor (who has) available

[the students [clause [e] [AP present]]] = the students (who were) present

From the above illustrations, we have realized that the structure of the relative clause differs from that of the reduced relative clause. With the relative clause, because the adjectival modifier is directly contained in the noun phrase, it follows the basic hierarchical ordering for multiple adjectives but with the reduced relative clause that usually occurs after the noun, it is seen as contained in the clause. Phrases with the reduced clause can have the adjectival modifiers reordered because they do not directly modify the noun.

According to Alexiadou and Wilder (1998), the special marker that is used to mark indirect modification need not always be a relative clause. Different languages could use different morphemes to mark indirect modification. One such example they give is Greek where a second definite article is used to mark indirect modification as shown in the example below.

(71a) to vivlio to kokkino to megalo   (b) to vivlio to megalo to kokkino

  the book   the red   the big   *the book   the big   the red*

   The big red book   the big red book

In Greek we realize that if the adjectives follow the noun, there is no order and the definite article (the), always occurs with the adjectives and because the adjective does not directly occur with the noun, it does not have to follow any hierarchical order and both ways are accepted in the language as grammatical.

In Akan, multiple adjectival modifiers are not seen as indirectly modified. We made mention of the fact that those types of adjectives must occur in the predicative position. As mentioned earlier in the introduction to Akan adjectives, it was stressed that all Akan adjectives can occur either attributively or predicatively. There are no adjectives in Akan that are restricted to the attributive position. There are also no adjectives that are restricted to the predicative position.

The final concept we will be considering is Parallel modification which we earlier on described as entailing the free ordering of the adjectival modifiers of noun phrases because the adjectives are parallel to each other and hence modify the noun independently.

2.3.4 Parallel Modification

This mechanism is also claimed to be one of the special ways in which multiple adjectival modifiers of noun phrases do not follow the strict basic hierarchical ordering restrictions. According to Sproat and Shih (1991: 578-9), when adjectives are ordered hierarchically they modify the head noun as well as the other adjectives in the phrase and follow a strict order. However, when they are parallel, they are separate units and thereby modify the head noun separately and do not follow any order of arrangement. According to Sproat and Shih (1991), adjectives used in this special pattern are coordinated which makes them parallel structures and as stated earlier, parallel structures are not hierarchical and hence do not follow any hierarchical ordering restriction. English exhibits this pattern using commas which signify coordination even though there is no pronounced conjunction. Another language that Sproat and Shih (1991:584) describe as exhibiting parallel modification is French. The study of the French language seems to suggest that adjective ordering restrictions do not exist in that language. One other significant observation they made is that the adjectives are post-nominal and stated that adjective ordering restrictions do not apply to multiple adjectival modifiers that occur post-nominal in French. We will consider examples showing how English and French exhibits parallel modification in the examples below:

English: Going by the basic hierarchical order that English multiple adjectival modifiers follow, we expect to have an order QUALITY > COLOUR > NATIONALITY/ORIGIN for the example below but that is not the case. The example below given by Sproat and Shih (1991) does not follow this order but it is accepted because the adjectives are separated by commas which signal a coordination of the structures which hence shows that the adjectives are parallel to each other.

(72a) she loves all those wonderful orange oriental ivories   (expected order)

     (b) She loves all those Oriental, orange, wonderful ivories   (special pattern)

French:

(73a) COLOUR>SIZE

Chien moyen blanc	chein blanc moyen
dog medium white	*dog white medium*
medium-sized white dog	medium-sized white dog

(b) SHAPE>COLOUR

Maison blanche carée	maison carée blanche
house white square	*house square white*
square white house	square white house

from the above examples we realize that the modifiers can be interchanged one for the other and the outcome is still acceptable and since they are coordinated structures, they have equal status. Also, according to Sproat and Shih (1991), there is the evidence for a preference for the use of the conjunction 'and' realized in French as (et) in between the adjectives which further indicates that they are coordinated structures.

(74a) chien moyen et blanc   (b) maison blanche et carée

    Dog medium and white   *house   white and square*

    medium-sized white dog   square white house

(c) piano noir et antique

    piano black and old

    old black piano

(d) table grande et ronde

    table big   and round

    big round table

As we stated earlier when the adjectives are stacked, they are arranged in a hierarchical order but when they are parallel, they are coordinated structures and therefore no order is expected. Let us consider the diagrams below which show the difference between a stacked structure and a coordinated structure:
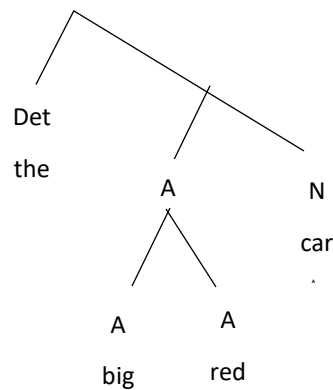
(75a) the big red car

(b) *the red big car
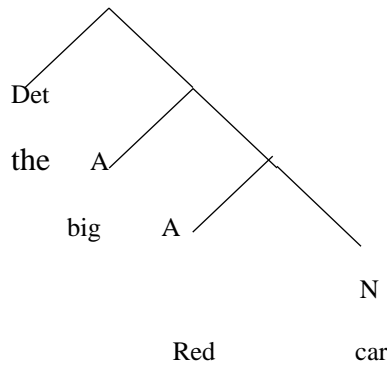
With the example above, (b) is regarded ungrammatical because the adjectives have been arranged in a stacked order and as a result, the basic hierarchical order for arranging multiple adjectives must be applied.

(76a) the big and red car

(b) the red and big car

We realize from example (76) above that both (a & b) are grammatical because they have been coordinated and no ordering restriction exists between them.

2.4 Conclusion

From the beginning of this section, we tried to establish the special circumstances under which the strict basic adjective ordering in English is not followed and came out with four different situations.

We looked at phonological reordering where we said that with this pattern, adjectives that have the same absoluteness can be rearranged to deviate from the strict order based on the phonological length of the adjectival modifiers involved. In that case, the adjective with the longer syllable will come after the adjective with the shorter syllable and is permitted in the English language.

Secondly, we discussed another special pattern known as focus reordering whereby the adjectives can be rearranged and will still be acceptable if there is a mention of a previous context and if the first adjective is stressed. If this happens in English and all the conditions are met, it is regarded as acceptable.

Also, we looked at indirect modification which is mainly characteristic of the Chinese (Mandarin) language. With this concept, the adjective occurs with the particle (**de**) and is seen as a reduced form of a relative clause. Since it is a relative clause, it does not occur directly with the noun and as a result, can be rearranged and will still be correct. Another feature is that the adjectival modifiers can only occur in the predicative position.

Lastly, we discussed parallel modification where we said that the adjectival modifiers are put together in a parallel structure and so they are not expected to follow the basic hierarchical order for sequencing multiple adjectival modifiers. The adjectives are also coordinated structures and have equal status. We looked at how English and French express parallel structures as explained by (Spoat and Shih 1991).

Chapter 3 Attributive adjectives in Akan

3.1 Introduction

Speakers of the Akan language most often than not freely use multiple adjectival modifiers in noun phrases in their day-to-day conversations as well as writings. This is opposed to the English Language where there is a strict basic hierarchical order as to how they are to be arranged. I would like here to emphasize that as already mentioned in the previous chapter, there are special situations where English accepts deviations from the preferred order as grammatical. In this chapter, I analyze into depth how specifically two adjectival modifiers in Akan noun phrases are arranged and whether they follow the basic hierarchical order proposed by linguists. If they do not follow the basic hierarchical order for arranging multiple adjectives, then based on the data, I can draw conclusions on which of the special patterns described in chapter two best describes the situation in Akan. I will be presenting the findings by Pokua (2003) on a similar research and the data I gathered from the speakers of the Akan language specifically (Asante Twi) from the Ashanti region of Ghana and based on my findings conclude on whether the findings match with any of the proposed theories above.

3.2 Pokua (2003)

There has not been much work done on adjectival ordering with regards to the Akan language, but a prominent research done in this area was by Pokua (2003). Pokua's work sought to find out if the preferred order of sequencing multiple adjectives in Akan followed the basic hierarchical order proposed by linguists like Dixon. Pokua (2003) tested for the existence of the hierarchy in Akan using three adjectives in her analysis.

Pokua worked with the notion that the property of the referent that the speaker wanted to emphasize was going to be the last to appear in the sequence and stressed that the semantic properties of the adjectives involved determined which one occurred closer to the noun. She also claimed that adjectives are ordered freely in Akan when they occur in a sequence.

The work done by Pokua (2003) sought to know the intuitive judgments of the native speakers of Akan on the order that they preferred if they had to arrange multiple adjectives in a sequence. The categories of adjectives she used in her work were the seven semantic classes proposed by Dixon (1982) who seemed to suggest that there was a possibility of a universal principle on the order of

adjectives that occurred in a noun phrase. His framework assumed that "the syntactic properties of a lexical item can largely be predicted from its semantic description."

(i)Value e.g. papa 'good'

(ii)Dimension e.g. Kɛseɛ 'big'

(iii)Physical Property e.g. dzen 'hard'

(iv)Speed e.g. hare 'fast'

(v)Human Propensity e.g. huuhuu 'boastful'

(vi)Age e.g. foforo 'new'

(vii)Colour e.g. kɔkɔɔ 'red'

Against the backdrop of Dixon's proposed hierarchy, Pokua interviewed 45 native speakers of the Akan language with a set of constructions that had in each set three adjectives arranged in an order. The respondents were required to choose the order that they would normally use. Pokua tested various sets to ascertain whether Akan followed an order. In Akan, the adjectives are postmodifiers, unlike English where the Adjective comes before the noun. Let us consider the structure below:

We expect a typical English noun phrase to have the structure Det $A_1 < A_2$ N

Akan, on the other hand, could either be the mirror image of English:

 N $A_2 > A_1$ Det or N $A_1 < A_2$ Det.

Pokua tested for the behavior of adjectival modifiers in the attributive position, of adjective modifiers of plural nouns, adjective modifiers that belong to the same class, and those that occur in the predicative position.

Criticism of Pokua's method

Pokua used three adjectives at a time in her constructions when questionnaires were presented to the respondents. This has been known to pose problems for respondents if the adjectives in a single noun phrase are a lot and there are a lot of possible sets to choose from. As described by Hetzron (1978: 175), the more the adjectives, the more confused the informant becomes thereby impairing on the judgment of the informant:

Research into the relative order of adjectives is among the most delicate topics in Linguistics. One obvious difficulty is the experimental fatigue that affects informants faster than in most other domains….informant's judgment rapidly becomes impaired, he may be willing to accept more after a few questions than in the beginning, or he may declare himself to be confused. (1978: 175)

The framework by Dixon (1982) which Pokua adopted in her work has seen significant modification over the years where some adjective classes have been further divided into several classes that are also ordered and several other adjective classes have been included. An example is the order hierarchy proposed by Scott (2002) which is more fine-grained compared to that proposed by Dixon (1982). Let us look at Scott's hierarchy below:

DETERMINER[(the/this)]>SUBJECTIVE COMMENT[(nasty/magnificent)] >SIZE[(big/small)] > LENGTH[(long/short)] > HEIGHT[(tall/high)] >SPEED[(fast/slow)] > WIDTH[(fat/thick/thin)]> WEIGHT[(light/heavy)]> TEMPERATURE[(hot/cold)]> AGE[(modern)]> SHAPE[(round)]> COLOUR[(white)]> NATIONALITY/ORIGIN[(German)]>MATERIAL[(wooden)]>NOUN

Looking at Dixon's categories, he puts a lot of adjective classes under DIMENSION but Scott's hierarchy separates them into SIZE > LENGTH > HEIGHT. According to Scott's hierarchy even though they all belong to DIMENSION, they occur in an order. Scott's hierarchy also includes other classes like TEMPERATURE > SHAPE > NATIONALITY/ORIGIN > MATERIAL.

We want to examine some of the categories she tested and her findings:

3.2.1 Adjectival sequencing in the Attributive Position
As we established earlier, Adjectives that occur in this position occur after the noun they modify and Pokua used adjectives belonging to different semantic classes in this section to find out if indeed they followed an order. Pokua tested sets that had three adjectives in each construction.

The English order is Human Propensity > Dimension > Colour (haughty fat dark woman) and Pokuaa expected Akan to be a mirror image of the English order: Colour < Dimension < Human Propensity (dark fat haughty woman).

(77a) Maame   tuntum   kɛseɛ   niɔdenfoɔ   no   a-ba   ha

    Woman   dark   fat   haughty   DEF PERF-come   here

           C   D   HP

  The dark, fat, haughty woman has come here.

  (b)Maame kɛseɛ   tuntum   niɔdenfoɔ   no   a-ba   ha

    Woman fat   dark   haughty   DEF PERF-come here

         D   C   HP

  The fat, dark, haughty woman has come here

  (c)?Maame niɔdenfoɔ   tuntum   kɛseɛ   no   a-ba   ha

    Woman   haughty   dark   fat   DEF   PERF-come here

        HP   C   D

  The haughty, dark, fat woman has come here

With the instances above, Pokua reported that all the 45 respondents did not completely rule out some of the orders since there was some level of acceptability in the Akan language for all the orders but preferred the Colour < Dimension < Human Propensity order more than the others. This order conformed to the basic hierarchical order for sequencing multiple adjectival modifiers in the noun phrase. She, however, recorded a small percentage of respondents who did not accept the order with HUMAN PROPENSITY coming directly after the noun. As described by Hetzron (1978:178) subjective qualifications like HUMAN PROPENSITY must occur farther away from the noun with the objective ones like COLOUR which has a relatively fixed attribute occurring closer to the noun. According to her the order that had Dimension coming before Colour was also accepted by a lot of people.

Another set of categories that she analyzed in her work was Age, Speed, and Value. The English order is value > speed > age (nice slow old man) and she expected Akan to be a mirror image of the English order: age < speed < value (dark fat haughty woman).

(78a) Papa akɔkora nyaanyaa kamakama no a-wu

    Man old slow nice DEF PERF-die

        A S V

    The old, very slow and nice man is dead

(b) Papa nyaanyaa akɔkora kamakama no a-wu

    Man slow old nice DEF PERF- die

      S A V

    The very slow, old and nice man is dead

(c)Papa kamakama nyaanyaa akɔkora no a-wu

    Man nice slow old DEF PERF-die

      V S A

    The nice, very slow and old man is dead

According to the results gathered from the respondents, the order they preferred most was age < speed < value but some of the respondents also saw the other orders as acceptable. Pokua based on her report made the conclusion that, the closer the adjective AGE was to the noun, the more acceptable it was to the respondents compared to when it was moved farther away from the noun. Her finding also seemed to confirm the assertion made by Ameka (2001:16) that AGE adjectives tend to occur first in the sequence in Ewe (a local Ghanaian language) noun phrases.

She also considered the categories Value, Colour, And Physical Property. The English order is value > physical property > colour (special hard white axe) and she expected Akan to be a mirror image of the English order: colour < physical property < value (white hard special axe).

(79a) Akuma   sonoko   fitaa   denden   bi   a-pue

Axe   special   white   hard   INDEF   PERF-appear

   A special white hard axe has appeared

(b) Akuma   fitaa   sonoko   denden   bi   a-pue

   Axe   hard   white   special   INDEF   PERF-appear

   A white special hard axe has appeared

(c)Akuma   denden   fitaa   sonoko   bi   a-pue

   Axe   hard   white   special   INDEF   PERF-appear

A hard, white, special axe has appeared

With this order too, respondents saw all the other orders as a possibility, but they mostly preferred the order that had the adjective COLOUR being the closest to the noun followed by those that had the COLOUR just an adjective away from the noun. The order that had the adjective COLOUR farthest away from the noun was the least accepted. In this set of examples, respondents mostly preferred COLOUR adjectives very close to the noun.

Lastly, we consider the order of preferred arrangement when Dimension, Age and Colour occur. The English order is dimension > age > colour (wide new red umbrella) and she expected Akan to be a mirror image of the English order: colour < age < dimension (red new wide umbrella).

(80a) ɔhene kyiniɛ   mono tɛtrɛɛ kɔkɔɔ no

  Chief umbrella new wide red DEF

  The new wide red umbrella of the chief

(b) ɔhene kyiniɛ tɛtrɛɛ mono kɔkɔɔ   no

 Chief umbrella wide new red DEF

 The wide new red umbrella of the chief

(c)ɔhene kyiniɛ kɔkɔɔ mono tɛtrɛɛ no

 Chief umbrella red new wide DEF

 The red new wide umbrella of the chief

The example above took an interesting turn because the majority of the respondents preferred the order with Dimension occurring closer to the noun more than the other orders even though AGE was present. In the example (80) where AGE was the most preferred, the adjectives COLOUR and DIMENSION were both not present. Example (79) saw the majority of the respondents preferring COLOUR closer to the noun as against the one with DIMENSION occurring closer to the noun. Example (80) paints a different picture with the majority of the respondents preferring DIMENSION closer to the noun. Pokua concludes that there is no consistency in the ordering between COLOUR, AGE, and DIMENSION.

3.2.1.1 Summary

In this part of Pokua's work, the results revealed that Akan to a large extent conforms to the basic order proposed for ordering multiple adjectival modifiers in the noun phrase. When the categories *colour, dimension* and *Human propensity* occur in an Akan noun phrase, the preferred order is Colour < Dimension < Human Propensity. This conforms to the basic universal hierarchy for adjective ordering suggesting the existence of adjective ordering restrictions in Akan. Also, with the set of categories Age, Speed, and Value, the preferred order was age < speed < value which also conformed to the basic hierarchy. With the categories Value, Colour, And Physical Propensity, the focus of the respondents was the position of the Colour adjective which they

preferred to occur closer to the noun. Lastly, we consider Dimension, Age, and Colour. This set of categories did not conform to the basic adjectival hierarchy as respondents preferred the order with Dimension occurring closer to the noun more than the other orders.

3.2.2 Adjective Sequencing and Plurality

Unlike English, Akan adjectival modifiers are pluralized when the nouns they modify occur in the plural forms. Pokua tested respondents on this to see if pluralizing the adjectives influenced their order in the noun phrase in any way. Let us consider the examples below:

One set of categories that she analyzed in this section was Dimension and Colour. She had two dimension adjectives but she did not classify the adjectives into any particular order.

(81a) A   -hem-fo   a-kyiniɛ   a-kɛseɛ   m-   fitaa -m-fitaa a-tenten no

   PLU-chief-PLU   PLU-umbrella PLU-big   PLU-white-PLU-white PLU-tall DEF

   The big white tall umbrellas of the chiefs.

(b) A   -hem-fo   a-kyiniɛ   m-fitaa -m-fitaa   a-kɛseɛ a-tenten no

   PLU-chief-PLU   PLU-umbrella PLU-white-PLU-white   PLU-big PLU-tall DEF

   The white, big, tall umbrellas of the chiefs

(c)A   -hemfo a- kyiniɛ a-tenten   a-kɛseɛ   m-fitaa- m-fitaa no

   PLU-chief-PLU   PLU-umbrella PLU-tall   PLU-big PLU-white-PLU-white DEF

   The tall big white umbrellas of the chiefs

With the examples above, Pokua was looking at COLOUR and DIMENSION categories and as established earlier for Akan, DIMENSION adjectives are expected to occur closer to the noun than COLOUR adjectives. There are two DIMENSION adjectives and one COLOUR adjective. The results showed most of the respondents preferring the order with the two DIMENSION adjectives occurring before the COLOUR adjective. The two Dimension adjectives involved were Height and Size and according to Scott's hierarchy they both obey the hierarchy with Size occurring before Height (Size > Height) but Pokua failed to realize it because she used Dixon's hierarchy which grouped them all under Dimension. Due to this, she did not pay attention to the order in which the Dimension adjectives occurred. Going by Scott's hierarchy, the expected order will be size > height > colour.

Another set of plural categories she tested were COLOUR, DIMENSION, and HUMAN PROPENSITY. The English order is Human Propensity > Dimension > Colour and Pokuaa expected Akan to be a mirror image of the English order: Colour < Dimension < Human Propensity.

(82a) M-maayewa a- deyɔfoɔ n-teaanteaa n-kɔkɔɔnkɔkɔɔ bi re- to dwom

PLU-girl PLU-hardworking PLU-slim PLU-red INDEF PROG-sing song

Some hardworking slim fair girls are singing a song

(b) M-maayewa n-kɔkɔɔnkɔkɔɔ n-teaanteaa a-deyɔfoɔ bi re to dwom

PLU-girl PLU-red PLU-slim PLU-hardworking INDEF PROG-sing song

Some hardworking fair slim girls are singing a song

(c)M-maayewa n-teaanteaa n-kɔkɔɔnkɔkɔɔ a-deyɔfoɔ bi re- to dwom

PLU-girl PLU-slim PLU-red PLU-hardworking INDEF PROG-sing song

Some slim fair hardworking girls are singing a song

With these sets of examples, the set that scored the highest percentage was the order in which DIMENSION occurs first followed by the set that had COLOUR beginning the sequence. This did not obey the hierarchy but showed that Akan speakers prefer (Dimension < Colour).

Let us consider another instance where Pokuaa uses the same adjective set COLOUR, DIMENSION, and HUMAN PROPENSITY but gets a different response from the respondents. The English order is Human Propensity > Dimension > Colour and Pokuaa expected Akan to be a mirror image of the English order: Colour < Dimension < Human Propensity.

(83a) Mmranteɛ atrimuɔdenfoɔ a-brane n-tumtum n-tumtum no akɔdi awurakasɛm

PLU-young men wicked-PLU PLU-stout PLU-black PLU-black DEF perform heinous act

The wicked stout dark young men have gone to perform a heinous act

(b) Mmranteɛ   a-brane atrimuɔdenfoɔ n-tumtum n-tumtum no akɔdi awurakasɛm

   PLU-young men PLU stout wicked-PLU PLU-black PLU-black DEF perform heinous act

   The stout wicked dark young men have gone to perform a heinous act

(c)Mmranteɛ n-tumtum n-tumtum   a-brane atrimudenfoɔ no akɔdi   awurakasɛm

PLU-young men PLU-black PLU-black PLU-stout   wicked-PLU DEF perform heinous act

The dark stout wicked young men have gone to perform a heinous act

In this set of orders, the order that has COLOUR beginning the sequence scored the highest percentage as the most preferred order. This conformed to the basic hierarchical order for ordering adjectives but was not what was expected in Akan since earlier examples proved that Akan speakers preferred DIMENSION adjectives to be closer to the noun.

(84a) Saa   m-mranteɛ   no yɛ a-trimuɔdenfoɔ a- brane n-tumtum-n-tumtum

     Those PLU-young man DEF be   PLU-wicked   PLU- stout PLU-black-PLU-black

     Those young men are wicked, stout and dark

(b) Saa   m-mranteɛ   no yɛ a-brane   a-trimuɔdenfo n-tumtum n-tumtum

  Those PLU-young man DEF be PLU-stout PLU-wicked PLU-black PLU-black

   Those young men are stout, wicked and dark

(c)Saa   m-mranteɛ   no yɛ   n-tumtum n-tumtum   a-trimuɔdenfo a-brane

   Those PLU-young man DEF be PLU-black PLU-black PLU- wicked   PLU-stout

   Those young men are dark, wicked and stout

In this instance also where COLOUR, DIMENSION, HUMAN PROPENSITY was tested, the order that has DIMENSION occurring first was the much preferred one. These adjectives were predicative and as such cannot be hierarchically ordered because they have been coordinated with a conjunction and that makes the adjectives parallel.

Lastly, we consider the categories HUMAN PROPENSITY, VALUE and SPEED

(85a) A-kristo-foɔ   no   yɛ mpaebɔfo amapa   a- ho-harefo

   PLU- Christ-PLU DEF   be prayerful   outstanding PLU-self-fast

   The Christians are prayerful out-standing fast people

(b) A-kristo-foɔ   no   yɛ amapa mpaebɔfo a- ho-harefo

   PLU-christ-PLU   DEF   be   outstanding prayerful PLU-self-fast

   The Christians are out-standing prayerful fast people

(c)A-kristo-foɔ   no   yɛ mpaebɔfo a- ho- harefo ampa

   PLU-christ-PLU DEF   be   prayerful PLU-self-fast   outstanding

  The Christians are prayerful fast out-standing people

With these orders, Pokua recorded a higher preference for the order where the VALUE adjective occurred last in the sequence and this she says occurs in the singular forms as well. With the order where VALUE began the sequence, the majority of the respondents totally ruled it out as totally unacceptable. The preferred order of the respondents was HUMAN PROPENSITY, SPEED, and VALUE. These adjectives were also predicative and coordinated and as such cannot be stacked which implies that adjective orderings restrictions cannot apply to them.

3.2.2.1 Summary and criticism

The attributive adjective examples that Pokua analyzed with regards to pluralized nouns showed that the adjectives behave the same way as when they modify singular nouns. DIMENSION adjectives are usually preferred by respondents to begin the sequence but there are other instances where the COLOUR adjective was preferred by respondents to begin the sequence. However, Pokua failed to realize that predicative adjectives cannot be stacked and as a result cannot have ordering restrictions apply to them. Multiple adjectives that occur in the predicative position must be coordinated and that prevents adjective ordering restrictions from applying to them.

3.2.3 Adjectives From the Same Semantic Class

The issue of analyzing adjectives that belong to the same class raises a lot of questions because most of the adjectives that Pokua analyses as belonging to the same class actually belong to separate classes when the more fine-grained hierarchical order proposed by Scott (2002) is used.

The framework proposed by Dixon that Pokua employed in her work grouped a lot of adjective classes under DIMENSION. As the hierarchy proposed by Scott (2002) reveals, the class of adjectives that Dixon groups under DIMENSION are different classes and they obey the hierarchy.

Pokua analyses some Dimension adjectives like (tall and fat) which belong to Height and Width adjective classes respectively. Dixon (1982:25) states that there does not appear to be an order when two or more adjectives belonging to the same semantic class modify a noun. According to him, they can be interchanged one for the other and it would still be acceptable but using Scott's hierarchy, Height is supposed to occur before Width. Scott's hierarchy proposes Height > Width and Akan would be expected to be the reverse order Width < Height.

(86a) Kofi yɛ tenten kɛseɛ   (b) Kofi yɛ   kɛseɛ   tenten

    Kofi be tall   fat   Kofi be   fat   tall

    Kofi is tall and fat   Kofi is fat and tall

Looking at the examples above, the adjectives tenten 'tall' and kɛseɛ 'fat' both belong to the category DIMENSION and so Pokua was not expecting to find an order. Based on the results from the respondents, both orders scored 91.1% when it came to acceptability showing that there was a free order between the two adjectives.

Looking at the examples above, the adjectives are predicative and therefore are not supposed to show any ordering restriction because they have been coordinated even though there is no overt realization of the Akan conjunction (ne). Also, the idea that they both belong to the same class makes it problematic, the question is what are the correct classes of adjectives that exist? By answering this question we can tell what classes of adjectives that belong to the same class.

Let us consider another example provided by Pokua below:

(87a) Ntoma papa sonoko   (b) Ntoma sonoko papa

    Cloth good special   cloth   special good

   A special good cloth   a good special cloth

The examples above make use of the adjectives papa 'good' and sonoko 'special' which both belong to the VALUE category of adjectives. According to Pokua, there was a level of acceptability for both orders but there was a significant difference between them. 55.6% of the respondents

preferred papa sonoko 'good special' as opposed to 11.1% who preferred sonoko papa 'special good'. These adjectives showed a significant preference for one order over the next and as a result, they should belong to different categories according to Dixon's analysis.

Pokua believed that what could have accounted for the preference for papa sonoko 'good special' assumed that the adjective sonoko 'special', is the more distinct adjective which talks about a noun that is not just good but also special and so should occur farther away from the noun. This she believes better explains why there exists an order between good and special and they cannot just be interchanged.

Scott (2002) also raises the issue of analyzing stacked adjective phrases that are made up of adjectives belonging to the same class. One class Scott identifies is the Subjective Comment class and states that you can have multiple subjective comment adjectives that are stacked. The solution he offers is the 'further decomposition' of the subjective comment class into (a) "some sort of evidential or universal comment phrase that indicates some kind of general, stable, or standard evaluation" and (b) "a phrase that can be considered more essentially "subjective comment" in that it indicates the speaker's own evaluation or an evaluation that may be more transitory. Scott provides the structure for an example '*a boring famous book*' below:

(88a)
DP
  D   Subjective CommentP
  a
      AP
    boring   e   ?evidentialP/Universal CommentP
                    AP   NP
                  Famous   book
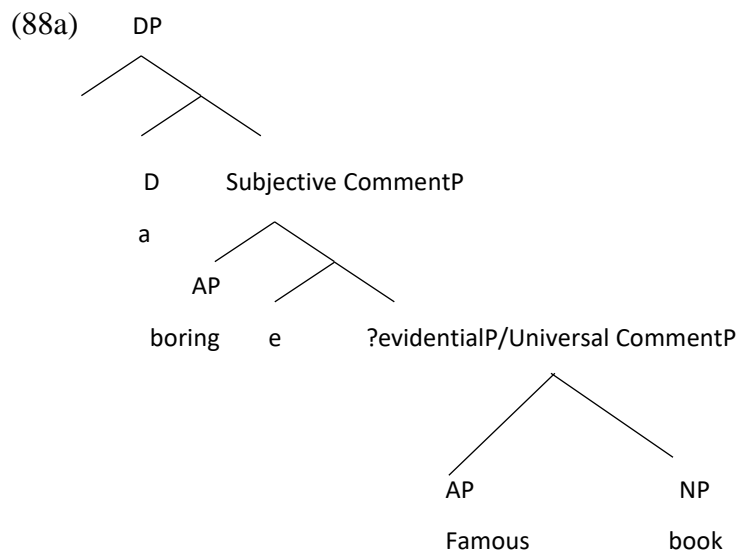
Pokuaa also analyses examples that belong to the same class of Human Propensity below:

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(89a) Abranteɛ kwasea hyeehyee no   (b) Abranteɛ hyeehyee kwasea no

Young man foolish boastful DEF   Young man boastful foolish DEF

The foolish boastful young man   the boastful foolish young man

The adjectives used in the above examples (*foolish, boastful*) are from the class HUMAN PROPENSITY. In these examples, Pokua did not record a significant number of respondents choosing one order over the other. These adjectives could be interchanged one for the other and the respondents still saw it as acceptable. On this set of adjectives, Pokua agreed with Dixon and classified them as belonging to the same semantic class of adjectives hence their free ordering.

We consider the last example for this section below

(90a) Ntoma gow   dada   (b) Ntoma dada gow

Cloth   tattered   old   cloth old   tattered

A tattered old cloth   an old tattered cloth

The adjectives gow 'weak/tattered' and dada 'old' are both grouped under the category Age. According to Pokuaa, Osam (1991:191) in his work glossed 'gow' as old/ wretched. Since both adjectives talk about age, they should be ordered freely but that is not what happens when these examples are presented to the respondents. Pokuaa recorded a significance in the level of preference as 66.7% of the respondents preferred <u>gow, dada </u>'weak, old' as against just 8.9% for the reverse order.

She gives the explanation that the adjective <u>gow </u>can be argued to be a physical property adjective, thereby putting both adjectives in different classes where an order is expected. She further states that if both adjectives are treated as belonging to different classes, the Age adjective under normal circumstance as explained above would have to occur closer to the noun. This is however not the case with regards to the feedback from respondents on example (90).

Pokua explains that the property of the noun involved sometimes determines the position of the adjectives that occur with it. As Hetzron has noted (1978:176), some adjectives combine with their nouns to form a single unit. In these cases, those kinds of adjectives always occur directly with the noun when they occur in a sequence with other adjectives depending on the language involved. So, with the example we had above, although <u>dada </u>'old' would have been expected to begin the

sequence, the adjective <u>gow</u> 'weak/tattered' begins the sequence because it normally occurs with the noun <u>ntoma</u> 'cloth'. The results from respondents were significant with 66.7% choosing <u>gow, dada</u> 'tattered/old' as against 8.9% preferring the reversed order.

As noted above by Pokuaa, it can be difficult assigning an adjective to a particular class due to the meaning of an adjective. When there is difficulty in establishing the meaning of an adjective, there can also be a difficulty in deciding the adjective class they belong to. There is also the problem of ambiguity when an adjective is torn between two or more meanings that place each in a different class. A typical example given by Scott (2002) is the adjective 'green' which can have two meanings. 'Green' can have the typical meaning of COLOUR and will be generated in the after AgeP. It can also mean 'inexperienced' and will be generated before AgeP in Subj.CommentP. this he argues can account for the difference in meaning between *he is a young green* (=colour) *Martian* and *he is a green* (=inexperienced) *young Martian.*

3.2.4 Adjective sequencing in predicative position

Adjectives that occur after the copula verb in the predicative position do not follow the basic hierarchical order for arranging adjectives because they cannot be stacked. Multiple adjectives that occur in the predicative position must be coordinated since that is the only structure possible. The basic hierarchical structures proposed by Dixon (1982) and Scott (2002) among other linguists pertained to adjective phrases that occurred inside the noun phrase and not 'multiple predicative adjectives'. Pokuaa does not seem to understand this concept and goes ahead to test Akan speakers for hierarchy restrictions in 'multiple predicative adjectives'. In this section, the respondents were given uncompleted sentences by Pokuaa and three adjectives belonging to different classes to arrange in the order in which they preferred. We will consider a few examples below.

(91a) Ntoma no ye

　　　The cloth is …

　　　　　　kɛseɛ 'big'(Dimension), dada 'old' (Age), fitaa 'white' (Colour)

As we stated earlier when discussing how these adjectives behaved in the attributive position, we stated that adjectives that belonged to these three categories (Dimension, Age, Colour) usually occurred close to the noun. And bringing all three together makes it difficult to tell if there exists

an order between them. According to Pokuaa, the order which scored highest in terms of preference was Colour < Dimension < Age followed by Dimension < Colour < Age but the difference was not significant. Pokuaa, however, concluded that when you have (Dimension, colour, age) all modifying a noun, there is no clear order and as such the sequence depends on the individual speaker and what he/she wants to emphasise.

There was no record of a preferred order among these adjective classes because adjectives in the predicative position are not expected to follow the hierarchical order for multiple attributive adjectives.

(b) Kaa no yɛ…

　　The car is…Denden 'hard' (PP), foforɔ 'new' (A), kama 'nice' (V)

According to reports by Pokuaa, a majority of the respondents preferred the order that had the adjective Age beginning the sequence and the Value adjective being last in the sequence. It has earlier on in the chapter been established by Pokuaa that if a set of adjectival modifiers include one of Age, it is more likely to begin the sequence. The order that was least preferred was the one that had the Value adjective beginning the sequence. This corresponds with earlier discoveries made by Pokuaa that respondents usually prefer when the value adjective occurs last in the sequence.

(c)Adwoa Mansa yɛ…

　Adwoa Mansa is…

　　　　　　　Tenten 'tall' (D), fɛfɛɛfɛ 'beautiful' (V), nyansani 'wise'/kwasea 'foolish' (HP)

Looking at example (c), the adjective classes that were being tested belonged to Dimension, Value, and Human propensity. The order that was the most accepted was Dimension < Value < Human propensity in that order. The preferred choice is quite interesting because the Value adjective occurred before the Human Propensity adjective as it had been established earlier that the Value adjective is usually preferred to occur last in the sequence. This according to Pokua makes it difficult to strongly say that Value adjectives are always preferred to occur last in the sequence. Pokua is of the view that the semantic content of the adjective involved most often than not determines its position in relation to the noun it modifies. Pokuaa goes on further to say that Akan as a language admires height ' tenten' as an attribute and would, therefore, prefer an adjective like

beautiful 'fɛfɛɛfɛ which is a value adjective to occur close to it as against the Human Propensity adjective wise 'nyansani'.

Pokua did not need to expect an order for multiple adjectives in the predicative position because such structures are coordinated even though Akan does not have the overt realization of the conjunction (ne) when the multiple adjectives occur in the predicative position. The absence of the conjunction does not mean the adjectives are stacked.

We consider the last example below

(d)The young man is…

    The young man is…

                    Hweaa/feaa/teaaa 'slim/slender' (D), kumaa 'young' (A), bawee 'stiff' (PP)

In the above example, most of the respondents preferred the order that had Dimension beginning the sequence followed by Age. Although there was another order with Dimension beginning the sequence, it was least preferred because it was followed directly by Physical Property. Pokuaa then suggests that the order of the adjectives in the sequence is usually not dependent solely on the adjective that begins the sequence but also how the other adjectives follow in the sequence. Pokuaa concludes that when adjectives occur in the predicative position, they behave in much the same way as those that occur in the attributive position. Multiple adjectives in the predicative position are not expected to show any strict order just as multiple attributive adjectives are expected to do.

3.2.5 Summary and Conclusion

Authors like Dixon (1982:24) and Hetzron (1978:169) have postulated that there is a basic order when adjectives occur in a sequence in the attributive position and seem to suggest that the order they follow in the English language is Value > Dimension > Physical Property >Speed > Human Propensity > Age > Colour. Dixon (2001:17) seemed to suggest that this order was universal for languages that had the adjective coming before the noun. For languages that had the adjective occurring after the noun, he was of the view that the reverse of the order was going to be the case Colour < Age < Human Propensity < Speed < Physical Property <Dimension <Value. Pokua decided to investigate if the adjectival modifiers in Akan noun phrases followed an order when they occurred in a sequence just as was exhibited by English adjectives. This investigation was

done against the backdrop that there was a relatively free ordering of Akan adjectives. She was of the belief that the motivation for a respondent's choice was dependent on the feature the person wanted to emphasise.

For an adjective like Colour, according to the order suggested above, it was supposed to always occur in the sequence directly after the noun in Akan but she did not always record a preference for Colour beginning the sequence. There were instances where the order that had Colour occurring second or Last was the most preferred one. One observation she made was that there was a high preference for adjectives belonging to the semantic classes Colour, Age, and Dimension as closest to the noun with Dimension preferred over the others in most cases. She also observed that Value adjectives were mostly preferred to occur last in the sequence and when Human Propensity and Speed adjectives were to occur in a sequence, the respondents preferred for Human Propensity to occur before Speed adjectives. The significant difference recorded by Pokua is the Adjective Dimension that is supposed to occur last if we were to go by the order but instead, most respondents preferred it to occur first in the sequence.

In terms of how plurality affected the order of adjectives in a sequence, Pokua discovered that adjectives that modified plural nouns behaved in the same way as their singular counterparts. This test was carried out on respondents because as established in Akan, some adjectives tend to inflect for the number of the nouns that they modify. However, expecting to find ordering restrictions among multiple adjectives that modify plural nouns in the predicative position was a mistake on the part of Pokua as the basic ordering restrictions proposed by linguist pertained to multiple attributive adjectives.

When Pokua tested the behavior of adjectives that belonged to the same class, it appeared that adjectives that belong to the same class can be used interchangeably and it is accepted. She also noted that the semantic contents of the nouns, as well as the adjectives in some instances, were a contributory factor in their order of sequence. The adjective classes that Pokua grouped under Dimension following Dixon's hierarchy are actually regarded as separate classes going by Scott's hierarchy. There is also the difficulty of being able to decide on the meaning of an adjective in order to determine what class to actually put them. This is because some words can be ambiguous between two readings and their various meanings could actually put them in two classes.

Lastly, she also discovered that the behavior of adjectives in their order of sequence stayed the same when they occurred in the predicative position. Multiple adjectives in the predicative position are coordinated even if there is the absence of the conjunction 'ne' as can be seen in Akan. Ordering restrictions are not expected to occur in these instances because adjectives in the predicative position cannot be stacked.

Based on Her findings above, she concludes that unlike English, there is no basic hierarchical order in Akan that adjectival modifiers follow when they modify a noun phrase in a sequence. This conclusion was made even though in some instances there was a clear preference for a specific order. Pokua rather argues that the semantic contents of the nouns and adjectives involved sometimes give rise to a preferred order.

Having gone through Pokua's work since it was the major work done on adjectival ordering in the Akan language, I decided to carry out a study in Akan to ascertain whether multiple attributive adjectival modifiers had ordering restrictions. My approach was somewhat different from hers in that I employed the use of two adjectives in all my test results. Unlike Pokua who used three adjectives at a time in almost all her test results. I took this approach bearing in mind the confusion respondents go through when faced with multiple examples as reported by Hetzron (1978:175).

Research into the relative order of adjectives is among the most delicate topics in Linguistics. One obvious difficulty is the experimental fatigue that affects informants faster than in most other domains….informant's judgment rapidly becomes impaired, he may be willing to accept more after a few questions than in the beginning, or he may declare himself to be confused. (1978: 175)

I was of the view that if indeed a basic hierarchical order existed in the Akan language just as is evident in English, then using two adjectives should be enough to confirm its existence.

3.3 Follow – up Questionnaire

3.3.1 Mode of data collection

For this study, the use of questionnaires was employed which had many constructions for respondents to choose from. Every construction had two adjectives at a time from which respondents were required to choose from. This was done to avoid the problem identified by Hetzron (1978) where respondents get confused when too many adjectives or constructions are

posed to them thereby impairing on their choice. From the earlier study carried out by Pokua, she made use of three adjectives in most of her constructions and there could be the possibility of not being a true representation of the situation in Akan as respondents could get confused at a point and make mistakes. The respondents were told to rank the constructions on a scale of 1-5 (where 1-very acceptable 2-quite acceptable 3-neutral 4-unacceptable 5-very unacceptable). The (neutral) choice was added to the options because some speakers of the language I spoke to earlier before conducting the research said they could not make a choice and accepted both options as okay even though it was impressed upon them to make a choice. A copy of the questionnaire used has been included in the (Appendix).

The questionnaires were administered with the help of two other people with one of them being a 50-year-old teacher of the Akan language and had lived all his life in the village where the test was carried out.

3.3.2 Respondents

The respondents employed in my work were 40 native speakers of the Akan language. 38 out of the 40 respondents were native speakers of the Asante twi dialect with the other 2 being natives of the Fante dialect. This was so because the test was carried out in two villages in the Ashanti region of Ghana which is predominantly inhabited by native speakers of the Asanti Twi dialects. A typical village (Apitikoko) and a town (Obuasi) in the Ashanti region of Ghana were the places where this test was carried out in other to be sure that the language spoken by the natives had not been influenced by other local languages.

The capital city of this region (Kumasi) has in the recent years seen the influx of many migrants from the Northern region of Ghana and it might be difficult getting speakers whose L1 is Asante twi. Also, all the speakers interacted with had lived in those places almost all their lives. Looking at the work done by Pokua (2003), some of the data was taken from parts of Accra which is inhabited by the Gas originally who are not native speakers of the Akan language and also inhabited by speakers of other Ghanaian languages. The 50-year-old teacher of the Akan language helped to identify people who had lived all their lives there and we also inquired of their competence in the language before issuing out the questions.

The respondents' ages were also taken into consideration. The ages of the respondents ranged between 18 and above 55 years. Specifically, twelve of the respondents were between the ages of 18-25 years, eleven were between the ages of 26-35, two were between 36-45, five were between the ages of 46-55 and lastly, ten were above 55 years. Since (Apitikoko) was a typical village, majority of the respondents were illiterates, so the questions had to be read out to them to make a choice. Since they had two options, it was quite easy for them to choose the options they preferred the most. All forty questionnaires were administered to the respondents within a week.

3.3.3 Mode of Analysis

This work was analysed based on the intuitive judgments of the native speakers of Asante Twi that were interacted with. They were given a set of constructions which had two adjectival modifiers in each and were supposed to choose the order they preferred. Since there were only two orders involved at a time, respondents basically scored the order they preferred so for each set, the total number of people who chose one order were counted against those who chose the opposite order. The set that received the highest number of respondents was considered as the most preferred order. So for instance if Colour < Size was the order being compared and 30 people chose 1 or 2 which were very acceptable and quite acceptable respectively, it would be regarded as the most preferred order against say the remaining 10 people choosing the reverse order Size < Colour. However, if there is a tie between the two sets or the difference is insignificant, then the conclusion is that the two sets could be interchanged and would still be considered grammatical.

The questions were in two parts. The first part was about the background of the respondent and the dialect of Akan he or she spoke. Out of the 40 respondents, 38 spoke Asante Twi as their main Akan dialect. The more comprehensive hierarchical order as proposed by Scott (2002) in chapter 2 above was the framework used in this work. The second part of the questionnaire contained the actual questions and was divided into 4 sections (A-D). Section A looked at adjectival ordering in the attributive position by testing several adjectival categories, B looked at those adjectives that belonged to the same semantic class and how they behaved, C looked at adjectival ordering in the predicative position and lastly, D looked at how plurality affected adjective ordering in Akan attributive adjectives.

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3.4 Adjective Ordering in Attributive Position (questionnaire section A)

Adjectives can be used to modify the noun phrase in Akan and they usually occur after the noun. This section had 6 questions with two adjectives in each construction and the adjective pairs were size>height, subj comment>colour, size>age, subj comment>temperature, Speed > Age. As already stated by Hetzron (1978:170-172), languages that have the adjectives occurring before the noun behave differently from those that have the adjectives occurring after the noun. Since adjectives in Akan are post-modifiers, they are expected to be the reverse order of what happens in languages like English. Width < Height, Colour < Subjective Comment, Age < Size, Temperature < Subjective Comment, Age < Speed. These adjective pairs were taken from Scott's hierarchy below which was the framework employed in this work.

DETERMINER[(the/this)]>SUBJECTIVE COMMENT[(nasty/magnificent)] >SIZE[(big/small)] > LENGTH[(long/short)] > HEIGHT[(tall/high)] >SPEED[(fast/slow)] > WIDTH[(fat/thick/thin)]> WEIGHT[(light/heavy)]> TEMPERATURE[(hot/cold)]> AGE[(modern)]> SHAPE[(round)]> COLOUR[(white)]> NATIONALITY/ORIGIN[(German)]>MATERIAL[(wooden)]>NOUN

These category pairs were chosen to examine whether the break-down of the Dimension class for instance by Dixon would reveal a preferred order as was predicted by Scott (2002) that adjective classes under Dimension were actually separate adjectives. Pokua treated these separate adjectives under a single 'Dimension' class. These separate classes showed an ordering restriction when a multiple of them are used in the attributive position. Also,

Below are some of the questions as well as the responses from the respondents. The question numbers correspond to how they have been numbered in the questionnaire.

1.(a) Apoosini tenten   gramoo no   a- wu   **N < Width < Height < (expected order)**

    Police   tall(H)   stout(W)   Det Aux die
    The tall stout police man is dead

 (b) Apoosini gramoo   tenten no a-wu   **N < Height < Width (not expected)**

    Police   stout (W)   tall(H)   Det Aux die
    The stout tall police man is dead

In (1) above, the adjective used belonged to the classes Height and Size. According to Scott's hierarchy, Width is supposed to occur before Height in Akan and since the Akan adjectives are post-modifiers, it was expected to show a reverse order for English (Width < Height). All the respondents were of the view that they saw both orders as acceptable and not completely wrong but 39 out of the 40 respondents chose the (a) option and scored it as very acceptable but did not rule out the (b) option as a possibility. 1 of the respondents chose the option (b) as the order preferred but did not rule out the possibility of the (a) option. This showed that when it came to Width and Height, there was a clear preference for the order that conformed to the order proposed by Scott (2002). This example showed that when it came to adjectives belonging to the Width and Height classes, Akan exhibits ordering restrictions.

Let us consider another example below that employed the use of the adjective classes Subjective Comment and Colour.

(expected order)

2(a) Ataadeɛ fitaa fɛɛfɛ   no ayera   **(N < Colour < Subj. Comment)**

　　Dress   white(C) nice (SC) Det missing

　　The white nice dress is missing

(not expected)

 (b) Ataadeɛ fɛɛfɛ fitaa no ayera   **(N < Subj. Comment < Colour)**

　　Dress   nice (SC) white (C) Det missing

　　　The nice white dress is missing

With example (2) above, 35 out of the 40 respondents chose (1) which is very acceptable for the option (a), 3 respondents chose (1) which is very acceptable for the option (b) and 2 chose both options. Again, with this example, all the 40 respondents were totally fine with both options. 3 respondents who were above the age of 60 made it known that either option was acceptable and so could not make a choice. They ended up choosing both options as acceptable. This goes to confirm the assertion made by Pokua (2003) that Value adjectives, in this case, Subjective

Comments have a fixed position in Akan in that they are usually the last to occur in the sequence farther away from the noun. This example also showed that Akan had a clear preference when these two adjective classes are involved and showed ordering restrictions.

Let us consider another example in this section where the adjectives occur attributively

3 (a) Abofra kumaa tiatia   no   yare   da ayaresabea   **N < Age < Width (expected order)**

    Child   young slim DEF be+ sick sleep hospital

   The young slim child is sick at the hospital

(b) Abofra tiatia kumaa   no yare da ayaresabea   **N < Width < Age(not expected)**

  Child   slim   young DEF be+sick sleep hospital

  The slim young child is sick at the hospital

With example (3) above, all respondents saw both orders as acceptable but 16 of the respondents chose the expected order which had Age occurring before Width. The majority of the respondents (24) chose the order which was not expected. This order goes to confirm the observation made by Pokua (2003) that even though the adjective Age usually has to occur close to the noun, the speakers of Akan prefer to put DIMENSION adjectives first to occur in the sequence.

We will consider the last example for this section below:

4 (a) Maame aberewa nyaa   no   a-wu   (**N < Age < Speed**) (**expected order**)

   Maame old   slow   DEF PERF die

   The old slow woman has died

(b) Maame nyaa aberewa   no a-wu   (**Speed < Age**) (**not expected**)

   Maame slow old   DEF PERF-die

  The slow old woman has died

With the example above, all the 40 respondents chose (1) for the option (a) which was the expected order. The results of this question showed clearly that there was an ordering preference. Pokuaa (2003: 34) makes the claim that Age adjective is always preferred to occur close to the noun

because of its semantic properties. She argues that a property like Age is inherent and cannot easily be changed about a noun but adjectives like <u>nyaa</u> 'slow' is a property that can easily be changed by circumstances and so occurs farther away from the noun.

3.5 Adjectives In The Same Semantic Class (section B)

 We have been able to establish in section 3.4 above that those class of adjectives that Dixon (1982) put under Dimension actually belong to different adjective classes and also have ordering restrictions. On the other hand, Scott (2002) also acknowledges the existence of words that belong to the same class. In Scott's system, he discusses multiple 'subjective comment' adjectives and states that you can have multiple subjective comment adjectives that are stacked. The solution he offers is the 'further decomposition' of the subjective comment class into (a) "some sort of evidential or universal comment phrase that indicates some kind of general, stable, or standard evaluation" and (b) "a phrase that can be considered more essentially "subjective comment" in that it indicates the speaker's own evaluation or an evaluation that may be more transitory adjectives that both belong to the Subjective comment category. When the adjectives are analysed in this sense, we can expect to find an order when two subjective comments occur in a noun phrase.

We will consider some examples that belong to the same semantic class of Subjective Comment and see if we recorded any order between the adjectives or they could both be interchanged and will still be acceptable.

11 (a) Abaayewa tirimuɔdeni ahoɔfɛfoɔ no yɛ ɔkyerɛkyerɛnii

    Lady wicked   beautiful DEF be teacher

   The wicked beautiful lady is a teacher

    (b)Abaayewa ahoɔfɛfoɔ tirimuɔdeni no yɛ ɔkyerɛkyerɛnii

     Lady   beautiful   wicked   DEF be teacher

    The beautiful wicked lady is a teacher

In example (11) above, the adjectives ahoɔfɛfoɔ 'beautiful' and tirimuɔdeni 'wicked' both belong to the Subjective Comment class. 14 of the respondents chose (1) which is very acceptable for the order that had the adjective wicked occurring before the adjective beautiful. The remaining 26 respondents chose the reverse order as acceptable. The difference is quite significant and showed a preference even within the same semantic class.

Let us consider another example below:

12 (a) Ntoma fii   tantan no da adaka no so

    Cloth dirty   ugly DEF lie box DEF on

    The dirty ugly cloth is on the box

  (b) Ntoma tantan fii no da adaka no so

    Cloth ugly dirty DEF lie box DEF on

    The ugly dirty cloth is on the box

In the example above, the adjectives that occurred in a sequence where fii 'dirty' and tantan 'ugly' which both belong to the Subjective Comment class. In this example, 35 out of the 40 respondents chose the order that had the adjective 'dirty' occurring before 'ugly'. The difference was very significant showing that even within the same semantic class, some adjectives are preferred to occur before the other. The explanation that Pokua (2003) gives is that sometimes the semantic contents of both the nouns and the adjectives involved determine their order. In the context above, I would assume that the option (a) which has 'dirty' occurring before 'ugly' is more acceptable because 'a cloth' which in this case could pass for a 'rag' is most often than not seen as more likely to be dirty as opposed to 'ugly' hence combining with the adjective 'dirty' before 'ugly'.

3.6 Adjectives In the Predicative Position (section c)

Adjectives can also occur in the predicative position after the copula verb 'yɛ' in the Akan language. In the predicative position, multiple adjectives can also be used but no ordering restrictions are expected because adjectives in that position have to be coordinated and not stacked.

In this section, I wanted to test how respondents used predicative adjectives but not expecting them to undergo ordering restrictions. This is unlike when they occur in the attributive position with ordering restrictions applying. The sentences used had adjectives that belonged to different semantic classes and posed to respondents to see if they would be ordered. Let us consider the examples below:

17 (a) Abaayewa no yɛ kɔkɔɔ teatea   (**Colour < Height**) (**expected order**)

   Girl   DET be red   slim

   The girl is fair and slim

(b) Abaayewa no yɛ teatea kɔkɔɔ   (**Height < Colour**) (**not expected order**)

   Girl   DET be slim fair

   The girl is slim and fair

In these sets of constructions, the adjectives that were being compared were kɔkɔɔ 'red' and teatea 'height' and they belonged to the Colour and Height classes respectively. The expected order for attributive adjectives that conforms to the basic hierarchy would be Colour < Height but as recorded by Pokuaa (2003) above, the speakers of Akan mostly preferred the Height adjective to occur first whenever it was to occur with other adjectives. In the test I conducted, 17 of the respondents chose (a) which had the order Colour < Height and 23 of the respondents chose the order Height < Height confirming the findings made by Pokua (2003).

                                                   (**expected order**)

18 (a) Maame no yɛ abrewa kămakăma   (**Age < Subjective Comment**)

   Maame DEF be old   cute

   The woman is old and cute

(b) Maame no yɛ kămakăma Aberewa   (**Subjective Comment < Age**)

   Maame DEF be nice   old

   The woman is cute and old

In these sets of constructions, the adjectives that were being compared were aberewa 'old' and kămakăma 'nice' and they belonged to the Age and Subjective Comment classes respectively. The expected order that conforms to the basic hierarchy for attributive adjectives would be Age < Subjective Comment. In the test conducted, all 40 respondents chose (1) which is very acceptable for the order that had Age occurring before Subjective Comment. In this instance, all 40 respondents saw the reverse order as very unacceptable in the Akan language. This confirmed the observation made by Pokua (2003) that Value adjectives which in this case is represented by the class 'Subjective Comment' have a fixed position to occur last in the sequence. it also confirmed her finding that the Adjective class 'Age' is usually preferred to occur first in a sequence that has an Age adjective.

20 (a) Bɔɔlo no yɛ korokorowa ketewa   (**Shape < Size**) (**expected order**)

      Ball DEF be round   small

      The ball is round and small

   (b) Bɔɔlo no yɛ ketewa korokorowa   (**Size < Shape**) (**unexpected order**)

      Ball DEF be small round

      The ball is small and round

In these sets of constructions, the adjectives that were being compared were korokorowa 'round' and ketewa 'small' and they belonged to the Shape and Size classes respectively. The expected order that conforms to the basic hierarchy for attributive adjectives would be Shape < Size. In the test conducted, all the respondents saw both orders as acceptable but specifically, 20 respondents chose (1) which is very acceptable for the order that had Shape occurring before Size. The

remaining 20 respondents also chose the reverse order as acceptable. So basically, there was a tie among the respondents. This showed that multiple predicative adjectives do not undergo order restrictions.

21 (a) Adaka no yɛ duduudu kɛseɛ   (**Weight < Size**) (**expected order**)

    Box   DEF be heavy   big

    The box is heavy and big

(b) Adaka no yɛ kɛseɛ duduudu   (**Size < weight**) (**not expected**)

  Box DEF be big   heavy

  The box is big and heavy

In these sets of constructions, the adjectives that were being compared were kɛseɛ 'big' and duduudu 'heavy' and they belonged to the Size and Weight classes respectively. The expected order for multiple attributive adjectives would be Weight < Size. In the test conducted, all the respondents saw both orders as acceptable but specifically, 19 respondents chose (1) which is very acceptable for the order that had Weight occurring before Size. The remaining 21 respondents also chose the reverse order as acceptable. The difference in this set of questions was not significant and showed that Speakers of Akan preferred either order further proving that multiple predicative adjectives are not stacked. So, I would say that there is a free ordering between Weight and Size adjectives in the predicative position in Akan.

We now move on to the last section that looked at how plurality affects the order in which adjectives occur in a sequence.

3.7 Plurality in Multiple Attributive and Predicative Adjectives (section D)

This final section was to test if the occurrence of plural nouns played any role in the order of adjectival modifiers in both the attributive and predicative positions. As established in Akan some adjectives agree in number with the nouns and take on their plural counterparts when they modify nouns in their plural forms. Let us consider some examples below:

3.7.1 Plurality in the predicative position

22 (a) Asraafoɔ   no   yɛ a-tenten a-gramoofoɔ   (**Height < Size**) (**expected order**)

     Soldiers DET be PLU-tall PLU- stout

    The soldiers are tall and stout

   (b) Asraafoɔ no yɛ a-gramoofoɔ a-tenten   (**Size < Height**) (**not expected**)

     Soldiers Det be   PLU-stout PLU- tall

     The soldiers are stout and tall

In these sets of constructions, the adjectives that were being compared were agramoofoɔ 'stout' and atenten 'tall' and they belonged to the Size and Height classes respectively. The expected order for attributive adjectives would be Height < Size. In the test conducted, all the respondents saw both orders as acceptable but specifically, 27 respondents chose (1) which is very acceptable for the order that had Height occurring before Size. The remaining 13 respondents also chose the reverse order as acceptable. The difference in this set of questions was very significant and showed that Speakers of Akan preferred the order that conformed to the basic hierarchy even though no order was expected.

24 (a) Mmɔfra   no yɛ   a-tumtum a-hweaafoɔ   (**Colour < Size**) (**expected order**)

     Children DEF be PLU- black PLU-slim

    The children are dark and slim

   (b) Mmɔfra no yɛ a-hweaa a-tumtumfoɔ   (**Size < Colour**) (**not expected**)

     Children DEF be PLU-slim PLU-black

     The children are slim and dark

In these sets of constructions, the adjectives that were being compared were kɔkɔɔ 'red' and teatea 'height' and they belonged to the Colour and Size classes respectively. The expected order for attributive adjectives would be Colour < Size but as recorded by Pokua (2003) above, the speakers

of Akan mostly preferred the Size adjective to occur first whenever it was to occur with other adjectives in a sequence. In the test I conducted, 17 of the respondents chose (a) which had the order Colour < Size and 23 of the respondents chose the order Size < Colour. Clearly, both orders are acceptable as no order restrictions are expected to exist.

3.7.2 Plurality In The Attributive Position

23 (a) Akyerɛkyerɛfoɔ nkɔkɔɔfoɔ akɛsefoɔ no a-wu   (**Colour < Size**) (**expected order**)

      Teachers   fair   fat   DEF PERF- die

      The fair fat teachers have died

  (b) Akyerɛkyerɛfoɔ akɛsefoɔ nkɔkɔɔfoɔ no a-wu   (**Size < Colour**) (**not expected**)

      Teachers   fat   fair   DEF PERF-die

      The fat fair teachers have died

In these sets of constructions, the adjectives that were being compared were kɔkɔɔ 'red' and akɛsefoɔ 'fat' and they belonged to the Colour and Size classes respectively. The expected order that conforms to the basic hierarchy would be Colour < Size but respondents mostly preferred the Size adjective to occur first whenever it was to occur with other adjectives in a sequence. In the test conducted, 19 of the respondents chose (a) which had the order Colour < Size and 19 of the respondents chose the order Size < Colour. 2 of the respondents also chose both orders as acceptable.

25 (a) Papafoɔ akwadwofoɔ aniadenfoɔnom no yare

    Men   lazy   brave   DEF sick

   The lazy brave men are sick

(b) Papafoɔ aniadenfoɔnom akwadwofoɔ no yare

    Men   brave   lazy   DEF sick

   The brave lazy men are sick

In example 25 above, the adjectives akwadwofoɔ 'lazy' and aniadenfoɔnom 'brave' both belong to the Subjective Comment class. As established earlier by Scott (2002), adjectives that belong to the same class of subjective comments undergo ordering restrictions in the attributive position when they are further decomposed. The test was conducted to see if plurality influenced the choice of the respondent when the nouns are in their plural form since nouns and adjectives in Akan agree in number. 27 of the respondents chose (1) which is very acceptable for the order that had the adjective lazy occurring before the adjective brave. The remaining 13 respondents chose the reverse order as acceptable. The results showed that adjectives in the same class exhibit ordering restrictions and plurality does not in any way influence the order of adjectives.

TABLE 1 A SUMMARY OF MY RESULTS

Categories	Adjective Classes	Expected order	Unexpected order	Both Orders	Total
Adjectives in Attributive Position	Width , Height	Width<Height (39)	Height<Width (1)		40
	Colour , Subj. Comment	Colour<SubjComment (35)	Subj Comment<Colour (3)	2	40
	Age, Width	Age<Width (16)	Width<Age (24)		40
	Age, Speed	Age<Speed (40)			40
Predicative Position *No Order Expected*	Colour , Height	Colour<Height (17)	Height<Colour (23)		40
	Age , Subj.Comment	Age<Subj Comment (40)			40
	Shape, Size	Shape<Size (20)	Size<Shape (20)		40
	Weight , Size	Weight<Size (19)	Size<Weight (21)		40
Plurality in Predicative Positions *No Order Expected*	Height, Size	Height<Size (27)	Size<Height (13)		40
	Colour , Size	Colour<Size (17)	Size<Colour (23)		40

TABLE 2 SUMMARY OF RESULTS CONT.

Categories	Adjective Classes	Preferred Order 1	Preferred order 2	Total
Same Semantic Class	Subj Comment, Subj. Comment	Beautiful<Wicked (14)	Wicked<Beautiful (26)	40
	Subj.Comment, Subj. Comment	Dirty<Ugly (35)	Ugly<Dirty (5)	40
Plurality in Same Semantic Class	Subj Comment, Subj Comment	Lazy<brave (27)	Brave<Lazy (13)	40

Table 1 and 2 above show some of the responses to the multiple adjective modifier questions asked the 40 respondents who were interviewed in this work. In table 1, the adjectives that fall under predicative position were labelled 'no order expected' because the objective was not to find any order. They were however tested using the hierarchical ordering for attributive adjectives to show the fact that multiple adjectives in the predicative position do not follow the basic ordering restrictions for attributive adjectives.

Table 2 also shows that even though some of the adjectives belonged to the same class, speakers of the Akan language had a preferred order regarding how they were to be sequenced.

3.8 Summary

The above sections showed the findings of the interview with 40 speakers of the Akan language. The purpose of the study was to investigate if multiple attributive adjectives in Akan followed an ordering restriction. Although Akan showed a clear preference in some instances, it seems to be a language that has a free ordering when multiple adjectives are used to modify a noun, unlike English where there is a strict basic ordering for adjectival modifiers. Authors like Dixon (1982:24) and Hetzron (1978:169) have postulated that there is a basic order when adjectives occur in a sequence and seem to suggest that the order they follow in the English language is Value > Dimension > Physical Property >Speed > Human Propensity > Age > Colour. Dixon (2001:17) seemed to suggest that this order was universal for languages that had the adjective coming before the noun. For languages that had the adjective coming after the noun, he was of the view that the reverse of the order was going to be the case Colour < Age < Human Propensity < Speed < Physical

Property <Dimension <Value. Unlike Pokuaa who used three adjectival modifiers in her work, this work employed the use of two adjectives at a time to make it easy for respondents to make a choice and avoid the problem encountered by Hetzron.

> Research into the relative order of adjectives is among the most delicate topics in Linguistics. One obvious difficulty is the experimental fatigue that affects informants faster than in most other domains…informant's judgment rapidly becomes impaired, he may be willing to accept more after a few questions than in the beginning, or he may declare himself to be confused (Hetzron 1978:175).

The set of adjectival classes proposed by Scott (2002) below was used in this investigation.

DETERMINER[(the/this)]>SUBJECTIVE COMMENT[(nasty/magnificent)] >SIZE[(big/small)] > LENGTH[(long/short)] > HEIGHT[(tall/high)] >SPEED[(fast/slow)] > WIDTH[(fat/thick/thin)]> WEIGHT[(light/heavy)]> TEMPERATURE[(hot/cold)]> AGE[(modern)]> SHAPE[(round)]> COLOUR[(white)]> NATIONALITY/ORIGIN[(German)]>MATERIAL[(wooden)]>NOUN

Since Akan has adjectives as post-modifiers, the order in which they occurred was the reverse of what occurred in English. For instance, an adjective like Colour, according to the order suggested above, was supposed to always occur in the sequence directly after the noun in Akan, but the investigation revealed that even when a COLOUR adjective was one of the two adjectival modifiers, it was not always the case that it followed the noun directly. There were instances where the order that had COLOUR occurring second or last was the most preferred one. One observation made was that when it came to adjective classes like Colour, Age and (Height < Size), the later was preferred over the others in most cases. Subjective comment adjectives were mostly preferred to occur last in the sequence and when they occurred with Speed adjectives, the respondents preferred for Subjective Comment to occur before Speed adjectives.

In terms of how plurality affected the order of adjectives in a sequence, I discovered that adjectives that modified plural nouns behaved in the same way as their singular counterparts. This test was carried out on respondents because as established in Akan, some adjectives tend to inflect for the number of the nouns that they modify.

With reference to the behavior of adjectives that belonged to the same class, Scott (2002) identified the subjective comment class as the class that could have more than one adjective in a sequence. In Scott's system, he discusses multiple 'subjective comment' adjectives and states that you can have multiple subjective comment adjectives that are stacked. The solution he offers is the 'further

decomposition' of the subjective comment class into (a) "some sort of evidential or universal comment phrase that indicates some kind of general, stable, or standard evaluation" and (b) "a phrase that can be considered more essentially "subjective comment" in that it indicates the speaker's own evaluation or an evaluation that may be more transitory adjectives that both belong to the Subjective comment category. With this class of adjectives, Scott suggested that it was possible to have them arranged in an order that was restricted.

Lastly, it was confirmed that multiple adjectives that occurred in the predicative position in Akan just like it happens in English do not undergo adjective order restrictions. This is because they cannot be stacked and have to be coordinated and that puts them on a parallel structure. The results also showed that the behavior of multiple adjectives in the predicative position in Akan behaved in the same way as their attributive counterparts suggesting that Akan attributive adjectives are coordinated. By they being coordinated, they are seen as parallel to each other and this could account for the somewhat free ordering of multiple attributive adjectives in Akan.

Chapter 4 Theoretical Discussion

4.1 Introduction

In this chapter, I analyse and discuss the results I obtained from my fieldwork with two hypotheses in mind. Firstly, section 4.2 introduces the first hypothesis which suggests that the hierarchy for arranging adjectives in a sequence is universal, Akan obeys the hierarchy but as English allows for a deviation from the order using special patterns, Akan also uses some mechanism to allow for a deviation from the hierarchy. Section 4.2.1 analyses Akan considering the first special pattern known as Phonological Re-ordering. Section 4.2.2 also talks about the second deviation known as Focus Re-ordering. Section 4.2.3 also looks at Indirect Modification which is another mechanism for deviation. Section 4.2.4 looks at the last mechanism which is Parallel Modification which I am going to argue is the pattern that most likely supports the Akan data. Section 4.2.5 will discuss parallel modification In Akan. Section 4.2.6 will look at predicative coordinated adjectives and its implication for analyzing attributive adjectives in Akan. And lastly based on the discussion look at the second hypothesis which argues that the adjectives in Akan do not obey the hierarchy as is evident in the data provided above and the fact that the hierarchy might not be universal.

4.2 Hypothesis 1 (Akan Obeys the Universal Hierarchy for Adjective Ordering)

As has been claimed by authors like Dixon (1982:24) and Hetzron (1978:169), the hierarchy for multiple adjectival ordering is universal and it is assumed that all languages obey this hierarchy. English as a language follows this strict basic order proposed by various theorists but there are special patterns where the reverse order is accepted by the native speakers of English as grammatical. In chapter 3 above where I presented my data, we realized that Akan does not seem to follow the basic order for adjective sequencing in all instances. We are going to analyse Akan in view of the various deviations as it could be possible that Akan follows the hierarchical order, but it allows deviation by employing one of the mechanisms going to be discussed below.

4.2.1 Phonological Re-ordering

As described in section 2.3.1 in chapter two above, phonological re-ordering is one of the special patterns that the speakers of English employ when they want to deviate from the basic hierarchy. With this mechanism, two adjectival modifiers can be reordered based on the length of the syllables involved and it will still be acceptable even if it does not follow the proposed hierarchical order.

According to Sproat and Shih (1991: 588-589) when two absolute adjectives modify a noun, and by absolute adjectives they mean adjectives whose meanings are objective, the phonologically longer adjective tends to come after the shorter adjective even if that order does not conform to the expected order. They give the example of QUALITY and SIZE belonging to the same level of absoluteness. English prefers QUALITY>SIZE, but it can be re-ordered to have SIZE>QUALITY and it will still be acceptable. Let us consider an example they provide below;

(92a) QUALITY, SIZE: beautiful large house

(b) *SIZE, QUALITY: large beautiful house

With the examples above, the option (b) is not the expected order and is seen as ungrammatical but we realise that the second adjective (beautiful) is larger in syllable compared to (large) so based on the length of the second adjective, that option is also seen as acceptable.

Even though Akan adjectives can be reordered, the data above does not show a preference for an order based on the length of the syllables involved.

Let us now consider some examples from the Akan data above:

1.(a) Apoosini tenten   gramoo no   a- wu   **N < Width < Height < (expected order)**

    Police   tall(H)   stout(W) Det Aux die
    The tall stout police man is dead

(b) Apoosini gramoo   tenten no a-wu   **N < Height < Width (not expected)**

    Police   stout (W)   tall(H)   Det Aux die
    The stout tall police man is dead

tall 'tenten' = 2 syll, gramoo 'stout' = 2 syll

In (1) above, the adjective used belonged to the classes Height and Size. According to Scott's hierarchy, Width is supposed to occur before Height in Akan and since the Akan adjectives are post-modifiers, it was expected to show a reverse order for English (Width < Height). All the respondents were of the view that they saw both orders as acceptable and not completely wrong but 39 out of the 40 respondents chose the (a) option and scored it as very acceptable but did not rule out the (b) option as a possibility. 1 of the respondents chose the option (b) as the order preferred but did not rule out the possibility of the (a) option. This showed that when it came to Width and Height, there was a clear preference for the order that conformed to the order proposed by Scott (2002). This example showed that when it came to adjectives belonging to the Width and Height classes, Akan exhibits ordering restrictions. Both orders have 2 syllables each and are all accepted. Phonological re-ordering is not considered in Akan.

4 (a) Maame aberewa nyaa   no   a-wu   (**Age < Speed**) (**expected order**)

    Maame old   slow   DEF PERF die

   The old slow woman has died

(b) Maame nyaa aberewa   no a-wu   (**Speed < Age**) (**not expected**)

   Maame slow old   DEF PERF-die

   The slow old woman has died

Slow 'nyaa' = 1 syllable, old 'abrewa' = more syllables

With the example above, the two adjectives were 'aberewa' and 'nyaa' and if we were to use the mechanism above to explain then we would say that the sequence aberewa, nyaa could also be acceptable because aberewa is longer in syllable than the adjective nyaa. Based on the results, none of the respondents chose the option that had the longer syllable occurring after the shorter syllable. All the 40 respondents chose the option that had the longer syllable beginning the sequence and considered the reverse option as unacceptable. With this example, the basis for their choice was unknown. The order that was preferred had the adjective Age beginning the sequence and this conformed to the hierarchy for adjectival sequencing.

We consider another example below:

7 (a) Bɔɔlo korokorowa ketewa no   (**Shape < Size**) (**expected order**)

  Ball DEF be   round   small

  The ball is round and small

  (b) Bɔɔlo ketewa korokorowa no   (**Size < Shape**) (**unexpected order**)

  Ball DEF be small round

  The ball is small and round

small 'ketewa' = 3 syll, round 'korokorowa' = more syll

In these sets of constructions, the adjectives that were being compared were korokorowa 'round' and ketewa 'small' and they belonged to the Shape and Size classes respectively. 20 of the respondents chose the order that had the shorter syllable beginning the sequence and the remaining 20 also chose the reverse order but all the 40 respondents saw both orders as acceptable. They did not have a preference because of length but because it is assumed that adjectives in Akan could be ordered freely, both orders are acceptable to speakers of the language.

4.2.2 Focus Re-ordering

with this mechanism as described in section 2.3.2 of chapter 2 above, the adjectival modifiers can be reordered, and it will be accepted. This occurs if the speaker is speaking within a special type of context. Also, for the order to be accepted, the first adjective in the construction must be stressed as described by (Alexiadou and Wilder 1998: 308). This phenomenon differs from phonological reordering in that the syllables here can be single words that have equal phonological length and the information focused must be contrastive with another in the context. Let us consider the illustrations below.

(93a) the small white house

(b) * the white small house

From the examples above, we realize that in the normal sense, example (b) is not accepted by speakers of English and is considered ungrammatical because it deviates from the proposed order. If we introduce a special context, then it can become grammatical. Let us consider the context below. This concept works in English but does not occur in Akan. Pokua (2003) seems to suggest that the adjectives can be ordered based on what the speaker wants to emphasize but she does not make a mention of a previous context or a stressing of the first adjective in the sequence.

Ameka (2003: 16) also suggests that Ewe which is another Ghanaian language provides evidence to show that having more than one adjectival modifier is possible in the noun phrase but the order in which they would appear depended on

"which property the speaker perceives as most salient for characterizing the noun head. Such a feature, depending on the communicative situation tends to be quite obvious or visible, high in factuality and verifiable". Page 25

Ameka also does not make a mention of a previous context as well as stressing the first adjective in the sequence.

Let us consider some examples from the data below:

3 (a) Abofra kumaa tiatia   no   yare   da ayaresabea   **N < Age < Width (expected order)**

    Child   young slim DEF be+ sick sleep hospital

   The young slim child is sick at the hospital

(b) Abofra tiatia kumaa   no yare da ayaresabea   **N < Width < Age(not expected)**

   Child   slim   young DEF be+sick sleep hospital

   The slim young child is sick at the hospital

With the example above, all respondents saw both orders as acceptable but 16 of the respondents chose the expected order which had Age occurring before Width. The majority of the respondents (24) chose the order which was not expected.

Abofra   tiatia   kumaa   no

Child   2-syll   2-syll   DEF

This order that was not expected according to the hierarchy was chosen by 24 of the respondents which were the majority. As it can be seen from the example, there was no special emphasis on the first adjective and there was no special context as well. Akan does not need focus in order to choose an unexpected order.

13 (a) Akyerɛkyerɛfoɔ nkɔkɔɔfoɔ akɛsefoɔ no a-wu   (**Colour < Size**) (**expected order**)

  Teachers   fair   fat   DEF PERF- die

  The fair fat teachers have died

(b) Akyerɛkyerɛfoɔ akɛsefoɔ nkɔkɔɔfoɔ no a-wu   (**Size < Colour**) (**not expected**)

  Teachers   fat   fair   DEF PERF-die

  The fat fair teachers have died

With the example above, 19 of the respondents chose (a) which had the order Colour < Size and 19 of the respondents chose the order Size < Colour. 2 of the respondents also chose both orders as acceptable. The expected order that conforms to the basic hierarchy would be Colour < Size but respondents mostly preferred the Size adjective to occur first whenever it was to occur with other adjectives in a sequence.

Akyerɛkyerɛfoɔ akɛsefoɔ   nkɔkɔɔfoɔ no

Teachers   4-syll   4-syll DEF

This order that was not expected according to the hierarchy was chosen by 19 of the respondents. As it can be seen from the example, there was no special emphasis on the first adjective and there was no special context as well. This shows that Akan does not need focus in order to choose an unexpected order.

4.2.3 Indirect modification

As stated earlier in chapter 2, Indirect modification also allows multiple adjectives to be ordered freely when they occur in the noun phrase. In languages that exhibit this characteristic, the adjectival modifiers according to Alexiadou and Wilder (1998: 308) are claimed to be reduced relative clauses and so do not occur directly with the noun. One language as cited by Sproat and Shih (1991:566) that exhibits this property is Mandarin (Chinese). In Mandarin, multiple

adjectives that modify nouns do not follow the basic hierarchical ordering for multiple adjectives when they are accompanied by a particle (de) which also serves as a relative clause marker. One other feature of indirect modification is that the adjectives involved must be predicative adjectives. Therefore, adjectives that are not predicative cannot occur as de-modifiers. There are instances where the adjectives obey the basic hierarchical order for English when the adjectives are bare and do not occur with any particle. Let us look at some examples below:

(94a) SIZE>COLOUR

  (i)Xiaŏ-de   lǜi-de   huāpíng   (ii) lǜi-de   xiaŏ-de   huāping

  Small-DE   green-DE   vase   *green-DE small-DE   vase*

  Small green vase   small green vase

(b) SIZE>COLOUR

  (i)Xiǎo lǜ   huāpíng   (ii)*lǜ   Xiǎo huāping

  Small green vase   *green small vase*

  Small green vase   small green vase

When we consider the examples above, (94a) (I and II) are both accepted because the adjectives occur together with the relative clause marker **de**, and so do not directly occur with the noun. On the other hand, the example (94b) (II) is seen as ungrammatical because the modifiers are bare adjectives and must follow the basic order restrictions for languages such as English.

(95a) *qián-de   zŏngtŏng   (b) *wèi-de yào

    Former-DE president   fake-de medicine

The examples in (95) above are considered ungrammatical in Mandarin because the adjectives used are not predicative adjectives and therefore cannot occur as indirect modifiers. (qián and wèi) can only occur as direct modifiers.

(96a) qián zǒngtǒng   (b) wèi yào

    former president   *fake medicine*

    former president   fake medicine

Can indirect modification be used as a phenomenon to explain the relatively free ordering of multiple adjectival modifiers in Akan?

Even though Akan to a large extent is not subject to ordering restrictions just as Mandarin indirect modifiers have shown, Akan as a language does not appear to have non-predicative adjectives. From our observation of Mandarin, we realized that the adjectives that occur as DE-modifiers are predicate adjectives. An attempt to place non- predicative modifiers as indirect modifiers, results in grammatical constructions. Since Akan does not have non-predicative adjectives, this test of indirect modification cannot be applied to Akan adjective modifiers.

4.2.4 Parallel modification

As described earlier in section 2.3.4 of chapter 2 above, this mechanism is claimed to be one of the special ways that allow adjectival modifiers in noun phrases deviate from the strict basic ordering restrictions in languages. As stated by Sproat and Shih (1991: 578-9), when adjectives are ordered hierarchically they modify the head noun as well as the other adjectives in the phrase and follow a strict order. However, when they are parallel, they are separate units and thereby modify the head noun separately and do not follow any order of arrangement. One language that Sproat and Shih (1991:584) describe as exhibiting parallel modification is French.

Adjectival modifiers that are parallel to each other also encode the meaning of coordination where the adjectives have equal status and put together with the conjunction (and). According to Sproat and Shih (1991:584), the study of the French language seems to suggest that adjective ordering restrictions do not exist in that language and that the multiple use of adjective modifiers in a noun phrase is put together in a parallel structure with each adjective modifying the noun independently. They also prefer for the adjectives to be coordinated with the conjunction et (and).

Let us consider some examples below:

(97a) COLOUR>SIZE

Chien moyen blanc   chein blanc moyen

dog medium white   *dog white medium*

medium-sized white dog   medium-sized white dog

(b) SHAPE>COLOUR

Maison blanche carée   maison carée blanche

house white square   *house square white*

square white house   square white house

from the above examples we realize that the modifiers in French occur after the noun and can be interchanged one for the other and the outcome is still acceptable and since they are coordinated structures, they have equal status. Sproat and Shih seem to suggest that multiple postnominal adjectives do not observe adjective ordering restrictions.

(98a) chien moyen et blanc   (b) maison blanche et carée

Dog medium and white   *house   white and square*

medium-sized white dog   square white house

(c) piano noir et antique   (d) table grande et ronde

piano black and old   *table big   and round*

old black piano   big round table

4.2.5 Parallel Modification in Akan

From the above observation in French, the characteristics exhibited by the adjectival modifiers can also be replicated in Akan. Firstly, adjectival modifiers in Akan are post-nominal just as is seen in French. Speakers of Akan do not follow a strict order when more than one adjective modifies a

noun because they could be assumed to be put together in a parallel structure. And from our understanding of parallel modification, the adjectives are coordinated structures hence giving them equal status. Even though there could be a preferred order the reverse order is also accepted by native speakers. From observing examples in the Akan language, we can describe the adjectives as being coordinated hence their free ordering.

The interesting fact in Akan is that when adjectival modifiers occur in the predicative position, we do not see any conjunction (ne). From our observation of what happens in English, when multiple adjectives occur after the copula (to be), they have to be coordinated because that is the only structure possible. When multiple adjectives occur after the copula without a conjunction it results in an ungrammatical construction but that is not what is seen in Akan. In Akan, multiple adjectives occur in the predicative position but without the overt realization of the coordination marker (ne) in Akan. This could suggest that multiple adjectival modifiers in the attributive position in Akan are coordinated and this could explain why they are ordered freely without following any strict basic hierarchy. Let us consider some examples from the questionnaires given to the respondents.

8 (a) Abaayewa no yɛ kɔkɔɔ teatea   (**Colour < Height**) (**expected order**)

    Girl   DET be red   slim

    The girl is fair and slim

 (b) Abaayewa no yɛ teatea kɔkɔɔ   (**Height < Colour**) (**not expected order**)

    Girl   DET be short fair

   The girl is short and fair

In example 8 above, the adjectives that were being compared were kɔkɔɔ 'red' and teatea 'short' and they belonged to the Colour and Height classes respectively. They occurred in the predicative position and from the example, we realize that there was no conjunction (ne) between them but it

is encoded in the meaning (the girl is both slim and tall). In the test I conducted, 17 of the respondents chose (a) which had the order Colour < Height and 23 of the respondents chose the order Height < Dimension. It was no surprise that they could be ordered freely because no strict ordering was expected since the adjectives occurred in the predicative position and were coordinated.

11 (a) Adaka no yɛ duduudu kɛseɛ   (**Weight < Size**) (**expected order**)

   Box   DEF be heavy   big

   The box is heavy and big

  (b) Adaka no yɛ kɛseɛ duduudu   (**Size < weight**) (**not expected**)

   Box DEF be big   heavy

   The box is big and heavy

In these sets of constructions, the adjectives that were being compared were kɛseɛ 'big' and duduudu 'heavy' and they belonged to the Size and Weight classes respectively. They occurred in the predicative position and from the example, we realize that there was no conjunction (ne) between them but it is encoded in the meaning (the box is both big and heavy). In the test conducted, all the respondents saw both orders as acceptable but specifically, 19 respondents chose (1) which is very acceptable for the order that had Weight occurring before Size. The remaining 21 respondents also chose the reverse order as acceptable. So, I would say that Weight and Size adjectives in Akan are arranged parallel to each other when they occur in the predicative position because of the presence of the conjunction.

Let us now consider some examples in the attributive position:

3 (a) Abofra kumaa tiatia   no   yare   da ayaresabea   **Age < Size (expected order)**
   Child   young slim DEF be+ sick sleep hospital
   The young slim child is sick at the hospital

(b) Abofra tiatia kumaa   no yare da ayaresabea   **Size < Age (not expected)**

  Child   slim   young DEF be+sick sleep hospital

  The slim young child is sick at the hospital

With the example above, all respondents saw both orders as acceptable but 16 of the respondents chose the expected order which had Age occurring before Size. The remaining 24 chose the reverse order. This also confirms that there is not really an ordering effect between these adjectives because of the possibility that they are not stacked but actually coordinated structures without the use of the conjunction (ne). Looking at the fact that multiple adjectives in the predicative position are coordinated but we do not see the conjunction, there is the possibility that these attributive adjectives are coordinated but without a conjunction. Let us consider example (c) below:

(c)*Abofra tiatia ne kumaa   no   yare   da ayaresabea

  Child   slim   and young DEF be+sick sleep hospital

  The slim and young child is sick at the hospital

From the example in (c) above, the addition of the conjunction (ne) makes the sentence unacceptable in Akan. The example is fine without the conjunction.

6 (a) Abrantɛ teatea obolo no kyea   wo

  Young man   short   fat   DEF greet you

  The short fat young man greets you

 (b) Abrantɛ obolo teatea no kyea   wo

  Young man fat short   DEF greet you

  The fat short young man greets you

 In this example, 18 of the respondents chose the order Height < Size which was the order in (a) as acceptable and the remaining 22 of the respondents chose the order Size < Height as the acceptable order but overall, all the respondents saw both orders as acceptable. This shows that both orders can be interchanged by speakers of the Akan language and both are acceptable because of the possibility that the adjectives have been coordinated but without the physical presence of a

conjunction. An attempt to add a conjunction (ne) makes the sentence unacceptable as shown in the example below:

(c)*Abranteɛ   teatea ne obolo no kyea wo

    Young man short and fat DEF greet you

    The short and fat young man greets you

From the example in (c) above, the addition of the conjunction (ne) makes the sentence unacceptable in Akan. The example is fine without the conjunction.

4.2.6 Implications of Predicative Adjective Coordination on Attributive Adjectives In Akan

From the examples in the previous section, we observed that when Akan multiple adjectives occur in the predicative position, they are not ordered because they are arranged parallel to each other. We also established that languages that exhibit parallel modification have the adjectives coordinated and that puts them on an equal status. Akan in this instance does not have the conjunction (ne) overtly realized. We realize in English that multiple predicative adjectives need a pronounced conjunction when they are coordinated because that is the only structure possible for multiple predicative adjectival modifiers, unlike attributive adjectives where they can either be coordinated or stacked. By stacking I mean arranging the adjectives in a hierarchical order with the presence of an ordering effect. Coordinating them removes the ordering effect as they can be rearranged in any order and it is grammatically acceptable as is seen from the examples below:

 (99a) the house is red and big / the house is big and red

  (b) *the house is red big   / *the house is big red

This leads to the assumption that although the situation in Akan has the conjunction missing, coordination is the only structure possible.

On how this affects attributive adjectives in Akan, we can also assume that the adjectives in the attributive position are also coordinated but without the overt realization of the conjunction (ne)

and this removes any ordering effect. We will consider one more example to support our discussion in section 4.2.5 above:

14 (a) Akyerɛkyerɛfoɔ nkɔkɔɔfoɔ akɛsefoɔ no a-wu   (**Colour < Size**) (**expected order**)

    Teachers   fair   fat   DEF PERF- die

     The fair fat teachers have died

(b) Akyerɛkyerɛfoɔ akɛsefoɔ nkɔkɔɔfoɔ no a-wu   (**Size < Colour**) (**not expected**)

    Teachers   fat   fair   DEF PERF-die

    The fat fair teachers have died

The example above also shows a lack of ordering effects among the adjectives kɔkɔɔ 'red' and akɛsefoɔ 'fat' that belong to the Colour and Size classes respectively and have been used attributively. In the test I conducted, 19 of the respondents chose (a) which had the order Colour < Size and 19 of the respondents chose the order Size < Colour. 2 of the respondents also chose both orders as acceptable. The presence of the conjunction that is not overtly realized in Akan hides any possibility of an ordering effect between the adjectives.

4.3 Summary

From the beginning of this chapter we said that based on the intuitive judgments of the respondents in chapter 3 above, Akan multiple adjectives seemed not to show any ordering effect in all instances when they occurred in a sequence. We stated earlier in section 2.3 of chapter 2 that, there were special patterns where languages like English deviated from the proposed hierarchical order and native speakers still considered it as grammatical.

We talked about phonological re-ordering where an adjective that was longer in syllable could occur after a shorter one even when that order was not the basic one. We also discussed focus re-ordering where based on a preceding context, and the stressing of the first adjective in a sequence,

the order of adjectives is accepted when it is not the preferred order. We also talked about another phenomenon known as indirect modification where the adjectives can be ordered freely. The presence of the relative clause marker or a morpheme prevents the adjective from occurring close to the noun hence they can be ordered freely. Also, adjectives that underwent indirect modification were predicative adjectives and non- predicative adjectives could not undergo indirect modification. Looking at all these mechanisms in relation to the Akan language, we concluded that indirect modification could explain the situation in Akan but because Akan lacked non-predicative adjectives it was difficult to test for indirect modification in that language.

Lastly, we looked at parallel modification and said that adjectives in this situation are parallel to each other and hence can be ordered freely. We also saw that the adjectives in this situation are coordinated structures hence have equal status. From the Akan data, we realized that there seems to be a free ordering of the adjectives perhaps because the adjectives are seen parallel to each order and since parallel structures are equal in status, anyone can occur before the other and it will be grammatical.

Finally, we looked at adjectives that occur in the predicative position in Akan and based on the data, we realized that they do not occur with a pronounced conjunction unlike is seen in English. We made the claim that multiple adjectives that occur in a sequence in the predicative position must be coordinated and since the conjunction is not overtly realized in Akan, we concluded that multiple adjectival modifiers in the attributive position could also be coordinated hence their free ordering.

Chapter 5 Conclusion

5.1 Introduction

Over the years, the issue of adjective ordering has been a very delicate issue for linguists as reported by Hetzron (1978). This is because there is usually the difficulty of testing several adjective orders to know how native speakers arrange multiple adjectives in noun phrases. Hetzron in his study realized that testing a lot of adjectives confused respondents and this affected their judgments. English as the first language of study has been seen to follow the basic hierarchical order for arranging multiple adjectives in a language. This has been no surprise since adjective ordering forms part of the rules and principles that are common to all Languages (Universal Grammar). Akan the second language being looked at in this study is a very important language for the people of Ghana, West-Africa. From the beginning of the study, we realized that Akan plays an important role in the country's educational sector, Media among others. A study done by Pokua (2003) seems to reveal that the ordering of adjectives might not be universal after all because her study showed a relatively free ordering of the adjectival modifiers in Akan. The present study investigated the assumption that Akan adjectives had a relatively free ordering and went further to look at the special mechanisms that could allow adjectives to deviate from the proposed hierarchy for ordering adjectives. A questionnaire that had two adjectives in each construction were put together and given to native speakers of which they were to make a choice between two possible sets. If the results showed that the adjectives in Akan have a relatively free order, then it would bring the universality of the ordering hierarchy to question. The research questions that were addressed were:

1. Does data in Akan show the existence of adjective ordering in the language since it is regarded as universal to all languages?
2. What are the implications of coordinated predicative use of adjectives on attributive adjectives in Akan?
3. If data in Akan does not clearly show the existence of an order for adjective sequencing, could it be because of the presence of a special mechanism that allows for deviation from the proposed order?

The main theoretical framework that was applied to the data was that proposed by Scott (2002). Following the introduction above is a summary of the findings and recommendations for future studies.

5.2 Summary of Findings

Based on the data, I realized that the results seemed to agree with the findings of Pokua (2003) to some extent which suggests that Akan has a relatively free order when more than one adjective occurs in a noun phrase. The interesting discovery I made is that of the four special mechanisms that English speakers, as well as speakers of other languages, employ when they do not want to follow the basic universal hierarchical order for adjectival modifiers, namely phonological re-ordering, focus re-ordering, indirect modification and parallel modification, Akan employs the use of parallel modification. Here the adjectives are coordinated thereby putting them on an equal rank and the adjectives are parallel to each other. Adjectives that are arranged parallel to each other do not follow a strict order and can be rearranged in any form and is still acceptable.

Instead of regarding Akan adjectives as not obeying the hierarchy and questioning the universality of the hierarchy, I would like to conclude that Akan adjectives follow the hierarchy order but because it also employs parallel modification as a mechanism that allows free ordering, the effect of the hierarchy order is not seen.

5.3 Recommendations for Future Research

 I recommend that a more extensive research should be conducted on adjective ordering to provide more insights into the topic. However, future researchers should use a bigger sample size to cater for the large number of Akan speakers. Also, the mechanisms that allow speakers to deviate from the hierarchy order should be investigated more. This was not possible because of the sample size of the respondents and the limited time for the data collection of this thesis. I, therefore, recommend a study with a larger sample size.

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APPENDIX

QUESTIONNAIRE

Attributive Adjective Ordering: A Comparison of Akan And English

Please, I am carrying out a research on the ordering of adjectives when two or more modify a noun in the same construction. I will very much appreciate it if you can give your candid opinion on the set of questions below. Your response will be kept strictly confidential and will add to the existing knowledge on adjectives in Akan. Thank you

Part A (Socio-Demographic Data)

Please circle the appropriate letter

1. Which dialect of Akan do you speak? a) Asante Twi

   b) Fante

    c) other (please specify) ………………………….

2. Is this the only Akan dialect you speak? a) yes b) no

   If NO, kindly provide the other ……………………….

   And specify which one you are more fluent in ……………………..

3. How old are you? a) 18-25

b) 26-35

c) 36-45

d) 46-55

e) above 55

4. What is your level of Education? a) illiterate b) Primary level c) secondary level d) tertiary level

5. Place of birth? Region……........................... town ……………………………………. Duration of stay in this town a) 10 years b) 15 years-20 years c) whole life

Part B

Rank the following sentences on the basis of the more preferred order on a scale of 1-5

1-very acceptable 2-quite acceptable 3-neutral 4-unacceptable 5-very unacceptable

A) Adjective Ordering in Attributive Position

1a) Apoosini tenten gramoo no awu   …………………………………………

   b) Apoosini gramoo tenten no awu   …………………………………………

2a) Ataadeɛ fɛɛfɛ fitaa no ayera   ……………………………………….

   b) Ataadeɛ fitaa fɛɛfɛ no ayera   ……………………………………….

3a) Abofra kumaa tiatia no yare da ayaresabea   …………………………….

   b) Abofra tiatia kumaa no yare da ayaresabea   …………………………….

4a) Maame aberewa nyaa no akyɛ paa   ……………………………….

   b) Maame nyaa aberewa no akyɛ paa   ………………………………

5a) Papa kuraseni tumtum no wuu nnora   ……………………………….

   b) Papa tumtum kuraseni no wuu nnora   ………………………………..

6a) Nsuo nwunu dɛɛdɛ no si adidi pono no so   ………………………………..

   b) Nsuo dɛɛdɛ nwunu no si adidi pono no so ………………………………..

7a) Bɔɔlo korokorowa ketewa no   …………………………………

  b) Bɔɔlo ketewa korokorowa no   ……………………………….

B) Adjectives In The Same Semantic Class

8a) Dua tenten kɛseɛ no abu da kwan no mu ……………………………………….

b) Dua kɛseɛ tenten no abu da kwan no mu ………………………………………

9a) Abranteɛ tiatia Obolo no kyea wo ……………………………………….

b) Abranteɛ Obolo tiatia no kyea wo ……………………………………….

10a) Akwadaa tuntum teatea no kɔ sukuu da biara ……………………………….

b) Akwadaa teatea tuntum no kɔ sukuu da biara ……………………………….

11a) Abaayewa tirimuɔdeni ahoɔfɛfoɔ no yɛ ɔkyerɛkyerɛni ……………………………….

b) Abaayewa ahoɔfɛfoɔ tirimuɔdeni no yɛ ɔkyerɛkyerɛni ……………………………….

12a) Ntoma fii tantan no da adaka no so ……………………………………….

b) Ntoma tantan fii no da adaka no so ……………………………………….

13a) Abranteɛ mumuu nyansani no aware ……………………………………….

b) Abranteɛ nyansani mumuu no aware ……………………………………….

14a) Papa tuntum kwadwoni no abɔ dam ……………………………

b) Papa kwadwoni tuntum no abɔ dam ……………………………

15a) Maame tenten ahoɔyaani no abɔ dam ……………………………

b) Maame ahooyaani tenten no abo dam   ……………………………

16a) Ohene kokoo ahobraseɛni no adi nkunim ……………………….…..

b) Ohene ahobraseɛni kokoo no adi nkunim ……………………….….

C) Adjectives In the Predicative Position

17a) Abaayewa no yɛ kokoo teatea   …………………………………

b) Abaayewa no yɛ teatea kokoo   …………………………………

18a) Maame no yɛ aberewa kãmakãma   ……………………………..

b) Maame no yɛ kãmakamã aberewa …………………………………

19a) Boolo korokorowa ketewa no yɛ dada   ……………………………….

b) Boolo ketewa korokorowa no yɛ dada   …………………………….

20a) Boolo no yɛ korokorowa ketewa   …………………………….

b) Boolo no yɛ ketewa korokorowa   …………………………….

21) Adaka no yɛ duduudu keseɛ   ……………………………….

b) Adaka no yɛ keseɛ duduudu   …………………………….

D) Plurality in Multiple Attributive and Predicative Adjectives

22a) Asraafoɔ no yɛ atenten agramoofoɔ   …………………………..

   b) Asraafoɔ no yɛ agramoofoɔ atentenfoɔ   ………………………….

23a) Akyerɛkyerɛfoɔ nkɔkɔɔfoɔ akɛsefoɔ no awu   …………………………..

   b) Akyerɛkyerɛfoɔ akɛsefoɔ nkɔkɔɔfoɔ no awu   …………………………..

24a) Mmɔfra no yɛ atuntum ahweaafoɔ   ………………………….

   b) Mmɔfra no yɛ ahweaa atuntumfoɔ   …………………………

25a) Papafoɔ akwadwofoɔ aniadenfoɔnom yare   ………………………….

   b) Papafoɔ aniadenfoɔnom akwadwofoɔ yare   …………………………

26a) Akraman atuntum akeseɛ no ada   …………………………

   b) Akraman akeseɛ atuntum no ada   …………………………