

## LEXICAL RELATIONS IN ADAMAWA FULFULDE

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### Abstract

This paper investigates lexical relations in Adamawa Fulfulde. Lexical relations play a crucial role in understanding the structure and meaning of words in any language. The study explores the various lexical relationships in Adamawa Fulfulde, a dialect of the Fulfulde language spoken primarily in the Adamawa region. The research examines key semantic relationships such as synonymy, antonymy, hyponymy, highlighting their significance in linguistic comprehension and communication among Adamawa Fulfulde speakers. The study adopted a descriptive research design. Data were elicited from competent bilingual native speakers of Adamawa Fulfulde, particularly in Girei Local Government Area of Adamawa State. The data were collated through interviews of the native speakers. It was discovered that synonymy, antonymy and hyponymy are the most productive lexical relations in Adamawa Fulfulde. By analyzing lexical data through a descriptive approach, this research provides insights into the unique semantic patterns of Adamawa Fulfulde and their implications for linguistic studies and language preservation.

**Keywords:** Synonymy, Antonymy, Hyponymy, Lexical relations, Fulfulde.

### Introduction

African languages have been receiving substantial scholarly attention in recent decades. Compared to other Nigerian languages, such as Igbo, Hausa and Yoruba, Adamawa Fulfulde has received less scholarly attention. There are, however, a considerable number of scholarly works on Fulfulde especially on the formal levels of linguistic analysis. It is recorded that the first grammar of the language was written by Faidherbe in 1875 and in 1876; another grammar was written again by Reichardt and McIntosh (2017). From the last century to recent times, several works have been done, for example, Owens (1983), Pearson (2006) and Dendo (2012) worked on Fulfulde phonology. Carlson (1975) and Finnegan (2012) focused on Fulfulde morphology while Rehag (1984), McIntyre (1995) and Will (2013) are on Fulfulde syntax. On the semantics of the language, Dobrushina (1979) and Rappaport (2012) are some works. Most of these works, focused on other dialects of Fulfulde. Thus, to the best of the researcher's knowledge, few studies have addressed lexical relations of the Adamawa Fulfulde. Although efforts to document and

preserve Fulfulde Adamawa have increased in recent years, with linguistic studies, literacy programs, and the development of written materials aimed at sustaining the language for future generations. It is because of this gap in Adamawa Fulfulde scholarship that the researcher sets to explore the lexical relations in this dialect of the language.

### Adamawa Fulfulde

Adamawa Fulfulde refers to the variety of Fulfulde spoken in the Adamawa region of Nigeria, and neighboring parts of Cameroon and Central Africa. "Fulfulde" is the name of the language used by the Fulbe (Fulani) people across West and Central Africa. Thus, Adamawa Fulfulde is a dialect of the Fulfulde language, spoken predominantly in the Adamawa region of Nigeria, as well as parts of Cameroon, Chad, and the Central African Republic. The Adamawa dialect is one of the recognized major dialects of Fulfulde, alongside others like Maasina, Pulaar, and Borgu. The name "Adamawa Fulfulde" is used in contrast to other Fulfulde varieties to denote, linguistic features (phonological, lexical, and grammatical distinctions) (Taylor, 1953). It belongs to the

larger Atlantic branch of the Niger-Congo language family and is one of the major dialects of Fulfulde, alongside other regional varieties spoken across West and Central Africa.

The historical development of Fulfulde Adamawa is closely linked to the migration and expansion of the Fulani people (Fulbe), who are traditionally pastoralists. The Fulani began migrating across the Sahel and West Africa over a thousand years ago, spreading their language and culture across vast regions. By the 18th and 19th centuries, Fulfulde Adamawa gained prominence during the Fulani jihads led by Modibo Adama, a Fulani scholar and warrior who established the Adamawa Emirate under the Sokoto Caliphate. This period marked the formalization of Fulfulde as an administrative and cultural language in the region. The term "Adamawa Fulfulde" was not coined by a single person, but rather emerged through linguistic classification and description efforts by scholars of African languages (Ahmad, 2014; Aminu, 2019).

Over time, Fulfulde Adamawa has interacted with other local languages such as Hausa, Kanuri, and Arabic, leading to lexical borrowing and linguistic adaptations. Despite these influences, it has maintained its distinct phonological, morphological, and syntactic characteristics. Today, Fulfulde Adamawa serves as a lingua franca in the region, facilitating communication between diverse ethnic groups and playing a vital role in trade, governance, and social interactions. Adamawa Fulfulde as it is spoken in Girei Local Government, which is the area with arguably the purest form of Adamawa Fulfulde due to limited influence from surrounding languages.

### **Conceptual Review**

#### **Lexical Relations**

Lexical relations refer to the systematic relationships between words in a language, which contribute to meaning, structure, and linguistic organization. These relationships are fundamental to semantics, enabling language users to establish connections between words and their meanings. This review explores key types of lexical relations, their theoretical foundations, and their relevance in linguistic studies, with references from scholarly

works.

According to Khoo and Na (2006: 2), Lexical relations are meaningful associations between two or more lexemes, entities or sets of entities. They can be viewed as directional links between the lexemes, concepts/entities that participate in the relation. They are an integral part of relationship, as a relation cannot exist by itself but has to relate two things. Associations between lexemes, concepts/entities can be categorized into different types, abstracted, conceptualized and distinguished from other associations, and can thus be assigned meaning. The meaning or type of an association can sometimes but not always be derived from the meanings of the participant lexemes and concepts.

Linguists in the structuralist tradition (Lyons, 1977; Saussure, 1959) assert that lexemes and concepts cannot be defined on their own but only in relation to other concepts. Lexical relations appear to reflect a logical structure in the fundamental nature of thought (Caplan & Herrmann, 1993). Green, Bean & Myaeng (2002) noted that lexical relations play a critical role in how we represent knowledge psychologically, linguistically and computationally, and that many systems of knowledge representation start with a basic distinction between entities and relations. Green (2001:8) argues that "relationships are involved as we combine simple entities to form more complex entities, as we compare entities, as we group entities, as one entity performs a process on another entity, and so forth

#### **Synonymy**

Synonymy deals with the semantic relationship which holds between two or more words that have the same or nearly the same meaning and belong to the same part of speech but have different spelling forms. Synonymy is in other words the semantic equivalence that exists between lexical items (Atadoga, 2013). The pairs of words that have this form of semantic relationship are called synonyms or are said to be synonymous. Stanojevic (2009) posits that, it would be imprecise to define synonymy as identity of meaning since there are no two terms with completely identical meaning. Therefore, other definitions have emerged.

Generally speaking, synonymy denotes the phenomenon of two or more different linguistic forms with the same meaning. Those linguistic forms are called synonyms, for examples, peace and tranquility can be substituted with each other in certain contexts.

What defines synonymy is precisely the possibility of substituting words in given contexts without altering the objective and affective meaning. Inversely, the irreducible character of the phenomenon of synonymy is confirmed by the possibility of providing synonyms for the various acceptance of a single word. The idea of 'sameness of meaning' that is used in discussing synonymy is not necessarily 'total sameness.' There are many occasions when one word is appropriate in a sentence, but its synonym would be odd. In short, we can say that there are no absolute synonyms, that is., pairs of words that have the same meaning or share the same semantic features in all the

situational and syntactic contexts in which they can appear.

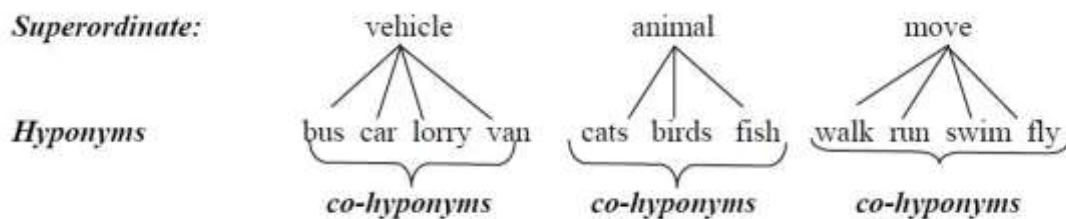
### Antonymy

Antonymy, according to Ullman (1977) and Saeed (2001) in Atadoga (2013), deals with the semantic relationships that exist between two or more words that has opposite meanings. The pair of items which contrast in meanings are termed antonyms. These pairs, according to Zapata (2000) belong to the same grammatical category – both elements may be nouns, adjectives, verbs, and so on. Besides, according to Fromkin and Rodman (1998), antonyms are said to share almost all their semantic features except one.

Atadoga, (2013) also asserts that the semantic feature that antonyms do not share is present in one member of the pair and absent in the other.

### Hyponymy

Hyponymy or inclusion is the semantic relationship that exists between two or more words in such a way that the meaning of one word includes the meaning of other words. We say that the term whose meaning is included in the meaning of the other terms is the general term; linguists usually refer to it as a **superordinate**. The term whose meaning includes the meaning of the other terms is the specific term; linguists usually refer to it as a **hyponym** or **hypernym**. If the meaning of a superordinate term is included in the meaning of several other more specific words, the set of specific terms which are hyponyms of the same superordinate term are called **co-hyponyms**. Examples are illustrated below:



**Fig. 1: Hyponymy**

**Source:** Zapata (2000:55)

In general, there are a number of hyponyms for each superordinate. For example, 'boar' and 'piglet' are also hyponyms of the superordinate 'pig', since the meaning of each of the three words 'sow', 'boar', and 'piglet' 'contains' the meaning of the word 'pig'. Thus, it is not surprising that hyponymy is sometimes referred to as inclusion. The superordinate is the included word and the hyponym is the including one. A superordinate at a given level can itself be a hyponym at a higher level. House is a hyponym of the superordinate building, but building is in turn, a hyponym of the superordinate structure, and, in its turn, structure is a hyponym of the superordinate thing.

### Empirical Review

Udemmadu and Ogwudile (2017) describe antonymy in the Igbo language. They adopt the descriptive method for their analysis. Among other things, they discovered that Igbo, just like other languages, attests antonymy. Antonymy in Igbo, according to them attests in the form of gradable and non-gradable antonyms. They further note that antonymy in this language world come in the form of reversives and conversives. They give the following examples to further illustrate antonymy:

- i. *rie* 'eat' - *erila* 'do not eat'
- ii. *sie* 'cook' - *esila* 'do not cook'
- iii. *taa* 'chew' - *atala* 'do not chew'

**Source:** Udemmadu and Ogwudile (2017:155)

Although the work gives a vivid description of the antonyms, it fails to apply any tone marks to the data. This, therefore, confuses non-native speakers of the language, since it is a tone language. Again, there is no indication as to whether the data is based on a particular dialect of Igbo or simply on the central dialect. The work is related to the present study in that it has taken into account the analysis of antonyms at the sentence level, especially imperative sentences.

Akase (2019) x-rays lexico-semantic relations in Tiv. The method of analysis has not spelt out, but it is descriptive in nature. The study employed the interviews of competent native speakers of the language for data collection. It explores semantic relations, such as synonymy, antonymy, and hyponymy. It was discovered, among other things, that Tiv antonyms could be gradable, relational and complementary. Reversive, according to him, are a type of antonyms in Tiv. He gave the following examples to illustrate the attestation of antonymy and its types in this language:

#### Antonyms

	Tiv	Gloss
i.	<i>tér/ngó</i>	father/mother
ii.	<i>shá/shin</i>	up/down
iii.	<i>vá/yém</i>	come/go
iv.	<i>kú/úmá</i>	death/life
v.	<i>túgh/sév</i>	night/day

**Source:** Akase (2019:75)

It can be seen that in each of the above pairs, the two (2) words contrast with respect to at least one aspect of their meaning. For instance, the meaning of *tér* "father" and *ngó* "mother" are opposites with respect to gender, although they are alike in other respects (both human). Similarly, *vá* "come" and *yém* "go" are opposites but both of them involve (movement).

For the gradable antonyms, he gave the following examples:

	Tiv	Gloss
i.	<i>táv/tìôn</i>	tall/short
ii.	<i>cùkúú/kèhé</i>	small/big
iii.	<i>shágbà/ícàn</i>	rich/poor
iv.	<i>ikyôr/cín</i>	fat/thin
v.	<i>kpishí/kpèghèr</i>	much/small

**Source:** Akase (2019:76)

As for relational antonyms, he illustrates with the following copious examples:

	Tiv	Gloss
i.	<i>òrmàrén/wán</i>	parent/child
ii.	<i>ínpín/ínlúmùn</i>	question/answer
iii.	<i>húròr/órhíòm</i>	friend/enemy

- |     |                        |                 |
|-----|------------------------|-----------------|
| iv. | <i>mtée/mýám</i>       | sale/purchase   |
| v.  | <i>òrtésén/òrhénén</i> | teacher/student |

**Source:** Akase (2019:76)

Al-Omari (2016) discusses synonymy in English and Arabic, with reference to the Holy Qur'an. The work is contrastive in approach. The author adopts a qualitative method, and elicits data from scholarly publications as well as the Holy Qur'an. The work highlights the controversy that surrounds synonymy as debated by classical and modern Arabic scholars. He discovers that the idea of absolute synonymy in the Holy Qur'an is an illusion. Although this work has a strong conceptual review, it fails to give concrete data to buttress the points explained. This makes the work prose-like rather than with adequate data. Its qualitative methodology is, however, related to the approach of the present study.

### Methodology

This study adopted a descriptive and qualitative research design for the analysis of the data, to explore the features, functions, and levels of usage of the lexical relations in Adamawa Fulfulde; thus, data were collected and collated for the analysis from primary and secondary sources. The primary sources include oral interviews of the native speakers of Fulfulde from four areas of Yola South Local Government Area, Adamawa state, as well as the native introspection of the researcher as a native speaker, which also helped in the data collection; while the secondary sources include: the internet, textbooks, and journals on lexical relation in language, as well as some published and unpublished materials on the Fulfulde and other languages. The researcher used both male and female native speakers with a minimum of secondary school education as informants to get data for the study. Informants from the age range of 25-70 years who are still very vibrant in the usage of the language were consulted. The native speakers provided the interpretation of the meanings of words or lexical items. The study made use of research instruments, such as Roger Blench's wordlist, to elicit data. A Digital Voice Recorder was used to record the interviews. This helped the researcher to go back to the recorded interview to elicit relevant data. Notebooks and pens were also used to take down relevant information during the interview. However, the data used in this study cuts across different socio-cultural backgrounds and sociolinguistic relations in the selected Fulfulde-speaking areas of Adamawa state, while the researcher analyzed the data using a descriptive method. The data were appropriately glossed using the Leipzig glossing rule; that is, there is interlinearization of every morpheme used in the data. English is the meta-language; that is, the language in which the gloss was rendered. The Lexical Pragmatic Theory was used as the tool for analysis in the study. The theory provides for the proper identification, presentation, and interpretation of word meanings to identify their lexical relations.

### Data Presentation and Analysis

#### Synonymy

This semantic relationship suggests nearness in meaning synonymy of Fulfulde Adamawa. Examples are shown below:

#### Examples 1:

	<b>Fulfulde</b>	<b>Gloss</b>
i.	<i>fartugo/Riwugo</i>	'chase/pursue'
ii.	<i>nyukkugo/Resugo</i>	'keep/hide'
iii.	<i>ganyo/ngaingu</i>	'enemy/foe'
iv.	<i>booful/aibe</i>	'sin/offence'
v.	<i>caddum/cattudum</i>	'difficult/hard'
vi.	<i>woodi/budfum</i>	'nice/good'

In the synonym relationship in Fulfulde, the extent of sameness depends on the number of semantic properties that they share. A notable feature of Fulfulde synonyms is their ability to mostly substitute one another. However, this does not happen in all instances.



### Antonymy

These are words that mean the opposite of each other. This semantic relationship that emphasizes oppositeness abounds in Fulfulde.

#### Examples 2:

	Fulfulde	Gloss
i.	<i>nyako/dada or inna</i>	'father/mother'
ii.	<i>derekejo/nayejo</i>	'young/old'
iii.	<i>manga/petel</i>	'big/small'
iv.	<i>diggodum/cattudum</i>	'smooth/rough'
v.	<i>beldum/mettuddum</i>	'sweet/bitter'

From the above examples, it can be seen that the antonyms appear in pairs. For each pair, there is what sharply distinguishes a word from its counterpart. For example, although *baba* 'father' and *dada* 'mother' share vastly similar qualities, especially as both are humans; they differ semantically with respect to one major quality-gender. On example 2(ii) above, the distinguishing semantic feature is that of age. Example 2 iii illustrates oppositeness in terms of size, while example 2 (iv) shows oppositeness in terms of texture.

### Gradable Antonyms

As one of the types of antonyms, gradable antonyms seek to show oppositeness in terms of comparison. Below are some examples of this semantic feature:

#### Examples 3:

	Fulfulde	Gloss
i.	<i>tekkudum/ceudum</i>	'fat/slim'
ii.	<i>duddum/sedda</i>	'plenty/small'
iii.	<i>soinde/maral</i>	'poverty/wealth'
iv.	<i>jurđum/keccum</i>	'dry/wet'
v.	<i>surugo/sodugo</i>	'sell/purchase'

From the examples above, it is shown that the majority of the gradable antonyms in Fulfulde are adjectives, as can be seen in examples 3(i-iv) above. Example 3 v is, however, a pair of nouns, as can be seen in example 3(v) *soinde* 'poverty' and *maral* 'wealth'.

### Relational Antonyms

In this type of semantic oppositeness, a pair of words shows how they are related. Such relationship can be seen in the following:

#### Examples 4:

	Fulfulde	Gloss
i.	<i>Saroo/bingel</i>	'parent/child'
ii.	<i>yāmol/jabadee</i>	'question/answer'
iii.	<i>sobaajo/ganyo</i>	'friend/enemy'
iv.	<i>jannginoowo/pukaraajo</i>	'teacher/student'
v.	<i>nyaundowo/nyaudo</i>	'doctor/patient'

In the above examples, each pair clearly demonstrates the oppositeness in terms of the relationship. For instance, in example 4(i), it is always ideal that every child has a parent, and vice versa. Thus, parent-child oppositeness illustrates such relational antonymy. In example 4(ii), it can be noticed that one exists because of the other, as there may not be an answer without a question and a question without an answer. The same applies to other examples. Therefore, it may be said that in relationship antonymy, in most cases, have the tendency of interdependence, such that the existence of one may depend on the existence of its counterpart.

## Complementary Antonyms

### Examples 5:

	<b>Fulfulde</b>	<b>Gloss</b>
i.	<i>fudduki/timoki</i>	'begin/end'
ii.	<i>nguurdam/maayde</i>	'life/death'
iii.	<i>mabbutu/mabbu</i>	'open/close'
iv.	<i>majji/hefti</i>	'lost/found'
v.	<i>gorko/debbo</i>	'male/female'
vi.	<i>maunirawo/Addirawo</i>	'brother/sister'
vii.	<i>mamaainna/dada/mamaanyako</i>	'grandmother/grandfather'
viii.	<i>kawo/yapendo</i>	'uncle/aunt'

### Hyponymy

This semantic relationship presupposes that the meaning of one thing is included in the meaning of the other thing. In essence, it deals with the relationship of inclusiveness. The following examples illustrate this feature:

### Examples 6:

	<b>Dabbaji</b>	<b>Animal</b>
	<b>Fulfulde</b>	<b>Gloss</b>
i.	<i>mbewa</i>	'goat'
ii.	<i>nagge</i>	'cow'
iii.	<i>babaladde</i>	'lion'
iv.	<i>busaru</i>	'dog'
v.	<i>mbala</i>	'sheep'

### Examples 7:

	<b>Kowowe</b>	<b>Insect</b>
	<b>Fulfulde</b>	<b>Gloss</b>
i.	<i>cuffi</i>	'mosquito'
ii.	<i>kowowe</i>	'ant'
iii.	<i>kurbanani</i>	'grasshopper'
iv.	<i>mbuburu</i>	'housefly'
v.	<i>nyakuro</i>	'bee'

### Examples 8:

	<b>Kusel</b>	<b>Meat</b>
	<b>Fulfulde</b>	<b>Gloss</b>
i.	<i>tayre</i>	'beef'
ii.	<i>gaduru</i>	'pork'
iii.	<i>gertugal</i>	'chicken'
iv.	<i>jaungal</i>	'guinea fowl'
v.	<i>poola</i>	'parrot'

### Examples 9:

	<b>Bibbeleddebelde</b>	<b>Fruit</b>
	<b>Fulfulde</b>	<b>Gloss</b>
i.	<i>cabbulle</i>	'orange'
ii.	<i>kuitaaje</i>	'garden egg'
iii.	<i>dukkuje</i>	'pawpaw'
iv.	<i>gerfe</i>	'mango'
v.	<i>kodong</i>	'banana'

In hyponymy relationship, the meaning of one or more things is included in the meaning of a larger unit. For

example, the words: *mbewa* 'goat', *nagge* 'cow', *babaladde* 'lion' necessarily presupposes that they are subsumed under a larger unit. This larger unit is *dabbaji* 'animal'. In such relationship, on the one hand, the down liners, that is, the smaller units, are technically referred to as co-hyponyms. On the other hand, the unit under which other units are subsumed is called hypernym.

### Discussion of Findings

This paper has unraveled that the lexical relations that exist in Adamawa Fulfulde include: synonymy, antonymy, and hyponymy. This is in accordance with Akase (2019) who also found synonymy, antonymy, and hyponymy to exist in Tiv. Although several subclasses of semantic relations further categorize how words and concepts relate to each other. These subclasses of semantic relations help linguists and language researchers analyze and understand the complex network of meanings and connections between words in a language. The synonyms of Adamawa Fulfulde can readily substitute each other. This is also revealed by Al-Omari (2016) who indicated that the idea of absolute synonymy is an illusion. With respect to antonymy, it was discovered that antonyms are usually in pairs, and just as many languages, they are categorized into gradable, complimentary and relational antonyms. This is also indicated by Udemmadu and Ogwudile (2017) and Akase (2019) who categorized antonymy into gradable, complimentary and relational antonyms. Thus, it was discovered that most gradable antonyms in Fulfulde are adjectives; but there are a few that are nouns. In Adamawa Fulfulde, relational antonyms, just as in other languages, rely on interdependence of the variables involved (words involved); and as for complementary antonyms in Adamawa Fulfulde, there is total mutual exclusiveness of the variables (words). Furthermore, hyponymy is a productive semantic feature in Adamawa Fulfulde, and works in like manner as in other languages, where the meaning of many things is included in the meaning of that generic term. Akase (2019) and Tiav, Tanimu, and Amende (2021) made similar conclusion in terms of hyponymy in Tiv. However, lexical relations are productive and vary

depending on the specific context or words being considered, and by exploring these relationships, we can gain insights into how language conveys information and how speakers interpret and make sense of the world around them, including their dependence on the context of the words or sentences.

### Conclusion

This study examines lexical relations, specifically synonymy, antonymy, and hyponymy in Adamawa Fulfulde, a dialect spoken in parts of Nigeria and neighboring countries. While Fulfulde has been studied extensively, little attention has been given to its lexical semantics, particularly in the Adamawa variety. Using interviews with native speakers in Girei Local Government, the research identifies examples of synonyms (e.g., *fartugo/riwugo* 'chase/pursue'), antonyms (e.g., *nyako/inna* 'father/mother'), and hyponyms (e.g., *mbewa* 'goat' and *nagge* 'cow' under *dabbaji* 'animal'). The study reveals that Adamawa Fulfulde exhibits rich lexical relationships similar to other languages. These semantic patterns enhance understanding of meaning and structure in the language. The research fills a gap in Fulfulde studies and contributes to the documentation and preservation of the Adamawa dialect. This study contributes to linguistic knowledge by documenting and analyzing lexical relations, synonymy, antonymy, and hyponymy, in the Adamawa dialect of Fulfulde, an area previously underexplored. It provides insights into the semantic structure of the dialect, enriching descriptive studies of Fulfulde and advancing the understanding of African language semantics. The findings also support efforts in language preservation and further research in Fulfulde linguistics.



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