Understanding the Nature of Code-Switching and Code-Mixing of Songhay Speakers of French

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Abstract- The present paper is a descriptive study on the nature of the types of code-switching and code-mixing found among Songhay speakers of French. It aims at identifying and describing the structural nature of the instances of switches by classifying and categorising them according to the existing theories and models on Code Switching and Code Mixing constraints. The paper also reviews proposed definitions on the issue of Code-switching and Code-mixing. The data for the data was collected through interviews and participant observation from ninety participants coming from the regions of Gao and Timbuktu in the north of Mali, and Bamako, the Capital City in the south. The study has identified two forms of switches, intersentential and intra-sentential code-switching, in which participants alternate the two codes or insert words from French into Songhay and vice-versa. Analysing the intersentential types of switches, the study confirms the ‘equivalence of structure constraint’ of S. Poplack (1980) which states that there is no violation of the grammar of the two languages involved in this form of switching where sentences or clauses are juxtaposed.

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I. Introduction

Bilingualism is a tradition in Africa considering that language contact phenomena are omnipresent everywhere in all African linguistic communities. As a result, we can observe linguistic contact phenomena of code-switching and code-mixing among students and other bilingual speakers of French, who alternate or mix elements of French language together with their mother tongue in their daily conversations.

Mali is a multilingual country with French as the official language. Several languages have been identified, but only a handful has received recognition from law. According to I. Skattum (2009c), approximately twenty languages among which thirteen have received the status of national languages: Bamanankan, Bomu, Bozo, Dogoso Fulfulde, Hasaniya, Maninkakan Mamara, Soñay, Soninke, Syenara, Tamashqué and Xaasongaxanon. The relationship between the ex-colonial European languages and the local languages in Africa leads to many phenomena of language change and variation. The local languages receive and adapt new terms from the European ones that express concepts or ideas the native speakers do not have in their language.

From this point of view, E. Annamalai (1989, p.48) notes that "in many situations of languages in contact, constituents of one language can be found with the constituents of another language in a number of linguistic phenomena, namely lexical borrowing, transferring, interference, calquing, diffusion, relexification, code-switching and code-mixing, etc." Indeed, the present study concerns the nature of the linguistic contact phenomenon of code-switching and code-mixing which is the use of two different languages in the same speech, as one of the impacts of French language on French speaking Africa. It describes and classifies this kind of language practice to see if the structures being switched or mixed conform to the existing theories and constraints on Code-switching and Code-mixing.

Considering the Malian context, literature on Code-switching is quasi-inexistent. Recent research works on the topic include M. Minkailou and I. Abdoulaye (2016) who demonstrated how Bamanankan speakers insert French constructions into Bamanankan and/or juxtapose Bamanankan and French constructions. A further related study still by the same authors analysed the phonological processes of adaptation that the switches by Songhay speakers of French undergo (I. Abdoulaye and M. Minkailou, 2017). A last work in this sense, still by M. Minkailou and I. Abdoulaye (2018) pertains to the types of switches made by Fulfulde speakers of French. A concluding
remark about all these studies remains the behaviour of the switched French verbs: in fact, the past participle of the switched French verbs is adopted by speakers of Bamanankan, Fulfulde and Songhay as the base form of the verb and is used as such in all their constructions. Regarding Songhay in particular, there is a need for confirmation since the study that was conducted was about the phonology of code-switching. And that is how this paper becomes highly significant.

In fact, while the phonological processes involved in Songhay-French Code-switching have been analysed and determined (I. Abdoulaye and M. Minkailou, 2017), the nature and type of switches have not been specifically determined. Therefore, this study aims to contribute and to fill this gap. The paper specifically aims at determining the types of switches made by Songhay speakers of French, the nature of those switches and the behaviour of the past participle of the switched French verbs.

To reach these aims, the following research questions will need to be answered: What are the types of switches made by Songhay speakers of French? What is the nature of those switches? And how does the past participle of the switched French verbs behave?

The significance of the study lies in that it will serve to reinforce the few studies conducted on the languages of Mali. The Malian sociolinguistic landscape needs to be adequately portrayed and made known to the public and to researchers. The paper will further serve to comprehend how far the theories developed so far are applicable to all instances of code-switching. The study will finally confirm or refute the behaviour of the past participle of the switched French verbs by Songhay speakers, i.e. the idea that participants adopt the past participle of the switched French verbs as the base form and use it as such in all instances.

Theoretically and conceptually viewed, code-switching and code-mixing generally appear as a basic language contact phenomenon with key concepts such as code-switching (hereafter CS) and code-mixing (hereafter CM) which are not always explicitly defined in the same ways by researchers. Many distinctive definitions of the two concepts have been proposed.

According to L. Naseh (1997), the earliest definition of code-switching dates back to U. Weinreich (1953), who defines bilingual people as “individuals who switch from one language to the other according to appropriate changes in speech situation”. But, in recent literature, there has been some variation in defining the term ‘code-switching’ in comparison to ‘code-mixing’. For instance, P. Muysken (2000, p.1) refers to code-switching as “the rapid succession of several languages in a single speech event”, however, code-mixing refers to “all cases where lexical items and grammatical features from two languages appear in one sentence”. As for A. Bentahila and E. Davies (1983, p.302) code-switching refers to “the use of two languages within a single conversation, exchange or utterance”, while J. J. Gumperz (1982, p.59) perceives the concept as “the juxtaposition within the same speech exchange passages of speech belonging to two different grammatical systems or subsystems”.

According to R. A. Hudson (1980, p.53) “code-mixing represents the case when a fluent bilingual talking to another fluent bilingual changes language without any change at all in the situation”. He also calls it a kind of language cocktail. In the eyes of P. Trudgill (1992), it is a process in which language users indulge in code-switching between languages of such rapidity and density, even within sentences and phrases, that it is not really possible to say at any given time the language they are speaking. Milroy and P. Muysken (1995, p.7) consider CS as “the alternative use by bilinguals of two or more languages in the same conversation”. S. Poplack (1993) cited in P. Muysken, (1994, p.157) defines code-switching as “the juxtaposition of sentences or sentence fragments, each of which is internally consistent with the morphological and syntactic (and optimally, phonological) rules of the languages of its provenance.” We note that this definition is in line with J. J. Gumperz’s (1982, p.59).

Aligning the subject matter of our study with these definitions, we adopt, as a working definition of code-switching and code-mixing the approach of B. B. Kachru (1983), R. Singh (1985), and S. Sridhar and K. K. Sridhar (1980) which refers to CS as inter-sentential switches and CM as intra-sentential switches. This approach of CS and CM, we think, is the sum of S. Poplack’s (1993) definition of CS as “the juxtaposition of sentences or sentence fragments, each of which is internally consistent with the morphological and syntactic (and optimally, phonological) rules of the languages of its provenance” and C. Myer-Scotton’s (1993, p.4) definition of CS as “the selection by bilinguals or multilinguals of forms from an embedded language (or languages) in utterances of a matrix language during the same conversation”. As a result, both terms show a systematic combination of elements of two languages in the same speech act by people speaking more than one language in a conversation. In other words, to be closer to the African context of switching as stated by P. Muysken (1994), we adopt this definition as an umbrella term to cover interchangeably the linguistic phenomena of both code-switching and code-mixing that will occur in the insertions or alternations of words or groups of words by Songhay speakers of French in verbal interactions.

II. Research Methodology

Following the methodologies adopted by variationists such as W. Labov, C. Myers-Scotton, S. Poplack and R. Redouane when doing research on language variation and change phenomena in terms of
field methods, the design of this study is a descriptive survey guided under an interpretivist approach of research philosophy which involves the description and examination of the processes and mechanisms of code-switching and code-mixing in the linguistic contact between French and Songhay language, and the impact of this language contact situation. It also involves seeking to categorise and describe the Songhay-French code-switching and code-mixing phenomena.

The study has adopted participant observation, which appears particularly useful to this investigation because, according to C. Bowern (2008), it is a source of potential information and a very powerful tool for investigating language contact. C. Bowern (2008) considers also that it is a core tool in sociolinguistics that permits the researcher to do an exploratory work to find out how people actually behave in language use. The advantage of this instrument to our study is that it provides spontaneous data through verbal interactions between the participants. More, it gives the opportunity to record information as it happens in the setting, with the researcher being either active or passive in the activities.

The population of the study consists of all Songhay speakers of French, and the sample constitutes of 90 participants selected out of five groups called “grins”¹ in Gao, Timbuktu and Bamako, three principal urban settings where these selected bilingual speakers reside. As instruments, participant observation and conversational interview have been used to collect the data. Spontaneous and fresh conversations have been recorded, transcribed and translated into English in an oral corpus. The cell phone has been used for recording the data. The data are qualitative and have therefore been qualitatively analysed.

III. Results and Discussion

In the classification of the instances of code-switching and code-mixing of Songhay speakers of French, the analysis of the data focuses on the structural dimension of code-switching and code-mixing practices.

As far as the structural dimension of code-switching and code-mixing is concerned, we have classified our data into two separate segments, following E. Boztepe’s (2005) point of view stating that the intra-sentential and inter-sentential distinction can distinguish the two types of switches equally well. In this vein, considering the structural constraints of the switch points, the first segment will group instances of code-switching, and the second segment will group instances of code-mixing. Then, we will categorise the different switches found in each segment, and identify the morpho-syntactic structures encountered.

The segmentation of our findings follows the definition of E. Boztepe (2005) according to which inter-sentential switching, sometimes called extra-sentential switching, is the type of switching which takes place at sentence or clause boundaries, or outside the sentence or the clause level; while intra-sentential switching is the type of switching which takes place within a sentence or a clause.

This classification and categorisation of our findings are based on the two dominant theories to the problem of syntactic constraints on code-switching: the alternation and the insertion approach, as P. Muysken, (1994, p.156) pointed out. Thus, the theoretical background of the classification of the instances of inter-sentential switching found in our data is based on S. Poplack’s (1980) word-order-equivalence which states that switches occur at sentence or clause boundaries. The theoretical background of the instances of intra-sentential switching found in our data is based on C. Myers-Scotton’s (1993a, 1993b) linguistic model for intra-sentential codeswitching known as the Matrix Language Frame Model. The first model shows that switches occur between sentences or clauses; the second model consists of the insertion of a foreign lexical or phrasal category into a given system.

In her study of bilingual Puerto Rican in New York City, S. Poplack distinguishes three types of code-switching: inter-sentential, tag-switching and intra-sentential, as can be seen in figure 1 below:

¹ “Grin” is the name for a kind of commonplace where friends usually meet after work to chat and while away time. It is also the place where people of the same age group meet to while away time or to converse.
Figure 1: The types of code-switching and the degree of switching in them (S. Poplack 1980, p.615)

Figure 1 shows the three types of code-switching proposed by S. Poplack (1980, p.615). She (S. Poplack, 1980, p.605) opined that tag-switching “requires least bilingual proficiency and minimal knowledge in L2”. She stated that “inter-sentential switching requires more knowledge in L2 and intra-sentential switching requires a high level bilingual proficiency because the speaker needs to know enough of the grammar of both L1 and L2 in order to be able to produce grammatically correct utterances” (S. Poplack 1980, p.605). Though S. Poplack affirms in her study that inter-sentential and intra-sentential are of equal use, Romaine (1995, p.123) points out that “all the three types of switching can be encountered within one discourse.”

Contrary to S. Poplack’s (1980) classification of the types of switches, in our study the data are classified according to two types of switching, as proposed by E. Boztepe (2005): inter-sentential switching and intra-sentential switching. We think that tag-switching can be grouped with intra-sentential switching because both involve inserting words from one language into another. From this point of view, we propose three representations of the types of Songhay-French code-switching: inter-sentential switching, intra-sentential switching and reverse direction of intra-sentential switching.

Thus, figure 2, as seen below, proposes to represent the inter-sentential type of code-switching of Songhay speakers of French. The two circles indicate the two languages involved in CS. The circles are of equal size, this is to fit the “equivalence Constraint” of S. S. Poplack (1980). The circles run parallel to each other; this indicates that the two languages involved in the switching are parallel constructions. The opposing direction of the two parallel arrows indicates that the inter-sentential switching is bidirectional.

On the basis of this parallel construction of two different codes, it can also be stated that the production of inter-sentential constructions by bilingual speakers requires competence in both languages.

Figure 2: Inter-sentential Songhay-French code-switching
Figure 3 proposes to represent the intra-sentential type of code-switching of Songhay speakers of French. The two languages involved in CS are represented in two different forms. These forms are not of equal size. The larger one indicates the base language or matrix language. The smaller one indicates the language that provides the inserted words. This is to fit the “Matrix Language Frame Model” of C. Myers-Scotton (1993a, b). The direction of the arrow indicates that words from French are inserted in a Songhay-based code. The switching is so unidirectional.

a) Instances of inter-sentential switching of Songhay speakers of French

This segment deals with the structural description of some instances of inter-sentential switching encountered through the 18 conversations of our oral corpus. It follows S. Poplack’s (1993) definition of code-switching according to which code-switching is ‘the juxtaposition of sentences or sentence fragments, each of which is internally consistent with the morphological and syntactic (and optimally, phonological) rules of the languages of its provenance’.

Following this definition, P. Muysken (1994, p.156) explained that the phenomenon of switching in the alternation model resembles the kind under which codes are switched between turns or utterances. In this section, the kinds of sentences and clauses encountered in the instances of the inter-sentential switching of Songhay speakers of French extracted from the oral corpus of our data are described. The descriptions are based on S. Poplack’s (1980, 1981) claim for the word-order equivalence between the languages involved arguing that switching occurs at specific switch points in discourse. In other words, speakers switch codes between sentences or clauses.

b) Instances of inter-sentential switching at sentence level

In the extracts below, speakers place sentences of Songhay and French side by side. They do this without violating the internal structures of the two languages. This point of view goes with S. Poplack’s (1980, 1981) word-order equivalence between the languages involved in code-switching. We can notice that the juxtaposition of the sentences in Songhay and French varies according to the situations and the speakers:
The following are examples of inter-sentential switching in which speakers from Bamako, Gao and Timbuktu juxtapose sentences in Songhay and French:

**1B2:** On joue à ‘Cent’2. (.) Maa n’o wii ga nda? “We’re playing ‘Cent’. Which card should you play?”

**1B2:** Abdou, ye haasum ni. (0.2) Boro go nee ka nda ma na ci ci a doo kur ye baa nga ŋāa hu. (.) C’est ce qu’il fallait répondre. (0.2) Tu as compris maintenani? “Abdou, I respect you. There is a person here that I am going to slap if you don’t talk to him. That’s what you had to do. Do you get me now?”

**1B2:** Uhh hu! (.) Parle maintenani. Maa n’o har? “Come on! (.) Speak up now. What did he say?”

In these three extracts speaker 1B2 juxtaposes Songhay and French sentences. In the first extract, the juxtaposition consists of a declarative simple sentence in French followed with a direct question in Songhay introduced by an interrogative pronoun ‘maa’ (what, which). While in the second extract, the juxtaposition consists of two declarative sentences in Songhay followed with two sentences in French, a declarative complex sentence and an interrogative sentence. In the third extract, we have an interjection followed with an imperative sentence in French and an interrogative one in Songhay.

The following are examples of inter-sentential switching in which speakers from Bamako, Gao and Timbuktu juxtapose sentences in Songhay and French:

**1B5:** A boor! Ay ta si cii ni doo mo. (0.2) Je garde seulement le silence. “Fine! I am in no position to comment. I have to keep silent.”

**2B3:** Non! I si hin ka ŋindi yer. (.) I si hin ka ŋindi yer. (0.2) Nous, on vient de commencer. (0.2) “No! They cannot fool us. They cannot fool us. We have just begun.”

**3B20:** Attendez! (.) C’est pour cela que j’ai dit qu’on laisse faire. (0.2) Maa se ne ay har yer’o nan ga? […] Donc, en ce moment-là on doit … on doit quand même parler de ça. “Wait! That’s why I proposed to let things take their course. Why did I propose so? […] So, from now on we must … we must really talk about it.”

**3B23:** […] On peut décider de dire que, bon voilà: ‘yer sanba war se woo, war ma faaba ga nda bomo’ […] “We can decide to say the following: ‘we send you this to assist you’.”

**G9:** Šiiya! Šiiya! Il est toujours chef D.E.R3, prof., section tronc commun à l’E.N.A. (.) […] “Stop! Stop! He is still the Head of Department of the common-core syllabus section at E.N.A ((Ecole Nationale d’Administration)).

**G1:** Non! Avant, avant! (.) Man’ti sohô da g’ay go. “No! Before, before! It’s not now I mean.”

**FG8:** Ay ši baa ye faajikaaray. (.) C’est tout! (0.2) Je peux disposer? “I don’t want to chat. That’s all! (.) May I leave?”

**T5:** Woodi ti nee da k’a har yer se. (.) Yer na guna ga. (0.2) On n’a pas vu ça. “It’s that he told us. We didn’t see it. We didn’t see it.”

**T11:** Je voulais résumer, c’est tout! (0.2) Ay har, Ablo wane ciinidi ga … “I wanted to summarize, that’s all! I said, concerning what Ablo has just said…”

As a matter of fact, it can be stated that the practice of inter-sentential switching by Songhay speakers of French is general because we have found examples of this kind of code-switching in all the five selected “grins” of our sample. We can also say that in all the examples, there appears a kind of parallel use of Songhay and French codes through sentences in both languages. This supports the claim that in the inter-sentential switching, the switching phenomenon is bidirectional.

**c) Instances of inter-sentential switching at clause level**

In the extracts below, speakers juxtapose in the same sentence clauses in Songhay and French in a way that the internal structure of the two languages is not violated. This juxtaposition shows clauses in Songhay and French within the same sentence where we have either the main clauses juxtaposed to the subordinate ones, or independent clauses juxtaposed to each other. For example, in the following extract, speaker 1B6 juxtaposes two clauses in the same sentence where the main clause is in French while the subordinate clause is in Songhay. The word ‘telephone’ is not considered here as a switched word, but as an integrated word in Songhay:

**1B6:** Moi, je me demande mise ka ra boro ma huray ni doo hal a ma jaw ni telephonedi ni wane bomodi cire. “I wonder how someone could get into your house and take your phone under your head.”

In the extracts below, the juxtaposition of clauses in Songhay and French language varies according to the situations and the speakers. We can also notice that in the inter-sentential switching at clause level, like that at sentence level, the clauses are used in parallels in both codes. So, the switching phenomenon in this kind of switches is bidirectional, too:

**1B2:** […] (0.4) Saadi ka a wiir, il a mis l’as carreau4. “As soon as he won, he dropped the ace of diamonds.

**1B6:** Ah, ay ta bay nin ka c’était trop fort, quand même. “Ah, really, (the clause in Songhay means literally ‘I know that’) it was too funny, honestly.”

**1B6:** Ay bara tarey yah, donnes-moi ma situation-là. “I was outside, tell me my situation.”

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2 One of the belote games
3 Department of Teaching and Research
4 One of the playing cards
• G8 : […] (0.4) Ay nee, je peux disposer? “I say, may I leave?”
• G12 : Bara boro fooyan ga ni woow kañ shi hin ka ni woow, parce que tu as accepté d’être devant … devant les gens. (.) “And some people insult you who may not insult you, just because you have accepted to be their leader. (.)”
• G13 : C’est pour dire que cawyan sii n da … haywana … “That’s to say that for studies, there is no …”
• T12 : Bon! (.) C’est pas forcément bara akoydi ma bana njerfu. […] “Well! It’s not compulsory that the person should pay a fine.”

d) Instances of intra-sentential switching of Songhay speakers of French

In this segment, we describe and categorise the morphological features of the instances of intra-sentential switching encountered in the 18 conversations of our oral corpus. Our descriptions will follow C. Myers-Scotton’s (1993a, 1993b) Matrix Language Frame Model, according to which there is an asymmetrical relation between the matrix and the embedded language in the switching situation. In other words, this model states that the two languages involved in a conversation do not have the same status. One of these two languages must be the base code, the “matrix language” as C. Myers-Scotton may call it, that is, the medium of the conversation where alien words or phrases are inserted. In C. Myers-Scotton’s Model, content morphemes can be inserted into mixed constituents only when congruent with the matrix language categories, while function morphemes cannot, that is to say that the grammatical morphemes must be from the base language. This kind of switching is largely the most frequent among our participants.

In the following extracts, speakers insert different categories of words from French into Songhay language. The procedure looks like what P. Muysken (1994, p.156) called placing ‘an alien lexical or phrasal category’ into a given language. In this case, the Songhay language is the base code, that is, the medium of the conversations, and French language plays the role of embedded language, that is, the language that provides the repertoire of the ‘alien’ words. This proves that the intra-sentential switching is unidirectional because the conversation is directed only in one of the two codes involved. But, the reverse direction is possible when the speaker changes the direction and uses the other code instead as the medium of the conversation, as will be seen further in this article. We propose to distinguish the different categories of the ‘alien’ words ‘imported’ from French into the Songhay language in the following extracts.

e) Verbs found in the intra-sentential switching of Songhay speakers of French

In the extracts below, we have noticed that the speakers insert in a Songhay-based code the past participle of the verbs in French. Consider the verb forms in the following:

• 1B3: Bari, war gagné wala? “Bari, did you win?”
• 2B1 : Le programme-là ka damndi, (h), à la mairie de Goundam-là, i reconduit ga. “The programme that was planned, (h), at the town hall in Goundam, they renewed it.”
• 2B8 : Non! A na fini deh! (0.2) “No! It’s not finished deh!”

Speaker 1B3 has inserted in his speech the past participle of the verb ‘gagner’. The action of the verb is stated in a past tense corresponding to the ‘passé composé’. We notice that the full form of the ‘passé composé’ which should be ‘avez gagné’ is not used. The first part of the verb which is ‘avez’ is omitted. This is because the use of ‘avez’ is not congruent with the grammatical structure of Songhay language which requires placing the infinitive form of a verb before the subject to express past actions, for example:

Ay kaa “I have come” or “I came”
Ali koy “Ali has gone” or “Ali went”.

Speaker 2B1 also uses the same form of the verb, the past participle of the verb ‘reconduire’ at the end of his speech, “í reconduit ga” “they renewed it”, in French “Ils ont reconduit cela”. Speaker 2B8, like 2B1 and 1B3, uses the same form of the verb, the past participle of ‘finir’.

However, it appears that the verbs used in these three examples are from different groups of verbs in French. ‘Gagner’ is a verb of the first group, ‘reconduire’ is a verb of the third group, and ‘finir’ is a verb of the second group.

So, we think that, whatever the group of the verb is, the embedded verb takes the form of the past participle in all the instances of our study where a single word is embedded as verb. But, when we have more than two verbs embedded, only the first verb form is in the past participle, the other forms follow the grammatical rules of the embedded language, like ‘commencé à voler’ in this extract:

• 2B3 : Non! I si hin ka ñindi yer. (.) I si hin ka ñindi yer. (0.2) Nous, on vient de commencer (0.2). Yer na ti kala un petit oiseau (0.2). Mise ka yer g’o yer’o sinti ka commencé à voler (0.2) […] “No! They cannot fool us. They cannot fool us. We have just begun. We are like a little bird. We are just trying to start flying.”

To support our claim that Songhay speakers of French use the past participle of the embedded verb in...
the intra-sentential switching, we have personally observed the speech of language teachers and communicators to find out if other forms of the following verbs like ‘gagner’, ‘reclamer’, ‘coller’, ‘finir’, ‘fournir’, ‘reconduire’, ‘repondre’, ‘atteindre’ (found in our data) can be used in an intra-sentential switching of a Songhay speaker of French instead of the past participle. From this observation, it can be stated that the past participle of these verbs is generally embedded in an intra-sentential switching of a Songhay speaker of French. Other forms of these verbs do not work in this kind of switching because they will not be congruent with the grammaticality of the Songhay language used as base code in switching practices with French. For example, in this extract:

- **2B1**: Han ka war décollé… “The day you leave…”

  If we substitute the subject ‘war’ (second person plural) with other subjects like ‘ay’ (first person singular) or ‘yer’ (first person plural) or ‘Ali nda Moussa’, the switching will always work with the same verb form ‘décollé’:
  - Han ka ay décollé
  - Han ka yer décollé
  - Han ka Ali nda Moussa décollé.

  But, if we substitute the verb form ‘décollé’ with other verb forms like ‘decolle’ (first or third person singular) or ‘decollons’ (first person plural) or ‘decollent’ (third person plural), the switching will not work with the grammatical system of the Songhay language:
  - Han ka ay décole (is not appropriate in Songhay-French switching)
  - Han ka yer décollons (is not appropriate in Songhay-French switching)
  - Han ka Ali nda Moussa décollent (is not appropriate in Songhay-French switching).

  The same way, if we substitute ‘décollé’ with other verbs like fourir or atteindre, the switching will always work with their respective past participle forms, and other verb forms will not be congruent in this kind of switching:
  - Han ka war fourni...
  - Han ka war atteint ...
  - But, not:
    - Han ka war fournisse...
    - Han ka war fourni...
    - Han ka war atteingnez...
    - Han ka war atteindre...

  From this angle, if we consider the verb form in the following extract:

- **2B2**: Hey, wa koti a ra nga baadi war ma noo ga a se, yer’o kaa collé ga. “Hey, you cut his share from the banknote and give it to him, we will stick it after.”

  The embedded verb collé is preceded by a Songhay veb ‘kaa’ which is conjugated in a perfect tense with the Songhay modal verb ‘go’, here in the contracted form ‘o’.

  In French, when two verbs precede each other, only the first is conjugated and the second must be in the infinitive form. This rule is violated in the Songhay-French code-switching. ‘Collé’, instead of the infinitive form, takes here the past participle form, because of the switching phenomenon. The infinitive is not congruent with Songhay internal system in the switching. This phenomenon is not a serial verb construction. Research needs to be done to find out if it is a case of vowel harmony. This is obvious when we substitute ‘coller’ with ‘reconduire’ or ‘fournir’, two verbs of second and third group:

  - Yer’o kaa reconduire ga. (is not appropriate in Songhay-French switching)
  - Yer’o kaa fournir ga. (is not appropriate in Songhay-French switching)
  - But,
  - Yer’o kaa reconduit ga.
  - Yer’o kaa fourni ga.

  So, from that point of view, the embedded verb in an intra-sentential Songhay-French switching takes the form of the past participle of the verb, whatever the group of the verb is.

  - Examples of embedded verbs of first group like ‘gagner’ (to win)
    - **2B8**: Muusa na cii (0.2) Muusa na cii, ay ga reclamé! “Moussa didn’t say anything. Moussa didn’t say anything, but I claimed!”
    - **G1**: Baa zaarikayo a cindi ka connecté. “Even this morning she was connected.”
    - **G9**: Sanda, boro na a na dam a ra kaŋ g’a géré. “Well, he engaged someone who managed it.”
    - **G1**: Ah, donc, ni n’k’a renforcé deh! “Ah, so, you just reinforced it!”
    - **FG2**: Wani n’ka joué hō? “Has Wani played today?”
    - **G1**: I nee Ha-Ko ka gagné un à zéro. “They said that Ha-Ko won one to zero.”
    - **G1**: Ayyo! Baa hano kaŋ ngi nda Mazaa borey joué là, i yenje. “Yes! Even the day when they played against Mazaa people, they quarrelled.”
    - **F14**: Sévaré, i g’i préparé gi ka koy yenje. “In Sevare, they are getting prepared to go to fight.”
    - **F12**: Eh! Wala … wala RFI cindi ka félicité gi hō, ma na mom partiedi? “Eh! Even … even RFI ((Radio France Internationale)) has congratulated them today, didn’t you listen to the related part?”
    - **T12**: Ay ta, wallaahi, Dra6 traumatisé ay … wallaahi, Dra traumati … “You know, truly, Dra has traumatized me … truly, Dra’s traumati …
    - **T14**: Walidj hasara ay ga da. (0.2) Ye baa ay ma racheté. (0.2) La vie c’est comme ça. “Honestly, I

6 Short for Abderhamane
lost the game. I want to redeem my honor. Life is like that."

- Examples of embedded verbs of second group like 'finir' (to finish)
  - 2B8 : Non, a na fini deh! (0.2) “It’s not finished deh!”
  - G14 : […] (0.2) Jina, nda a sinti ka couroo tee ma ne, nda ni si effort fourni deh a ga ni couroo kayandi. “[…] Moreover, if he begins your course, and you don’t make any effort, he stops your course.”

- Examples of embedded verbs of third group like ‘reconduire’ (to renew)
  - 2B1 : Le programme-là ka damndi, (h), à la mairie de Goundam-là, i reconduit ga. “The programme that was planned, (h), at the town hall in Goundam, they renewed it.”
  - 3B1 : […] (0.2) Ay ta nda ciimi, ay si hin ka har ye repondu ga quoi. (0.4) Beero, tu peux … comme beero go nee, yaama a ma may hayka a har yer se a ra. “[…] Really, I cannot say that I am able to answer it. Beero, can you … as beero is here, maybe he can tell us something about it.”

- Examples of embedded verbs in the Songhay language
  - G3 : […] (.) Deh ni ma ni objectifo atteinte, c’est ça quoi! “[…] Anyhow, you have to achieve your objective, that’s right!”
  - G14 : […] Mais Sam, nga mo a nka dixièreme repris, takaa woo nda ir na Backoo’ tee nda cere. […] Waatidin, Sam nda … nda Ousmane Issoufiwoo, nda Albaashaan … "[…] But Sam also repeated tenth form, that’s why we did the Baccalaureaute together with him. […] That time, Sam and … and Ousmane Issoufi, and Albaasha and others …”

- Embedded verb forms with Songhay affixation
  - Some French verbs follow the process of derivational affixation in the Songhay language. These embedded verbs are formed by adding to the French verb the Songhay derivational affix ‘-ndi’. In Songhay language, this derivational affix is added to a verb to form another verb, as we can notice in the speech of T11 where the speaker uses pure Songhay (bayndi, “to make know”) compared to the speeches of 2B8, T9, T11, where the speakers embed the French verb forms with the Songhay affix ‘-ndi’.

- 2B8 : Savoirmd’ay! Maa n’o hinse yane? “Make me know! What have you done for me?”

- 2B1 : Ciji, yer nda ngi borodiyo bara débat timmente ra meh. “Last night, we held a long debate with them, you know.”

- 3B18 : Bon, maintenanant, war’o har a se conditionsdiyo yah. (.) Haran go har a se conditions d’adhesiondiyo. “Well, now you tell him the

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7 Short for baccalaureate

\[f\) Nouns found in the intra-sentential switching of Songhay speakers of French

In the extracts below, speakers insert different kinds of nouns from French into the Songhay language: compound nouns, common nouns, proper nouns, abstract nouns, collective nouns. These nouns are used either as subject or as object.

However, we have found that these embedded nouns sometimes keep the Songhay inflectional affixes -di/-o/-wo (for singular nouns), -diyo/-wey (for plural nouns) which indicate the Songhay definite nouns. As for the Songhay indefinite nouns, the embedded words do not undergo any change for singular nouns, but the plural nouns take the inflectional affixes –yo/-yey (yo in Timbuktu dialect, -yey in Gao dialect).

This angle confirms C. Myers-Scotton’s (1993a, 1993b) Matrix Language Frame Model, according to which the grammatical morphemes must be from the base language and ‘content morphemes can be inserted into mixed constituents only when congruent with the matrix language categories’. Nouns are content words, and they adapt here the Songhay grammaticality:

- Definite form of nouns, singular (-di/-o/-wo) and plural (-diyo/-wey)
- Indefinite form of nouns, singular (bare form) and plural (-yo/-yey)
- Collective nouns, common nouns, proper nouns, abstract nouns, collective nouns.

- Examples of embedded definite form of nouns, singular (-di/-o/-wo) and plural (-diyo/-wey)

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conditions. Let Haran tell him the membership conditions."

- **FG2**: Ada ... Ada profilo face ga cijin. "Ada’s ... Ada’s profile on facebook yesterday night."
- **FG2**: Heh, Miguel nda Luciana musiquoo. "Heh, that’s the music of Miguel and Luciana."
- **G1**: Jigiba woo, n’ti parkingoo no a cindi a ga lakkal? “That Jigiba, wasn’t he watching over the parking?”
- **G1**: Non, za a cindi ... ay ka dir nga historyoo taka. “No, since he was ... I now forgot what his story was like.”
- **FG8**: Oui, ça se voit! (...) Irkoy se, en fait, ya mma goo no ay ga Prince gaa a ma nga table de multicationwoo zaa. “Yes of course, that’s obvious! (...) So, in fact, I am trying to help Prince learn his multiplication table.”
- **FG2**: Abba, ay nee, n’ga bay, ir tempsço oo ga, ir ga aru tee, mais ir cine arey banda ir ga hanga. (0.2) Mais sohô da, woy ize buuney, aru beerey no ... “Abba you know, in our times we made friends with men of our like. But nowadays, small girls are making friends with elder men ...”
- **G14**: Nda a dii kaŋ n’ si avancé deh a ga ni couroo kayandi. “If he noticed that you don’t improve, he stops the course.”
- **FT2**: Blifo, ay guna a ga telephoneedi, a go cii kuna ... “The day before yesterday, I saw the telephone with him, he was calling ...”
- **Examples of embedded nouns used with French determiners**
- **1B1**: Koy kuboy yane ay wane ijemayroyo deh à l’école publique (0.4). Ni nda woo ma koy nda cere, le petit-là. “Go and take my children at the public school. You go with this one, that little boy.”
- **2B3**: Non! I sì hin ka ƞindi yer. (...) I sì hin ka ƞindi yer. (0.2) Nous, on vient de commencer. (0.2) Yer na ti kala un petit oiseau. (0.2) [...] “No! They cannot fool us. They cannot fool us. We have just begun. We are like a little bird.”
- **FT2**: [...] Guna la différence. [...] “You see the difference.”
- **g) Adjectives found the in intra-sentential switching of Songhay speakers of French**

The adjectives encountered in the Songhay-French intra-sentential switching of our data are largely numerals and adjectives of quality. Other kinds of adjectives are used, but less frequent than numerals and adjectives of quality. Like nouns, some of these adjectives take the inflectional affixes -di/-o/-wo (for singular nouns), -diyo/-wey (for plural nouns), confirming C. Myers-Scotton’s (1993a, 1993b) point of view in her Matrix Language Frame Model, according to which content morphemes, like nouns here, adapt the grammar rule of the base language.

Examples of embedded numerals

- **2B1**: I fattandi hari a deux milles mètres. “They have dug two thousand metre deep to get water.”
- **FG2**: Bouba, ir k’a gar. (0.2) Bouba, n’ti onzième n’a go, ir go dixième. “Bouba, we came after him. While Bouba was in eleventh form, we were in tenth form.”
- **FT8**: I har i jaw cent personnes, mais Tumbutu boro boboyo’ koy. “It is said that a hundred people have been enrolled, but many people from Timbuktu have joined.”
- **T9**: Momo’o may ... a’may jiir quarrante ans. (...) Abba’o may quarante ans. “Momo is forty years old this year. Abba is forty years old.”
- **Examples of embedded adjectives of quality**
- **2B2**: Lazone, n’ti fort ne a go fort mo ... “Lazone, he is not only smart but ...”
- **2B2** [A too fort ra nong’ka], wala a way ka ndi war, nda a gay hal a go ciini ra, a’a cii hal a ma bendi nga moo woooyi si fer. A go daabu gi nin ka cii. “He is so smart that when he wants to fool you, he feigns to close his eyes from the beginning till the end of his speech. He closes them and goes on speaking.”
- **G11**: Ya nka si baa ya troisième leger tee, donc, troisième fort no ay ga baa. “I don’t like to make light tea, I like strong tea.”
- **G15**: Il y a des gens, un moment-là, ils sont pas ... i’si disponible. (0.2) Waati foooyan goo no, i ga regretté ... “There are some people, at a certain point, they are not ... they are not available. After sometimes they regret ...”
- **Examples of the embedded distributive adjective ‘chaque’ (each):**
- **T14**: Jour di ti chaque jeudi wala? “About the day, is it on Thursdays?”

h) Adverbs found the in intra-sentential switching of Songhay speakers of French

Contrary to verb forms, nouns and adjectives, the adverbs we found in this Songhay-French intra-sentential switching are fixed words. All these adverbs do not undergo any change.

- **1B4**: Hey, kaa din ay motoodi; après kur ay nda ni go joué. “Hey, come and take my motobyke; after, we play together.”
- **T13**: Mais, c’est-à-dire, après hawme handudi, maŋ ga ti a maa, bor’ka prêt, akody’o hin ka hajje ... “So, that is, after Lent, you know, any person who is ready can ...”
- **T12**: N’o may combien? “How much do you get?”
- **FG2**: Woo no ma bay kaŋ staryey ti ir. (0.2) Ay nee tellement que staryey ti ir, a si hin ka selen ya ne. “It is a fact that we are stars. I say we are stars, that’s the reason why she couldn’t talk with me”
- **FT7**: Ay har a boori! (0.2) Franchement, a na ti Ablo wane idée woo foo, puisque war mara woo jaatindi
ka ye guna, c’est vraiment très intéressant! [...] “I say, well done! Honestly, in addition to Ablo’s idea, the meeting itself, it is really very interesting!”

- **T12**: Bon! [...] C’est pas forcément bara akoydi ma bana njerfu. (0.2) Laissons ça! “Well! It’s not compulsory that the person should pay a fine. Forget it!” ((Here, speaker T12 mistakenly uses this adverb instead of the adjective forcé))

j) **Conjunctions found in the intra-sentential switching**

The conjunctions encountered in the Songhay–French intra-sentential switching are fixed words, and like the adverbs, these embedded conjunctions also do not undergo any change in their initial form.

- **1B4**: Donc, yer fur ga. “So, we forget it.”
- **G1**: Ah, donc, ni nk’a renforcé deh! “Ah, so, you just reinforced it!”
- **G1**: Sinon, Moussa, a futu deh! (0.2) [...] “Otherwise, Moussa got very angry!”
- **1B9**: Comme ay na tracé ga jina, quoi! “As I haven’t drawn it yet!”
- **2B6**: A boori! Comme ciinidiyo na sinti jina, quoi. “Fine! As the discussions haven’t begun yet.”
- **2B2**: Šer kondey woo, yer ti talkayo kondey, mais boro kur ka wiri dam a ga, wala bun, wala ijemaa, yer kur’o koy. “Our association is an association of poor people, but any member who got sick, or a death in his family, or naming ceremony in his family, we all go to his place.”
- **FG2**: Zarma šenni no a ga tee quoi, [...] “She speaks Zarma dialect, [...]”

k) **Reverse direction of the intra-sentential French-Songhay code-switching**

Figure 4 proposes to represent the reverse direction of the intra-sentential type of code-switching of Songhay speakers of French. The two languages involved in CS are represented in two different forms. These forms are not of equal size. The larger one indicates the base language or matrix language which is, here, French. The smaller one indicates the language that provides the inserted words. The reverse direction also fits the “Matrix Language Frame Model” of C. Myers-Scotton (1993a, b). The direction of the arrow indicates that the switching is taking place in French-based code. The reverse direction is also unidirectional.

**Figure 4**: Intra-sentential French-Songhay code-switching (reverse direction)
In the conversations of Songhay speakers of French, speakers sometimes reverse the direction of the conversation using alternately both languages as base code in their discourse. This does not challenge, anyhow, the unidirectional character of the intra-sentential switching because the conversation is directed only in one of the two codes involved. The speaker only changes the direction and uses the other code instead as the medium of the conversation. In our data, we found some examples of intra-sentential switching where the base code of the discourse is not Songhay language as seen in the extracts above, but French instead. In these examples, the Songhay embedded words generally express emphasis, excitement, surprise, joy, anger, agreement or disagreement, time, and other exclamations.

- **1B3**: C’est même pas bon, wallaahi! “It’s not good, I am sure!”
- **1B8**: Ciji, pourtant moi je l’ai vu. “Last night, I saw him all the same.”
- **1B2**: Aywa, toi aussi tu es avec son oncle. (.) “So, you also you are with his uncle. (.)”
- **2B1**: […] Ni baakayna, il fait partir des bailleurs, hein. “Your uncle, he is one of the sponsors, hein.”
- **3B18**: Ngaah, je… je voulais dire un mot par rapport à ça. […] “Yes, I … I want to say a word about that.”
- **3B1**: Beero t’a donné … je crois que beero t’a donné une réponse. Ce que je vais ajouter à ça… “My elder brother has given you … I think that my elder brother has given you an answer. What I’m going to add…”
- **3B10**: A ben, même s’il se marie quatre fois, on va l’accompagner quatre fois. “Alright, even if he gets married four times, we’ll accompany him four times.”
- **G1**: C’est un problème deh! (h) “It’s a problem, of course!”
- **T1**: Mais, quinzainedi, est-ce que c’est voté? “But, the fortnight, has it been voted?”
- **T14**: Ay ta, je suis quelqu’un qui me déplace beaucoup. (.) […] “As for me, I am particularly always on move. (.)”

### IV. Conclusion

The issue of code-switching and code-mixing is a language phenomenon facing all languages in contact situation. In Mali, it is a consequence of the multilingualism that characterises the Malian linguistic landscape and the Malian society as well. The data have revealed that the practice of code-switching and code-mixing by Songhay speakers of French is becoming general.

Table 7 shows the final results of all the participants involved in the study with 1169 total amount of utterances or speeches grouping 539 speeches of code-switching and code-mixing representing 46%, 443 speeches in native language only representing 35% and 220 speeches in French-only representing 19%. The use of code-switching and code-mixing is higher than the use of the native language, and French-only is less used. The table shows also that the use of intra-sentential switching is considerably higher (82%) than the use of inter-sentential switching (18%). As a matter of fact, this predominance of intra-sentential switching confirms the “size of constituent constraint” of S. Poplack (1980, 1981) and supports the claim that smaller language units like nouns or verbs tend to be more switched than larger ones like sentences or clauses.

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Theories on code-switching and code-mixing claimed by S. Poplack and C. Myers-Scotton have been revealed to be applicable to the different forms of the two types of switching in the study of Songhay speakers of French. Among these types, the intra-sentential one abounds much, representing 82% of the total number of
the speeches of our data, as shown in table 7. This type of switching, based on C. Myers-Scotton’s (1993a) insertion model is, according to P. Muysken (1994, pp.156-162) “typical of the African code-switching materials”.

The predominance of intra-sentential switches is evidence that confirms S. Poplack’s (1980, 1981) “Size of Constituent Constraint” according to which smaller language units like nouns, determiners, verbs, adverbs, and adjectives are more frequently switched than larger size of constituents such as sentences and clauses. It also supports the works of other researchers like S. Berk-Seligson’s (1986) study on Hebrew-Spanish, C. W. Pfaff’s (1979) S. Poplack’s (1980, 1981) and L. A. Timm’s (1975) studies on English-Spanish where smaller size of switches like nouns, verbs, adverbs, adjectives, etc. were had been found to be more frequently used than larger ones.

The study has found verbs, nouns, adjectives, adverbs, conjunctions and exclamations in French language that are inserted in Songhay-based conversations. We have also noticed that most of the inserted verb forms are past participles, and this concerns all the three French verb groups. Among the categories of the intra-sentential switching, the predominance of nouns is also noticeable throughout our data, though we did not consider any statistics to show their exact number and suggest future research to do so. However, the most striking finding in our study is the frequent use of the past participle of the verbal forms of switches. But, this claim should be taken with care, for more research needs to be done in order to investigate the grammatical categories of the Songhay-French intra-sentential switching using other data collection procedures.

We recommend that future research studies be done to generate new data and new findings on the problem of code-switching and code-mixing of Songhay speakers of French for further refinements. It will also be interesting to undertake more research work on code-switching and code-mixing issues on other languages in the Malian linguistic landscape such as code-switching of Songhay speakers of Bamanankan, Bambara speakers of French, Fulfulde speakers of French, Fulani speakers of Songhay, Fulani speakers of Bambara, Songhay speakers of Kel-Tamasheq and code-switching between French and other Malian national languages. Though various efforts have been made and are being made, the government must support any action aiming at protecting, preserving and promoting the national languages.

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Sitography


