

## Landmarks as sources of grammatical markers in Fulfulde

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### Abstract

This paper analyses the grammaticalization of two lexical items that refer to landmarks as grammatical markers that denote various abstract concepts. Although there is a very rich body of literature on Fulfulde, the aspects of grammaticalization and cognitive linguistics are less explored. The process of evolution of lexical items into grammatical markers is the subject of the grammaticalization theory, which assumes a uni-directional process and various stages of development. The terms *dow* ‘sky’ and *lesdi* ‘ground/earth’ are grammaticalized into various domains, especially orientational and spatial domains.

**Keywords:** Landmark, grammaticalization, grammatical markers, lexical items, Fulfulde.

### 1. Introduction

One of the significant questions in historical linguistics is the historical sources of contemporary lexical items and the relationship between their synchronic and diachronic usage. What lexicographers call etymology, as used in dictionaries, is partly related to this aspect of linguistic theory. However, this does not fully account for the linguistic evolution of grammatical items, as etymology focuses on cross-linguistic sources and dynamic changes in usage over time.

It has since been discovered that most grammatical markers – non-content words, such as prepositions, pronominals, etc. – originated from lexical items – content words, such as nouns and verbs – which transformed over time to become grammatical markers. Since language is majorly a function of grammar, the source of the terms that denote grammatical notions became highly relevant to historical linguists.

Various accounts of this transformation have been proposed in the literature. The most prominent and certainly more evidence-based and empirically proven is the grammaticalization theory as expounded by Heine and Reh (1982), Heine and Kuteva (2002), and other works that provide substantial, empirical evidence to this model of the theory.

Therefore, this paper discusses the origin of some grammatical markers in Fulfulde. The objectives of the report are to explain the development of some landmark terms into grammatical features and the various grammatical notions they denote. The data was collected from multiple Fulfulde texts corroborated by current verbal usage. The expressions were grouped based on figurative and literal use, whereas presentations were selected and analyzed based on the grammaticalization theory.

Typological linguists categorize Fulfulde as a West-Atlantic language of the Niger-Congo family, closely related to Wolof and Sere-Sin. Millions speak it as native and second language speakers in most African countries north of the Equator, but more densely in the Western sub-region. The language is also known as Pular/Pulaar in Western countries, such as Guinea, Senegal, Mali, etc. Fulfulde and its speakers, known as Pullo (sg.) and Fulbe (pl.), are also referred to by various exonyms: Filatanci/Filani (Hausa), Ful (German), Peul(h) (French), and Fellata (Arabic/Kanuri).

The structure of the Fulfulde language has been well described. The enormous academic interest in the descriptive study of the language led to a vibrant body of literature on the structural aspects of the language. However, most research on Fulfulde has been conducted within the structuralist and generative traditions to exclude the most recent frameworks, such as grammaticalization and cognitive linguistics.

Although there are general studies on grammaticalization that focus on African languages (cf. Heine and Reh 1982, Heine and Kuteva 2002, among others), there are few studies on specific African languages from the perspective of grammaticalization. These include Ameka (1995, 2004) on Efe, Moore (2000), and Robert (1997) on Wolof, and, more suitably, Abinet (2015, 2019) on Etheo-Semitic and Oromo. Apart from Shehu (2018), which deals with some aspects of the grammaticalization of body part terms, this author is yet to come across published materials on any element of grammaticalization in Fulfulde.

There is, therefore, the dirt of literature on these aspects of African languages, the same engine room of empirical linguistic data. This study, therefore, will add to the existing body of literature on grammaticalization, set the tone in this aspect of Fulfulde and African studies, and provide more data for the development of this model of the theory.

## 2. The grammaticalization theory

The term grammaticalization is believed to be first mentioned by the French linguist Meillet (1912). Later, linguists observed a systematic trend in the evolution of grammatical forms. Linguists (e.g., Heine and Reh 1980; Heine and Kuteva 2002; Traugott & Heine 1991; Narrog & Heine 2011; Baybee, et al. 1994; Svorou 1986, among many others) provide a vast literature across the languages of the world that suggest the systematicity of the process of grammaticalization which accounts for the pattern of the evolution of lexical items into grammatical markers.

Thus, the basis of the grammaticalization theory is to account for the origin and development of grammatical forms. Its primary goal is to describe how grammatical for structured constructions arise and develop through space and time. Various opinions and definitions of grammaticalization exist among scholars (cf. Narrog & Heine 2011). Still, this study follows Heine and Kuteva (2002, p. 2), who see grammaticalization as the “development from lexical to grammatical forms, and from grammatical to even more grammatical forms.”

One of the grammaticalization theory's central claims is that only lexical items that refer to more concrete experiences evolve into grammatical markers (which denote more abstract concepts) and that this development's reverse case is rare if possible. That effectively means grammaticalization is unidirectional, leading from less grammatical to more grammatical forms and constructions. Secondly, during the long process of the evolution of grammatical markers, the grammaticalizing lexical forms undergo various semantic, morpho-syntactic, and phonetic changes, and these grammaticalized forms may be replaced by other forms at some point in time, in what is known as ‘cyclical process’ (Narrog & Heine 2011).

Therefore, the grammaticalization of lexical items, including landmark sources, into grammatical markers occurs through the following pattern: landmark – object – activity – space-time – quality. The semantic and structural changes that lexical items developing into grammatical makers undergo occur in phases and these stages of evolution are conventionally referred to as parameters of grammaticalization. These are: Extension, Desemanticization, Decategorialization and Erosion.

Extension is often seen as a process of language change where existing forms appear in new contexts by extending their function. It is a process in which “linguistic items undergoing grammaticalization...gain in properties characteristic of their uses in new context” (Heine &

Kuteva 2002, p. 2). This makes the extension a necessary stage of grammaticalization. Since grammaticalization is context-induced, the structure of grammatical forms is heavily influenced by the context in which they are used to the extent that they may express meanings that cannot immediately be derived from their respective source forms. In the parameter of semantic extension lexical items referring to concrete objects acquire an abstract meaning, extending from literal to metaphoric and shift from major to a minor category.

Desemanticization, also known as semantic bleaching or semantic reduction, is the loss of some components of meaning of a lexical item. In this process, a lexical item which hitherto serves a single function acquires a non-lexical function, typically a second sense of usage which would subsequently be retained, and finally becomes its only function over time.

Desemanticization is simply an expansion of meaning, which is a situation where the linguistic function of a given grammatical element is extended to other semantic contexts or syntactic positions. Since lexical items belong to large open categories, their loss of meaning could be measured from the point of generality or the specificity of the information they contain. The chances of lexical items developing into grammatical forms might be triggered by the frequency of usage. Since grammaticalization occurs over a long period of time, the degree of generality or specificity of semantic information contained in grammaticalizing elements would also differ.

Decategorialization is the stage a grammaticalizing form loses its morpho-syntactic properties. When a lexical item acquires grammatical meaning, it tends to be used more frequently, and by so doing, it loses the morphological and syntactic properties characteristic of its previous lexical category. For instance, some of the grammatical characteristics of a noun are number, gender and case marking, and that of a verb include tense and aspect. Thus, all members of these lexical categories must be able to bear these grammatical features. However, a lexical item (noun or verb) undergoing the process of grammaticalization loses these properties and subsequently, its membership of the lexical category.

Erosion is the loss in phonetic substance of a grammaticalizing form. This is the case when a grammaticalizing morpheme loses a segment or a syllable, or a polysegmental morpheme is reduced to a monosegmental morpheme, just as a bisyllabic morpheme would be reduced to a monosyllabic morpheme. Erosion, for example, is observed in the English verbal phrase *going to*, in that, it could be reduced to a single morpheme *gonna* which is both a process of phonological and morphological loss.

### 3. Landmarks as sources of grammatical markers

The use of landmark terms as the source domain for the conceptualization of spatial orientation concepts has been reported in many languages. Although the use of landmarks as source domains for spatial grammatical markers is not as common in languages as the use of body part terms, Heine, et al. (1991) note that the terms for “land/earth” and “sky” appear to be widely used as source domains for the expression of spatial concepts in various languages. They further reported the use of other landmarks, such as ‘field’ for notions related to the *front* and ‘hole’ for those related to *in*.

In Fulfulde, landmark sources are found to be very useful in denoting grammatical concepts. In fact, not only that several Fulfulde prepositions derive from landmarks, these terms further grammaticalize into various grammatical concepts. For instance, the words *dow* ‘sky’ and *lesdi* ‘ground’ are used as the source domain for the conceptualization of spatial concepts, such as prepositions and other abstract notions.

Based on the rule of grammaticalization dictated by the unidirectionality principle, these terms further grammaticalize into conditional markers, qualifiers, etc. Although Heine, et al. found some African languages using terms for “field” and “hole” as source domains for expressing locative notions, the data in this study do not find evidence for such conceptualization in Fulfulde. The Fulfulde terms *babal* ‘field’ and *ngaska* ‘hole’ are not productive in this domain. The following table provides the landmark sources and the spatial domains in which they grammaticalize.

Source	Gloss	Preposition	Location
<i>dow</i>	sky	<i>dow</i>	on, above, over
<i>lesdi</i>	ground	<i>les</i>	down, under, below

## 4. Fulfulde landmarks and grammatical notions they denote

### 4.1. The “sky” as grammatical markers

The term *dow* literally means the ‘sky’. This should be distinguished from *duule* ‘clouds’, another term often extended to refer to the ‘sky’. On the one hand, the word *duule* strictly refers to the visible ‘clouds’ that could be seen moving in the sky during the rainy season. It literally denotes the clouds from which rain drops. The word *dow*, on the other hand, refers to the entire open space above the land and sea, roughly equivalent to the English ‘sky’.

As found in various other languages, including neighbouring Hausa and Kanuri, the term for “sky” has been used in the conceptualization of various grammatical notions in Fulfulde. This conceptualization stems from the fact that the sky stands above humans, and thus, is used to express notions that are related to height, over or above humans or other things.

This conceptualization is explained by the orientational metaphors that allow for the mapping of these concepts to explain orientational notions, which in turn, lead to the complete process of grammaticalizing these terms into grammatical markers. The grammatical domains in which the term *dow* ‘sky’ is extended are discussed, in turn.

#### 4.1.1 *Dow* ‘sky’ as preposition

The first grammatical domain in which the term *dow* ‘sky’ is grammaticalized is the domain of preposition. As explained earlier, the grammaticalization theory assumes that lexical items first arrive at more tangible domains, before proceeding to less physical and more abstract domains on their way to total grammaticalization and possibly getting out of use.

1. (a) *dow* korowal  
sky chair  
‘on the chair’
- (b) nyam-du dow daago  
eat-CL11 sky mat  
‘food on the mat’
- (c) res-u deftere nden dow leeso  
put-IMP. book the sky bed  
‘keep the book on the bed’
- (d) yaaB-u dow les-di  
match-IMP. sky ground-CL10  
‘match on the ground’
- (e) dar-a dow kos-de maada  
stand-IMP. sky leg-CL24 2SG.POSS  
‘stand on your feet’

On this basis, the term *dow* ‘sky’ has been grammaticalized into a prepositional marker, denoting the concepts that are related to the notion ‘on’. This usage of the term *dow* ‘sky’ as the preposition corresponding to the English ‘on’ is exemplified in the above expressions (1a

– d). These expressions are not metaphors or metonymies and, are therefore, not figurative in meaning. The term *dow* as used in these expressions simply means ‘on’ as in ‘*on* the chair’, ‘...*on* the mat’, ‘...*on* the skin’, ‘...*on* the ground’ and ‘...*on* the legs...’ as shown in (1a – e).

#### 4.1.2 *Dow* ‘sky’ as above

Another locative concept which the term *dow* ‘sky’ denotes in Fulfulde is the notion *above*. The English term *above* describes a vertical locative relationship between two entities that are not in physical contact. Thus, when one entity, e.g., an object – is *above* another object, the latter is assumed to be below the former, without physical contact between the two. Thus, the locative marker *above* is significantly different in the notion it denotes from that of the term *on*.

2. (a) e mo dar-ii dow maako  
 at 3SG stand-PAST. sky 3SG.POSS  
 ‘he is standing above him’
- (b) piirōow-al tokk-i dow cuu-di mabbe...  
 fly- CL16 follow- PAST. sky room-CL25 3PL.POSS  
 ‘aeroplane flew above their houses’
- (c) kur-ol tokk-i dow hoore maako...  
 arrow-CL17 follow- PAST. sky head 3SG.POSS  
 ‘the arrow flew above his/her head’

In Fulfulde, however, both locative concepts are denoted by the term *dow* ‘sky’, the difference being only in contexts highlighted in the expressive constructions. In the above examples (2a – c), the term *dow* ‘sky’ corresponds to the English term *above*. In these expressions, standing *above* someone as in (2a), or an aeroplane flying *above* something as in (2b & c) show that the term *dow* ‘sky’ has been further grammaticalized into more abstract grammatical notions.

#### 4.1.3 *Dow* ‘sky’ as upon

The notion ‘upon’ or ‘unto’ are used in expressing relationship between two concepts that is not exactly the kind that exists between two objects in vertical ascension where one is placed on top of the other as would be accurately described by the notion ‘on’.

3. (a) Salaatu duum-oo dow maako  
praises permanent-FUT. sky 3SG.POSS  
'everlasting praises upon him'
- (b) O lel-ii dow ma66e  
CL1 send- PAST. sky 3PL.POSS  
'he/she has sent to/upon them'
- (c) O sirfir-ii dow maako  
CL1 rely- PAST. sky 3SG.POSS  
'he/she relied upon him'

In the expressions (3a – c) above, for instance, a praise is sung *upon* the Prophet in (3a), while a message was sent *onto* another person as in (3b), while one person expects or relies *upon* another person as in (3c). This grammatical notion is more abstract than the physical, locative preposition *on* which relates together, physical objects in a location. In Fulfulde, the term *dow* 'sky' is grammaticalized to denote this concept as seen in the above examples.

#### 4.1.4 *Dow* 'sky' as *than*

The comparative relationship between two entities is denoted by various grammatical markers in English. The term *than* is one of those grammatical markers that denote such a relationship.

4. (a) ndikka ngar-aa dow lelaa  
better come-FUT. sky send  
'it is better to come than to send'
- (b) ndikka limse danee-je den dow 6alee-je  
better clothes white-CL24 the sky black-CL24  
'the white clothes are better than the black'
- (c) ndikka yar-a dow yiw-oo  
better drink-FUT. sky bath-FUT.  
'it is better to drink than to bath'
- (d) dow suka semt-a ndikka laahira he6-a kod6  
sky youth shame-FUT. better heaven get- FUT. stranger  
'it's better for the youth to die than to be shamed'



In Fulfulde, as would be seen in the above expressions (4a – d), this grammatical notion is denoted by the term *dow* ‘sky’. In (4a) for instance, it is said to ‘better come *than* send’. Expressions (4b – c) exemplify the use of the term in comparative relationship, where in (4b) a white cloth is said to be better *than* black, while in (4c) drinking (medicine, water, etc.) is better *than* bathing [with it]. The expression in (4d) compares situations, saying, it is better for a brave young man to die *than* be shamed [for losing].

## 4.2 The ‘ground’ as grammatical markers

The Fulfulde term *lesdi* literally refers to the ‘ground/earth’. However, the term has been grammaticalized to mark various abstract notions. The opposing concept to the sky is naturally the ground, or in some languages, the earth. This experience has led to the conceptualization of the terms for ‘ground/land/earth’ to denote locative notions which are the opposite to those conceptualized based on the term for “sky”. Like other terms, the process of the grammaticalization of the term for ground begins from more physical, more tangible to more abstract notions.

Unlike the term *dow* ‘sky’ which has not gone through the stage of erosion, the term *lesdi* ‘ground/earth’ has gone through some morphological changes in the process of grammaticalization. The initial form of the term is *lesdi* which erodes to the form *les* to denote various grammatical notions. As would be seen in the later parts of this section, there are in fact cases where the eroded form *les* further acquires various grammatical morphemes to denote other abstract concepts. The grammatical domains in which the term *lesdi* ‘ground’ has been extended are discussed in the following sections.

### 4.2.1 *Lesdi* ‘ground’ as preposition

In Fulfulde, the grammatical marker for the notion ‘under’ derives from the term *lesdi* ‘ground/earth’. The term first goes into the stage of decategorization by losing the suffix *di* which is a gender marker – also called nominal class marker – based on which a Fulfulde noun is placed into its appropriate nominal class. This, has then led to the desemanticization of the term to mark various grammatical notions, starting from the preposition “under”.

5. (a) res-u      les      korowal  
       put-IMP.    ground    chair  
       ‘keep it under the chair’

- (b) hoos-u      kusel les      leeso  
 take-IMP.    meat ground    bed  
 ‘take meat under the bed’
- (c) res-u      ngel      les      pade...  
 put-IMP.    CL3      ground shoes  
 ‘keep it under the shoes’
- (d) nagge dar-ii-nge      les      leggal  
 cow stand-CONT.CL13 ground    tree  
 ‘the cow that is standing under the tree’
- (e) mbaala    mbaal-ii-nga      les      danki  
 sheep    lie-CONT.CL12      ground    roof  
 ‘the sheep that is lying under the roof’
- (f) les      maako      o      huuw-ata  
 ground 3SG.POSS    CL1      work-FUT.  
 ‘he/she works under him/her’

In the above examples (5a – e), the term *lesdi* ‘ground’ has been grammaticalized into a locative maker ‘under’, as seen in (5a – c) where an object is placed under another object. In the expressions (5d – e), an animal is said to be standing under the shade of a tree and roof, respectively. In example (5f), the term denotes a superior – subordinate relationship.

#### 4.2.2 *Lesdi* ‘ground’ as below

The locative notions ‘under’ and ‘below’ are similar, but conceptually different. Apart from vertical location, the relations expressed by the notion ‘below’ can be based on the relative value, quantity, position, etc. of corresponding entities. Thus, while the English language has separate grammatical markers for these notions, Fulfulde extends the term *les* to denote this concept.

6. (a) Innde maako woni les innde am  
 name 3SG.POSS be ground name 1SG.POSS  
 ‘his/her name is the one below my name’

- (b) to ceede les maako a woni  
 if money ground 3SG.POSS you be  
 ‘you are under him/her in terms of money’
- (c) no ceede mbelirii fuu les njamu  
 no matter money sweet all under health  
 ‘no matter how good, money is under health’

The above expressions show that the relative concepts corresponding to the English “below” are expressed by the term *les*. In examples (6a – c) one’s name is said to be below another’s as in (6a), whereas someone’s wealth is said to be below another’s in (6b) and that the joy of money is below that of health in (6c).

#### 4.2.3 *Lesdi* ‘ground’ as low

Another grammatical notion marked by the term *lesdi* ‘ground’ is the notion *low*. This concept denote quantity, height, and other such qualities of objects and entities. What is interesting at this level is the ability of the hitherto eroded form *les* to further accept nominal and verbal suffixes to denote various concepts and acts of ‘lowering’ as in the terms *lesna* ‘to lower’, *leesde* ‘[something] is low’, *leesngal* ‘[something] is low’, *leesii* ‘it is low’, etc. as would be seen in the following examples.

7. (a) lees-nu sawto nder bolii-de maafa  
 ground-IMP. sound in speech-CL24 3SG.POSS  
 ‘lower your voice’
- (b) lees-tin jay-ngol pitirla nga  
 ground-IMP. light- CL17 lamp CL12  
 ‘lower the light of this lamp’
- (c) hiite maa-ga lees-ii  
 fire POSS.CL12 ground-PAST.  
 ‘its light is low’
- (d) hiite maa-ga lees-ay  
 fire POSS.CL12 ground-FUT  
 ‘its fire will be low’

- (e) hiite maa-ga lees-aay  
 fire POSS.CL12 ground-PAST.NEG.  
 ‘its fire is not low’
- (f) hiite maa-ga lees-ataa  
 fire POSS.CL12 ground-FUT.NEG.  
 ‘its fire will not be low’
- (g) bolwe maako lees-de  
 speech 3SG.POSS ground-CL24  
 ‘his/her voice is low’
- (h) danki kin lees-ki  
 roof the ground-CL19  
 ‘the roof is low’
- (i) korowal ngal lees-ngal  
 chair CL16 ground-CL16  
 ‘the chair is low’

The above examples are instances where the term *lesdi* ‘ground’ morphologically and phonologically transformed into various forms denoting various grammatical concepts. In (7a – f) the base *les* acquired verbal suffixes, where (7a – b) are imperative, in form of instruction, past tense form, as in (7c), future positive form, as in (7d), past negative form in (7e) and future negative form in (7f). In the subsequent examples (7g – i), the base *les* acquired nominal suffixes to derive grammatical forms that denote descriptive notions.

#### 4.2.4 *Lesdi* ‘ground’ as unworthy

The morphological derivation of the base *les* could also lead to the extension of the term into furthermore abstract domains. When something is perceived to be low, it would also be negatively understood to be unworthy, undesirable. To express this notion, the term *lesdi* ‘ground’ is grammaticalized to denote the concept.

8. (a) Yidde duuniya lees-ngel  
 love world ground-CL3  
 ‘the love for the unworthy world’

- (b) o lees-dō masin  
 CL1 ground- CL1 a lot  
 ‘he/she an unworthy person’
- (c) taa lees-in jun-ngo  
 don’t ground-IMP hand-CL14  
 ‘don’t be stingy’

In the above expressions (8a – c), for instance, the base *les* acquires diminutive and pejorative suffixes to refer to the concept of unworthiness and undesirability, as in (8a). Although the personal suffix *o* is not pejorative, the idea that a person is ‘lowly’ makes them unworthy, as in (8b), whereas a ‘low hand’ refers to stinginess, as in (8c).

#### 4.2.5 *Lesdi* ‘ground’ as obey/respect

The idea that something ‘low’ is pejorative or negatively perceived is not always the case. In Fulfulde, the concept of respect could be denoted by the grammaticalized form of *lesdi* ‘ground’.

9. (a) Bin-ngel lees-ana mawd-o  
 child-CL3 ground-FUT. big-CL1  
 ‘the young should respect elders’
- (b) lees-an maw-na  
 ground-FUT. grow-POSS  
 ‘respect your elder’
- (c) lees-an-am sedda mi war-a  
 ground-FUT.POSS. little 1SG come-FUT.  
 ‘wait for me a little I am coming’

In the above expressions (9a – c), the base *les* takes verbal suffixes to express the need for respecting elders and seniors (cf. 9a – b), while in (9c) the form denotes the concept of waiting.

From the data discussed above, two landmarks: *dow* ‘sky’ and *lesdi* ‘ground’ are the sources of various Fulfulde grammatical markers. This process occurred through various

grammaticalization stages. As can be seen, the term *dow* ‘sky’ has gone through the process of extension, whereas the term *lesdi* ‘ground’ has gone through both the processes of extension and erosion.

## 5. Conclusion

This study applies the theory of grammaticalization to analyse the development of lexical items for landmarks into grammatical markers in Fulfulde. The theory of grammaticalization assumes that most, if not all grammatical markers evolved from lexical items of various domains. It has been argued that prepositions, as one of the largest grammatical domains, are mostly derived from body part terms and landmark sources.

It has been shown in this paper that landmark sources, especially *dow* ‘sky’ and *lesdi* ‘ground’ are very productive sources of grammatical markers. As could be seen from the data provided, these terms have evolved from lexical items into grammatical markers denoting various abstract grammatical notions. Apart from locative domains such as prepositions, these terms have been extended into even more abstract grammatical domains, as seen from the data discussed in this paper.

It is important to note here, that this process is not peculiar to Fulfulde. It can be observed in various other neighbouring languages, the patterns of which warrant further investigations from areal linguistic perspective, comparative analysis and cognitive approaches. Another implication for further studies is the sources of other grammatical markers in Fulfulde, as well as the cognitive processes that allow for the process of grammaticalization.

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