



Scan to know paper details and  
author's profile

# Semantic Analysis of Modality in Siin Seereer

Jean Christophe Faye

Cheikh Anta Diop University

## ABSTRACT

*The present work is devoted to the semantic analysis of modality in Siin Seereer. The latter is an African language belonging to the West Atlantic branch of the Niger-Congo family. It is a language through which the enunciator can express his/her ideas and point of views through the expression of modality. Thus, there are lots of operators used in Siin Seereer language to deal with modality (deontic, epistemic, dynamic, etc.).*

*Keywords:* auxiliary, language, modality, operator, semantics.

*Classification:* DDC Code: 401.43 LCC Code: P325

*Language:* English



London  
Journals Press

LJP Copyright ID: 573333  
Print ISSN: 2515-5784  
Online ISSN: 2515-5792

London Journal of Research in Humanities and Social Sciences

Volume 22 | Issue 8 | Compilation 1.0



© 2022 Jean Christophe Faye. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 4.0 Unported License (<http://creativecommons.org/licenses/by-nc/4.0/>), permitting all noncommercial use, distribution, and reproduction in any medium, provided the original work is properly cited.



# Semantic Analysis of Modality in Siin Seereer

Jean Christophe Faye

## ABSTRACT

*The present work is devoted to the semantic analysis of modality in Siin Seereer. The latter is an African language belonging to the West Atlantic branch of the Niger-Congo family. It is a language through which the enunciator can express his/her ideas and point of views through the expression of modality. Thus, there are lots of operators used in Siin Seereer language to deal with modality (deontic, epistemic, dynamic, etc.). So, the article aims to highlight the different types of operators used to deal with modality, their grammatical categories, their formations and structures. In addition, the article will help understanding the functioning of Siin Seereer language in general and of the different types of modality, their relationships, their interdependency (if there is any) in particular. However, to find some results, field surveys, interviews and a lot of research will be done.*

**Keywords:** auxiliary, language, modality, operator, semantics.

**Author:** Doctor in Linguistics/ Grammar Cheikh Anta Diop University, Dakar- Senegal.  
e-mail: jeanbbchrist@gmail.com

## I. INTRODUCTION

Seereer is a language spoken in Senegal and in some other African countries and whose origin and classification have given rise to a lot of debates within researchers in general and linguists and historians in particular. Thus, as Faye (2021:1) said in *Possibility and Probability*, several theses have been brought up for its classification and the main methods of classifying African languages, among other things, are to gather them in terms of groups, branches and families. This operation is essentially based on some comparisons of elements in terms of structures, phonologies, grammars, lexicon etc. of

the current languages. However, Seereer language has linguistically been classified in various ways by many linguists and other scholars some of whom M. Delafosse, Cheikh Anta Diop, J. Greenburg, etc. According to the latter, Seereer is a language which belongs to the West Atlantic group of the Niger- Congo languages family (Greenburg: 1963).

So, belonging to the West Atlantic group, Seereer language has many dialects all of which are mutually intelligible. So, these dialects are divided into two groups: Siin (mainly called Siin-Gandum) group and Cangin group. However, as far as the current study is concerned, the main focus is on Siin Seereer (group) language. Writing, speaking or studying this Seereer language, is not an easy task for non- speakers due to the complexity of its pronunciation, its morphological and syntactical systems, the semantics of its words and its grammar. The latter is a set of rules in which the enunciator can express his/her ideas and point of views through the expression of modality. Modality is, as Palmer (2001: 1) says, a valid cross-language grammatical category that can be the subject of a typological study. It is a category that is closely associated with tense and aspect in that all three categories are categories of the clause and are generally, but not always, marked within the verbal complex.

But how is modality expressed in Siin Seereer? What are the used operators and their grammatical categories? In other words, are they auxiliaries, verbs, nouns, noun phrases, class markers, etc.? Are they formed and structured in the same way? What are the operators used to express deontic, epistemic, and dynamic modalities? Therefore, this article has been suggested in order to bring some answers to these raised questions. In other words, it aims to highlight the different types of operators used to deal with modality, their grammatical categories, their formations, structures and meanings.

Moreover, the article will help understanding the functioning of modality and its different types in Siin seereer, their relationships and interdependency.

Thus, to write this article, we have striven to explore the writings (in Siin Seereer) of some teachers, students and other scholars. Field surveys as well as interviews of native speakers have also been organized and analyzed in the study. In addition, we have read documents (books, articles, novels, stories, etc.) written in Siin Seereer language. This research has helped us have a lot of information and collect data for the corpus. After the elaboration of the corpus, we have moved on to data analysis and ended up with some results.

In so doing, the theoretical framework on which this study is based is the theory of the functionalism. In the linguistic field, there are several schools (one of which the Prague School) which have suggested many definitions of the functionalism. Thus, the functionalism can be defined as a theory that can refer to any one of various approaches to the study of grammatical descriptions and processes that consider the purposes to which the language is put and the contexts in which it occurs. So, the different types of modality and the way auxiliaries, verbs and phrases used to express modality are formed and their functions and meanings in the sentence are in the score of the study.

## II. MODALITY

Modality is, as Palmer (2001: 1) says, a valid cross-language grammatical category that can be the subject of a typological study. It is a category that is closely associated with tense and aspect in that all three categories are categories of the clause and are generally, but not always, marked within the verbal complex. Yet, however important these concepts may be, they are semantically and grammatically different from one another. F.R. Palmer has pointed out this difference for, according to him, modality differs from tense and aspect in that it does not refer directly to any characteristic of the event, but simply to status of the proposition that describes

the event. It is concerned with mood and modal operators such as modal auxiliaries and is treated as a single grammatical category found in most of the languages in the world, one of which Siin Seereer. Thus, there are different types of modality in Seereer some of which deontic, dynamic and epistemic modalities.

### 2.1 Deontic modality

Deontic modality is a system of modality, which is, as Palmer (2009: 01) says, a valid cross-language grammatical category that can be the subject of a typological study. It is a category that is closely associated with tense and aspect in that all three categories are categories of the clause and are generally, but not always, marked within the verbal complex.

Deontic modality refers to events that are not actualized, events that have not taken place but are merely potential, and may, therefore, be described as “event modality” (Palmer, 2009:70). However, with deontic modality, the conditioning factors are external to the relevant individual. In other words, they do not depend on the grammatical subject, but most of the time, on the enunciator. There are operators in Siin Seereer language that are used to express deontic modality. These operators can express directives or Commissive. Among them there are:

#### 2.1.1 War

“WAR” is an operator used in Siin Seereer language to express deontic modality. It can be regarded as a modal auxiliary that explicitly expresses an inter-subjective relationship in which the enunciator displays his/her authority. (s)He asserts him/herself either to show that (s)he is at the origin of the pressure or to show the obligation (s)he is reporting. With this modal, the enunciator targets the grammatical subject and wants to impose the content of the verb phrase on it. In this case, it expresses the directives.

- Jaaga - ka - war - o - gayik - naak - ke  
Jaaga - he - must- to - shepherd- cow - Def  
“Jaaga must/has to shepherd the cows”
- Ko - war - o - tim  
you - must - to - be quiet

*“You must/ have to be quiet”*

In these examples, “WAR” shows the pressure or obligation that the grammatical subject has to realize the predicate. This pressure or obligation may be subjective or objective. In other words, they can emanate from the enunciator or from external sources. That is why, for the translation of the operator, we resort to MUST and/or HAVE TO. According to some contexts, it means that the enunciator makes the predicative relation obligatory. On the other hand, the volition of the enunciator occupies a more or less big place in the obligation expressed by “WAR”. It can be the main source of an obligation or a wish or a point of view. It can also be rules or laws that (s)he reports.

However, unlike modal auxiliaries in English, this auxiliary can undergo an initial consonant alternation if the grammatical subject is in plural. In so doing, it becomes “MBAR”. But this consonant alternation does not affect its meaning and/or its structure.

- Gaynak - we - ka - mbar - o - niw - xooxoox - we  
shepherd - Def - they- must - to - respect- farmers - Def  
*“The shepherds must/ have to respect the farmers”*

The consonant alternation does not change the meaning of the sentence. The enunciator resorts to “MBAR” to express the obligation (objective or subjective) that the grammatical subject (*gaynak*) has to realize the predicate (*niw xooxoox we*). But unlike some of the other operators, “WAR” does not indicate that the enunciator is not going to do his/her best to have the action done.

The studied operator can also be used when the enunciator wants to give some advice to the grammatical subject or express the duty that the subject has to realize. The duty can emanate from the enunciator’s own point of view or from some external sources that might push him/her to utter such feelings or words.

- Ko - war - o - niw - a - fap - of  
you - should- to- respect - c.m - father- your  
*“You should/ought to respect your father”*

- Demba - ka - war - o - ret - mbind - doktoor  
Demba - he - should- to - go - house - doctor  
*“Demba should/ought to go to hospital”*

In the examples, the enunciator resorts to “WAR” to express either a piece of advice or a duty. In other words, the use of this operator can be explained by the fact that the enunciator advises the grammatical subject *ko* (you) in the first example and *Demba* in the second one to realize the predicate *niw a fap of* (respect your father) in the first sentence and *ret mbind doktoor* (go to hospital) in the second one. The enunciator can also express the duty that the subject has to accomplish. This duty can be subjective meaning emanating from the enunciator’s own point of view; it can also be objective, meaning coming from external sources or from the context.

All in all, “WAR” is an operator mainly regarded as a modal auxiliary in Siin Seereer language. It is used to express a subjective obligation (obligation emanating from the enunciator) or an objective obligation (obligation coming from external sources). It can also be used when the enunciator wants to advise the grammatical subject to realize the predicate or to talk about the duty that the grammatical subject has to realize the predicative relation. Nevertheless, “WAR” can also be used as a transitive verb in Seereer and would mean “to kill”.

#### FOSOOX

“FOSOOX” is an operator of modality in Siin Seereer language through the use of which the enunciator commits him/herself to having the grammatical subject realize the predicate. It indicates the lack of compatibility, concordance pre-established between the grammatical subject and the predicate. It is an operator that permits to link some entities which did not intend to go together. So, through its use, the enunciator personally guarantees the prediction because of this lack of natural compatibility between the grammatical subject and the predicate.

In addition, with “FOSOOX” there is a relationship between the enunciator and the whole predicative relation. The enunciator

predicts that the event will take place in the future. There is also a relationship between the subject and the predicate and this relationship always corresponds to the enunciator's commitment or constraint value. He/she says that the grammatical subject is not free or self-sufficient.

- Kam - fosoox - o - damit - ong  
I - shall - to - help - you  
“*I shall help you*”
- Kam - fosoox - o - jeg - xalal  
I - shall - to - have - wealth  
“*I shall be wealthy*”

In the examples, the enunciator resorts to the operator “FOSOOX” to express the commitment they have for the realization of the predicative relationship. In other words, the enunciator, that is at the same time the grammatical subject, is committed to having the predicate *damit ong* (help you) in the first example and *jeg xalal* (be wealthy) in the second one, realized. Thus, the use of this auxiliary shows that the subject is determined in the realization of the predicative relationship.

However, as it is the case with the operator “WAR”, the auxiliary “FOSOOX” can undergo an initial consonant alternation when the grammatical subject is in plural. In so doing, it becomes “MBOSOOX”.

- Ka i - mbosoox - o - njalik  
we - shall - to - go to work  
“*We shall go to work*”

The referral to the auxiliary “MBOSOOX” indicates that the grammatical subject commits themselves to realizing the predicate *njalik* (go to work). So the use of the studied operator shows the commitment of the enunciator in the realization on the predicate relationship. However, the resorting to this modal auxiliary indicates that the action does happen at the time of speaking. The enunciator predicts that the event will take place in the future. This is shown by the use of the operator “KA”, which is always used before the grammatical subject.

The deontic modality can also be expressed in Siin Seereer when the enunciator wants allow the grammatical to realize the predicate. In so doing, they can resort to the modal auxiliary “WAAG”.

#### WAAG

“WAAG” is an operator which can be regarded as a modal auxiliary in Siin Seereer language. It can be used when the enunciator expresses the permission that they give to the grammatical subject to realize the predicate. That is, it is going to be translated into English by the modal auxiliary “May”.

- Maan - a - waag - a - o - dolook  
Maan -she- may - acc - to- get married  
“*Maan may get married.*”
- A - waag - a - o - ret  
(s)he- may - acc- to - leave  
“*(s) He may leave/go.*”

The use of “WAAG” in the examples shows that the enunciator gives the grammatical subject the permission or the possibility to carry out the predicate. In the first example, the enunciator allows or gives the permission to the grammatical subject *Maan* to realize the predicate *dolook* (get married). Maybe he/she is *Maan's* father or mother or relative. Anyway the getting married of *Maan* depends or may depend on him/her. For the second example, the subject “A” (he/she) is allowed or given the possibility to realize the predicate *ret* (leave/go). Furthermore, this modal auxiliary “WAAG” can undergo an initial consonant alternation when the grammatical subject is in plural. In so doing, it becomes “MBAAG”. Thus, the operator in question can be used to express other types of modality in Siin Seereer. In other words, “WAAG” can express dynamic and epistemic modalities.

#### 2.2 Dynamic modality

Dynamic modality is a notion of modality confined to the properties of the grammatical subject. In other words, with dynamic modality, the enunciator expresses the ability, the capacity, the volition, etc. of the grammatical subject to realize the predicate. So, to express dynamic

modality in Siin Seereer, the enunciator resorts to the operators “WAAG” and “BUG”.

### WAAG

Dynamic modality can be expressed through the use of the operator of modality “WAAG”. The latter is used in this type of modality when the enunciator wants to express the knowledge, the ability, the possibility, etc. that the grammatical subject has in the realization of the predicative relationship. That is, “WAAG” is used to refer to physical and mental powers, to express ability, capacity, etc. and to include the circumstances that might affect the person involved. Thus, it is going to be translated into English by the modal auxiliary “CAN”.

- Xemes - a - waag - a - o - jaw - maalo  
Xemes -she- can - acc - to-cook- rice  
“*Xemes can cook rice.*”
- Pis - ne - waag - a - o - ret - marse - Joyin  
horse- Def- can -acc- to - go - market- Joyin  
“*The horse can go to Joyin market.*”

“WAAG”, in this example, refers to dynamic modality and expresses the ability or capacity that the grammatical subject *Xemes* in the first example and *Pis ne* (the horse) in the second one, has to realize the predicate. It can also refer to a logical possibility relative to a future event. This possibility consists in attributing to the event a degree of probability. This value is always derived from the physical possibility value. So, the author shows the possibility of the content of the predicative relationship. He/she notices the logical possibility between the grammatical subject and the predicate. But this possibility is objective in so far as the enunciator has focused on the context, on the reality of events to refer to it.

Dynamic modality can also be expressed through the use of “BUG”, an operator used to denote the will or willingness or volition of the grammatical subject to realize the predicate.

### BUG

“BUG” is an operator of dynamic modality used when the enunciator wants to express the volition of the grammatical subject to realize the

predicate. The referral to this auxiliary shows that the action does not take place at the time of speaking but it is intended to happen in the future. Thus, its translation into English refers to the use of the modal auxiliary “WILL” expressing the volition and which derived from *willan* in Old English and functioned as a straightforward catenative and control verb in some of its uses during that period, and now it has become a fully grammaticalized auxiliary.

- Kam - bug - o - damit - ong  
I - will - to - help - you  
“*I will help you.*”
- O - maad - oxe - ka - bug - o - gidim - in  
c.m - king - Def - he - will - to - thank - him  
“*The king will thank him.*”

In the examples, “BUG” expresses a dynamic modality. In other words, the enunciator shows the volition of the grammatical subject for the realization of the predicate. In the first example, there is coalescence in so far as the enunciator is the grammatical subject. So, the enunciator expresses their volition of helping the co-enunciator. In the second example, they show the willingness of the grammatical subject *o maad oxe* (the king) to realize the predicate *gidim in* (help him).

This operator can also, as the others do, undergo an initial consonant alternation when the grammatical subject is in plural. In so doing, it becomes “MBUG”.

- Goor - we - ka - mbug - o - ndet - no - qol  
men - Def - they- will - to - go - to - field  
“*(The) Men will go to field.*”

“MBUG” is used in the example to express the dynamic modality. Through its use, the enunciator expresses the volition of will or willingness that the grammatical subject *goor we* (the men) has to realize the predicate *ndet no qol* (go to field). Yet, the studied operator “BUG” can be used as an ordinary transitive verb and means in English “to love” or “to like”. That being so, the noun which comes from the verb “BUG” is “MBUG”, meaning “love”. This word (MBUG) is different from the one expressing the volition when the grammatical subject is in plural.

Siin Seereer language uses these two kinds of operators to deal with this type of modality confined to the properties of the subject. When the enunciator wants to express the knowledge, the ability, the possibility or capacity of the grammatical subject to realize the predicate, they resort to the modal auxiliary “WAAG”. When it is about to express the will or willingness or volition of the subject in the realization of the predicative relation, they refer to “BUG”. But as it is mentioned above, “BUG” can be an ordinary verb (transitive verb). However, Siin Seereer language can also express other types of modalities such as the epistemic one through the use of some of the studied operators and the referral to others.

### 2.3 Epistemic modality

Epistemic modality is a type of modality which is concerned with the enunciator’s attitude to the truth value of factual status of the proposition. Through epistemic modality, the enunciator expresses an indication of the estimation, typically but not necessarily by the enunciator, of the chances that the state of affairs expressed in the clause applies in the world or not, or, in other words, of the degree of probability of the state of affairs. Epistemic modality is shown when the enunciator, through a thought process that they have done from what they know, infers the existence probability of a relation between the subject and the predicate. In Siin Seereer, this type of modality can be expressed through the use of some operators.

#### FADNA

“FADNA” is an operator used in Siin Seereer language when the enunciator presents the validation of the predicative relation in terms of a calculation done on the degree of the event probability, as coming from an absolute necessity. It expresses the notion of deductive, which is a type of epistemic modality through which the enunciator expresses a judgment based on observable evidence. The enunciator, making an observation of the context, infers that such predicate is probably going to be realized by the grammatical subject. The modal auxiliary MUST is used for its translation into English.

- Fadna - Joomay - a - gata  
Phrase - Prop.N - he - come back (Acc)  
“*Joomay must have come back*”
- Fadna - gaynak - we - molika  
Phrase - shepherd- Def- go to summer pastures  
“*The shepherds must have gone to summer pastures*”

The operator under study is used in these examples to express the epistemic modality mainly the deductive. It is always or most of the time used at the beginning of the sentence or the clause. It denotes the notion of probability in Siin Seereer language. In other words, the enunciator expresses or establishes or evokes the chances of the realization of the predicative relationship. In other words, the enunciator expresses the chances that the grammatical subjects *Joomay* in the first example and *gaynak we* (the shepherds) in the second one have to realize the predicate *gata* (come back) and *molika* (have gone to summer pastures).

But as J. CH. Faye (2021:8) says, this is not surprising in so far as the operator in question can be said to be derived from “fad”. The latter is a verb which means “*to arrive or to beat*” in English. So, combined with “na” which is a morpheme expressing the notion of “accomplished aspect”, the phrase expresses probability or certainty. Thus, apart from being used in initial position, the operator “FADNA” is always followed by a noun; unlike English operators which are always placed between the grammatical subject and the predicate (in affirmative sentences) to express probability. So, whether the noun is in singular or in plural, the operator remains invariable. A part from this operator, Siin Seereer language can also refer to other phrases to express the epistemic modality.

#### “A WAAGA REF”

The phrase “a waaga ref” is used in Siin Seereer language when the enunciator wants to express the epistemic modality by speculating, meaning by expressing uncertainty. The validation of the predicate relation is presented not as effective but as being possible. The enunciator gives their own point of view about the realization of the predicate by the grammatical subject.

Thus, the studied phrase is a term composed of four morphemes: “a”, “waag”, “a” and “ref”. The first one (a) is an indefinite personal pronoun that can be regarded as a subject. The second one (waag) is an operator expressing possibility and that can be used as an auxiliary (modal) or as a verb. As far as the third morpheme (a) is concerned, it is a word used to show the accomplished character of a segment or the affirmative or interrogative forms. The last one (ref) is a verb. The whole forms this phrase on purpose used to express possibility or speculative. However, the possibility expressed here, will only be found in the predicative relation. In other words, this phrase is always used in an epistemic way. The speaker gives his/her point of view about the chances of the realization of the predicate by the grammatical subject.

- A waaga ref - e - Jeen - a - reta - gila - saax  
Phrase - that- Prop.N-he - go Acc- out- country  
“*Jeen may have gone abroad.*”
- A waaga ref - e - rew - we - a - anda - no  
Phrase - that-women- Def-they- knowAcc - him/her  
“*The women may have known him/her.*”

In the examples, the phrase “A waaga ref” is used in some sentences where the grammatical subject is in relation with the predicate. The validation of the predicative relation is presented by the enunciator, not as being effective but as being possible. The enunciator is not certain about the realization of the predicative relation. They just state that it is possible for the grammatical *Jeen* (in the first example) and *rew we* (the women) in the second, to realize the predicate *reta gila saax* (have gone abroad) and *a anda no* (have known him/her). So, the judgment made by the enunciator is not based on evidence, but on their own point of view.

When it is based on evidence, it is not regarded as speculative, but as deductive. It is based on a possible conclusion. In other words, According to the enunciator it is really possible that the grammatical subject have realized the predicate. Perhaps, they have or have not done the action. However, the phrase in question is invariable

whether it is in singular or in plural. There is no consonant alternation, nor shift. What might explain this is the fact that it is composed of a subject “a”, an auxiliary “waag” a verb “ref” and a relative pronoun “e”. It can be regarded as a proposition. Thus, this relative pronoun “e” follows the phrase. Indeed this “e” is different from the one expressing the unaccomplished character or the negative form. However, this phrase is always placed at the beginning of affirmative sentences.

Nevertheless, unlike the operator “WAAG”, the phrase “A WAAGA REF” cannot be used in interrogative form. For through its use, the enunciator does not need to ask some questions or wonder about the possibility of the realization of the predicative relation but he/she expresses his/her opinion on the possibility or lack of possibility of the subject to realize the predicate. In other words, they can be speculating about the realization of the predicative relationship.

### III. CONCLUSION

The notion of modality is expressed in Siin Seereer language through the referral of different operators (modal auxiliary and phrases) whose uses depend on the type of modality that the enunciator wants to express. Through the study we have pointed out that some of the studied operators, like the modal auxiliaries in English, can express two or more than types of modality. It is the case of “WAAG”, which can be used to express both deontic, dynamic and epistemic modalities. In deontic modality, it refers to the permission or possibility (possibility based on the enunciator) that the enunciator gives to the grammatical subject to realize the predicate. When it expresses the capacity, the ability or the possibility (possibility based on the context) that the grammatical subject has to realize the predicate, it denotes the dynamic modality. In addition, when it is about the expressing of the chances of the realization of the predicative relation, it refers to epistemic modality.

The study has also shown that all the operators regarded as modal auxiliaries in Siin Seereer language are always followed by the operator “O”

which means “TO” plus the infinitive of the verb. It is always said “war + o + infinitive”, “bug + o + infinitive”, “fosoox + o + infinitive”, “waag + o + infinitive”. This may cause difficulties to English people who want to learn Seereer and vice versa in so far as modal auxiliaries are never preceded or followed by “TO” in English whereas, in Siin Seereer, they are always followed by “O” meaning “TO”.

Furthermore, through the work, we have pointed out that almost all the operators used to express the epistemic modality are placed at the beginning at the sentence and they are invariable. In other words, whether the grammatical subject is in singular or plural, there is no initial consonant alternation, nor shift. Unlike these operators, some of modal auxiliaries in Siin Seereer undergo some initial consonant alternation when the grammatical subject is in plural. “WAR” in singular becomes “MBAR” in plural; “WAAG” in singular becomes “MBAAG” in plural, etc. But this consonant alternation does affect neither the meaning nor the place of the auxiliary.

Some of the studied operators can also be both auxiliaries and ordinary verbs. In so doing, the difference is located in the morphology and/or syntax. In other words, when they are (modal) auxiliaries, they are always followed by “O”, whereas when they refer to verbs, they are always followed by a direct object. They are transitive verbs and their meanings are or may be different from the one they have when they are auxiliaries. For instance, “WAR” means “must” or “have to” or “be obliged to, etc.” when it is an auxiliary whereas it means to “kill” when it is a verb.

## REFERENCES

- ADAMCZEWSKI, H. & Jean Pierre Gabilan. 1993. *Les clés de la grammaire anglaise*. Paris : Edition Armand Collins.
- ADAMCZEWSKI, H. & Claude Delmas. 2004. *Grammaire Linguistique de l'Anglais*. Editions Armand Collins
- BOUSCAREN, Janine & M. Moulin, H. Odin 1996. *Pratique raisonnée de la langue*. Editions Ophrys.
- CULIOLI, Antoine, 1991, *Pour une linguistique de l'énonciation, Opérations et représentations*, Tome 1. Gap : Ophrys.
- CULIOLI, A., 1971, « A propos d'opérations intervenant dans le traitement formel des langues naturelles », in *Mathématiques et Sciences Humaines*, 34. Paris: Gauthier-Villars.
- CULIOLI, A., 1982, « Rôles des représentations métalinguistiques en syntaxe », XIII, Congrès International des linguistes, Tokyo. D.R.L. Paris VII.
- FAYE, Jean Christophe. 2021 “Possibility and Probability in Seereer Siin: International Journal of Linguistics, Macrothink Institute.
- FAYE, Jean Christophe. 2018. « Quantifiers in Siin Seereer » International Journal of Multidisciplinary Research and Publications ISSN (Online): 2581-6187.
- FAYE, Souleymane. 2013. *Grammaire dialectale du Seereer*. Dakar : Les Éditions du Livre Universel.
- FAYE Waly Coly. 1979. *Etude morphosyntaxique du seereer singandum : parler de Jaxaaw et Naaxar*. Université de Grenoble 3.
- GREENBERG, Joseph. H. 1970. *The Languages of Africa*, Bloomington: Indiana University.
- JESPERSEN, O. 1970. *A Modern English Grammar on Historical Principles*, Part II: Syntax (1st Vol.). London.
- LAPAIRE, Jean Rémi & Wilfrid Rotge. 2000. *Linguistique et grammaire de l'anglais*. Toulouse: Presses Universitaires du Mirail.
- SAUVAGEOT, Serge. 1965. *Description synchronique d'un dialecte wolof : le parler du Diolof*. Dakar.