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The Serialising Connector in Mooré

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Abbreviations

Different abbreviations for the serialising connector in Mooré:

Peterson (1971)	*and*
Kouraogo (1976)	*n*
Schiller 1991	coordination marker *CM*
Nikièma (2003), Zongo (2014)	preverbal conjunction *PVC*

Further abbreviations:

AFF	affirmative marker
CAUS	causative marker
DEF	definite marker
IMP	imperative
IMPERF	imperfective/unaccomplished/progressive marker
NEG	negation marker
PAST	past tense
PERF	perfective/accomplished marker

1 Introduction

Serial verb constructions (SVCs) have attracted the interest of linguists for decades. They are frequently found in West African languages, among them also the Mabia (Gur) languages. Mooré, spoken primarly in Burkina Faso, belongs to the Mabia (Gur) group; however, serial verb constructions have been the topic of debate in the language, since its multi-verb constructions show a linking element which most common definitions of SVCs do not allow. The purpose of this thesis is to review existing literature and the data collected during field research in Burkina Faso to show that the constructions in Mooré are in fact serial verb constructions and to then provide an analysis of a serialising connector *n* in Mooré within the theoretical framework of lexical functional grammar, a grammar model with multiple independent structures which represent different aspects of a language.

The data for this thesis was taken from relevant literature and my own research in Ouagadougou, Burkina Faso, in February 2015. 16 informants, aged 23 to 70, with Mooré as their first language, were asked to produce relevant sentences and give their judgement about meaning and grammaticality. A summary of the relevant sentences used in this thesis can be found in the appendix.

1.1 Overview of the topic

Serial verb constructions (SVCs) are a grammatical phenomenon involving at least two verbs widely discussed by linguists (Lord 1993, Bodomo 1996 & 2002, Stewart 2001, Aikhenvald and Dixon 2006, Haspelmath 2015, etc.), resulting in different definitions and interpretations. The following set of rules is the most commonly accepted:

> Serial verb constructions describe what is conceptualized as a single event. They are monoclausal; their intonational properties are the same as those of a monoverbal clause, and they have just one tense, aspect, and polarity value. SVCs may also share core and other arguments. Each component of an SVC must be able to occur on its own. Within an SVC, the individual verbs may have same, or different, transitivity values. (Aikhenvald 2006:1)

What usually distinguishes them from similar multi-verbal structures is the absence of a conjunction between the verb phrases, as can be seen in the two Mabia (Gur) languages

Dagaare and Kusaal, closely related to Mooré, where serial verb constructions (SVCs) are a frequently used construction.

Dagaare:

(1) Ayuo da de la a bie zegle
Ayuo PAST take-PERF FACT DEF child seat-PERF

"Ayuo seated the child" (Bodomo 1997:108)

(2) ba zo gaa di la bondirii
they run-PERF go-PERF eat FACT food

"They ran there and ate food" (Bodomo 1997:112)

Kusaal:

(3) Bupuŋ la sa da'a diib di.
Lady DEF PAST buy food eat

"The lady bought food and ate it."

(4) O sa do yi kiŋ
S/he PAST get-up come-out leave

"S/he got up and left." (Abubakari 2011:23)

While the above examples are relatively uncontroversial throughout the literature, SVCs in Mooré have been a subject of debate since they lack the fulfilment of one of the most common features of SVCs.

Mooré:

(5) A zoeeme n wa ka
3s run-PERF n come-PERF here

S/he ran here / s/he came by running.

Mooré exhibits a connector *n* in a structure that otherwise satisfies every common criterion for SVCs. As Kropp Dakubu (2003a:32) mentions in her typology of SVCs in Gur and Kwa languages, "[t]he absence of a linking particle between the VPs is the other commonly cited criterion. However, this cannot be a real criterion unless language specific, for there may be

various devices whose main function is to link the VPs." Preceding this argumentation is the following working hypothesis which does not include the connector criteria:

1. Same/coreferent Subject
    1a. Subject only marked on/before V_1
2. Same T(ense) A(spect) M(odality) features:
    2a. TAM marked only on V_1
3. Same P(olarity) feature
    3a. P marked only on V_1
4. Coreferent O(bject)s not repeated
    4a. O taking limited to i) 1 per verb, or ii) 1 of each thematic type (Ag. Pat. Theme Goal)

(Kropp Dakubu 2003a:32)

My contribution to the discussion lies in answering the following research questions in this thesis:

1. What is the status of multi-verbal constructions in Mooré?
2. Which theoretical analysis can explain the presence of the *n* connector in serial verb constructions in Mooré?
3. How can serial verb constructions in Mooré be represented within a current linguistic framework?

Organisation of the thesis

The remainder of chapter 1 is devoted to definitions of serial verb constructions. As noted above, criteria and concepts for SVCs differ vastly which can result in ambiguity or lack of clarity; hence my decision to adapt two of them, Haspelmath (2015) and Bodomo (2002), and discuss them in detail. Subsequently I will list four selected Mabia (Gur) languages which are closely related to Mooré, namely Dagaare, Kusaal, Gurene and Dagbane/Mampruli, providing summaries of SVCs in the respective language.

Chapter 2 discusses multi-verbal constructions in Mooré by means of an extensive literature review including data sets and constraints based on which I will identify verb sequences which are true SVCs and those which are not. Considering this information, I will then provide a description of different types of connectors in the language to show that *n* is a special case. As a supporting argument, I will also briefly describe a similar phenomenon

occurring in the Gbe language Fɔngbè before constructing a theoretical framework for the serialising connector which essentially assumes SVCs in Mooré to be subordinating structures on a syntactic level. Having resolved theoretical issues, SVCs in Mooré will then be subjected to the definitions and constraints from chapter one using data collated in my field research to test whether they fulfil the criteria for true SVCs.

Chapter 3 will return to the claim made in chapter two of SVCs in Mooré exhibiting a serialising connector on a syntactic and phonological, but not on a functional and semantic level. The framework of Lexical Functional Grammar will be summarised to show how it allows for different levels in a language such as c(onstituent)-structure, f(unctional)-structure and a(rgument)-structure which are connected through mapping processes but allow for different representations in the respective structures. The p(honological)-structure will be examined in more detail since the concept is crucial to my arguments in this thesis. After providing a lexical entry of the *n*-connector, I will provide a formal representation of an SVC from my data set according to the lexical functional grammar framework, starting with the subordinated c-structure followed by the a-structure and f-structure which show the verbs as complex predicates, and a lexical entry including the p-form for the full SVC.

Chapter 4 consists of concluding remarks; it summarises the major findings in a concise manner and draws deductions from the contents presented in my thesis while acknowledging the limitations of the study.

1.2 Definitions

Serial verb constructions (SVCs), their definition and constraints have been the topic of great discussion, reflected in the uncertainty about what actually makes an SVC and which constraints are rigid. As Bodomo (2002:28) states: "A considerable amount of claims and counterclaims exist in the literature about the abstraction of universal rules for generating SVCs suitable for all languages and all types of SVCs in the same language". Since the literature on this issue is exhaustive, in this section I will discuss a few selected approaches and their validity in terms of the specific case of my analysis of Mooré.

Haspelmath (2015) approaches an attempt of a definition from a comparative standpoint in a more restrictive way than previous literature (e.g. Aikhenvald and Dixon 2006, Stewart 2001). He sees the reason for it in a misinterpretation of SVCs as universal categories which lead to broad definitions and presents a narrow approach including ten generalisations universally applying to serial verb constructions. An SVC is defined as a "monoclausal construction consisting of multiple independent verbs with no element linking them and with no predicate-argument relation between the verbs" (Haspelmath 2015:292), although some cases do not fully fit into the description. His contribution should be seen more as a theoretical discussion rather than a representative cross-linguistic study since his conclusions are drawn from the study of previous literature on definitions and not actual language samples.

The term serial verb construction itself originates from the study of the Kwa language Akan (Stewart 1963) and kept on being applied to other languages where similar structures were found. This extension resulted in a gradual change of meaning and constant amending of the phenomena's definitions: "With each extension of the term to a new language, there is a danger that the meaning of the term may change, because the defining properties that were applicable in the original languages have no relevance in the new language" (Haspelmath 2015:292). Thus, no universally unified definition of SVCs exists so far, which from my point of view is not surprising since one of the main characteristics about grammatical phenomena commonly is that there will always be exceptions, unexpected behaviour and therefore amendments to existing rules. I see this as a motivation for linguists and researchers in general because it prevents us from being satisfied with what has been produced so far;

instead there will always be need for further study and development of new theories, generalisations and definitions.

This view is partly also taken by Haspelmath who states that he regards "the lack of agreement concerning the definition of serial verb constructions as a perfectly natural situation, not surprising at all but virtually necessary given the way that linguistic research has developed" (Haspelmath 2015:293). He explains this by the above-mentioned misconception of SVCs being innate categories of universal grammar. If this was the case, it would ultimately mean that the phenomena can appear in any language, depending on the various parameters. If we accept that this is not the case and SVCs are not natural kinds, the differences and uncertainty concerning narrow definitions become the logical result of this process. Haspelmaths's solution is the abandonment of a cross-linguistic category, simply for the reason that this category does not exist, and the draft of a comparative concept. "Comparative concepts are not DISCOVERED in the way natural phenomena are discovered, but are DEFINED by comparative linguists to allow for comparison of languages. Thus, instead of lamenting the lack of agreement, linguists should feel free to simply advance a definition and then work with it. If the resulting work turns out to be interesting and productive, then the definition has proved useful." (Haspelmath 2015:293) – A mindset I shall myself follow in the course of this thesis.

1.2.1 What constitutes a serial verb construction?

> Serial verb construction: a definition
> A serial verb construction is a monoclausal construction consisting of multiple independent verbs with no element linking them and with no predicate-argument role between the verbs.
>
> key components of the definition
> a. construction
> b. monoclausal
> c. independent verbs
> d. no linking element
> e. no predicate-argument relation between the verbs
>
> (Haspelmath 2015:296)

Subsequently I will briefly go through the relevant components.

Construction

The construction component means that idiomatic structures are excluded. A productive pattern has to be present and the semantics of the entire constructed can be deduced from its components. This can of course not mean that every type of verb is productive in a serial verb construction; every language will have different kinds of verbs more likely to appear in those structures. Haspelmath notes here: "The precise semantic-pragmatic conditions for combining different kinds of verbs have been much less described than the morphosyntactic properties of the resulting constructions" (2015:297). I agree that it is crucial to emphasise the degree of influence semantic typology has on serial verb constructions. Thus there is need for further research in this area to explore the interface between grammatical factors playing together in serial verb constructions.

Monoclausal

This key component has been stressed in most relevant literature and is one of the most striking features in terms of distinguishing SVCs from other structures. Although there is a considerable amount of theoretical discussions about what clausehood constitutes, comparative linguists such as Haspelmath encounter a difficulty in this regard: "The criteria for determining clausehood are generally language-specific" (Haspelmath 2015:298). However, a possible solution for a comparative approach is suggested by Bohnemeyer et. al who presume "lack of independent negation" as an appropriate testing measure for clausehood (2007:501). Thus serial verb constructions can be crosslinguistically tested for their validity by applying this criterion: If one of the verbs in the construction can be negatied independently from the other(s), it is not a monoclausal construction.

Independent verbs

Another invariable defining criterion is that all verbal components of a serial verb construction must be semantically full verbs and able to occur on their own. From Haspelmath's comparative perspective, they express dynamic events. While this approach naturally excludes auxiliaries, he encounters difficulties in constructions where one verb takes on a grammatical function. For this reason, he adds that verbs in a serial construction, as stated above, must be independent.

Absence of a linking element

No linking marker can be present in a serial verb connection. Thus, coordinated and subordinated structures are excluded. The absence of a connector is a widely-accepted factor which will be discussed later in the course of this thesis. In chapter 2.2, it will be shown how and to what extent a language can produce serial verb constructions with a linking element between verbs.

No predicate-argument relation

Verbs cannot take other verbs belonging to the same serial construction as arguments. Thus complement clause constructions are excluded from the definition. Broadening the criteria to include them would result in a number of languages falling into this category by only showing this particular but no other type of serialisation.

By analysing all above stated criteria and their context, Haspelmath deducts ten generalisations which are subsequently summarised:

Haspelmath's Generalizations (2015:316-320)

Generalization 1

In all SVCs, the verbs have the same tense value.

Generalization 2

In all SVCs, the verbs have the same mood value.

Generalization 3

The verbs in a SVC do not have separate temporal or event-locational modifiers.

Generalization 4

All SVCs are pronounced with a single intonation contour, like single-verb clauses (Aikhenvald 2006:7).

Generalization 5

If a SVC expresses a cause-effect relationship, or a sequential event, the order of the two verbs is tense-iconic, i.e. the cause-verb precedes the effect verb, and the verb that

expresses the earlier event precedes the verb that expresses the later event (Durie 1997:§4, Aikhenvald 2006:16,21,28-29).

Generalization 6

If there is just a single person, tense, mood or negation marker, it occurs in a peripheral position, i.e. preceding the first verb or following the last verb.

Generalization 7

In all SVCs, all the verbs share at least one argument.

Generalization 8

All languages with SVCs have same-subject serial verb constructions, possibly along with other types (Foley & Olson 1985:26, Aikhenvald 2006:14).

Generalization 9

In different-subject SVCs, the second verb is always intransitive (cf. Aikhenvald 2006:16).

Generalization 10

A SVC cannot have two different agents, i.e. when a non-agent is shared, then the agent must be shared as well.

1.2.2 Semantic typology of serial verb constructions

Returning to Haspelmath's note on the lack of semantic typologies, the following section briefly describes the most common semantic types of serial verb constructions, based on Bodomo (2002).

Benefactive serialization

Benefactive structures are generated by including verbs like "give" or "receive" preceded by an active verb.

Causative

Causative constructions typically involve an active verb followed by a verb representing the result of the action.

Inceptive take-serialization

The verb "take" is followed by an action verb. It is important to note that in this type of construction, "take" is not to be interpreted in a literal but an inceptive sense.

Instrumental take-serialization

In this construction, "take" receives the meaning of "with" and is followed by an active verb closely connected to the object of the instrumental verb.

Deictic serialization

This type constructs the semantics of movement or direction. Bodomo (2002:32) notes that this type also typically forms complex serial verb constructions by combining with types listed above.

As stated before, this list is by no means complete. Different languages show different types of verbs and listing all those would exhaust the scope of this thesis.

1.2.3 Constraints

After listing the relevant criteria, constraints on serial verb constructions will be specified in this section. All following analyses in this thesis are based on the framework of Lexical Functional Grammar, a modular approach which includes several parallel structures (See chapter 3.1).

Bodomo (2002) develops five constraints for serial verb constructions in Dagaare. Since this language is similar to the main language of this thesis, Mooré, and Bodomo himself states that "(…) most of them can be generalized on to other Mabia languages and beyond" (2002:33), I will adopt these principles here and apply them to Mooré in chapter 2.3.2.

Constraints on serialization (in Dagaare): (Bodomo 2002:33)

i. **The subject sameness constraint:** All the verbs in an SVC share a single structural or functional subject.
ii. **The TAP constraint:** In an SVC there is only a single TAP (tense, aspect and polarity) node.

iii. **The connector constraint:** There is an absence of conjunctions or complementizers within the string of verbs.

iv. **The object sharing constraint:** All the verbs in the series share referentially identical direct objects.

v. **The predicate constraint:** Finite verbs expressing different parts of the same event occur together [single eventhood].

It is important to note that not all these constraints are in accordance with Haspelmath's criteria I chose to adapt earlier. This is because his definitions were adopted to show a general comparative overview of serial verb constructions. Since I analyse a specific language, a more specific approach to constraints is needed; they vary from language to language and can therefore not be generalised into a universal component.

I will go into detail of these constraints in the theoretical discussion of serial verb constructions in Mooré in chapter 2.3. For now, these constraints serve to offer a general idea of the structure.

1.3 Serial verb constructions in selected Mabia (Gur) languages

Serial verb constructions are widespread in the Mabia (Gur) languages. Bodomo (1993, 1997, 2002, 2004, Hiraiwa & Bodomo 2008) analysed the language Dagaare, spoken in Northern Ghana, exhaustively and thus built the until date most extensive and in-depth contribution about the phenomenon in the Mabia languages. Abubakari (2011) studied SVCs in Kusaal, also spoken in Ghana. Both those languages are the most closely related ones to Mooré within the language branch; For this reason, I will discuss them first. Subsequently summaries of SVCs in Gurene and Dagbane/Mampruli will be presented, the latter in the same section since they are mutually intelligible[2].

1.3.1 Dagaare

Dagaare is the language the constraints in chapter 1.2.3 are based on. Bodomo (2002) identifies five types of SVCs in Dagaare, a list that, as he says, is not complete but compiled to illustrate important features.

Benefactive:
This type is frequently found in all Mabia (Gur) languages; one verb of the construction is the equivalent of "give", the other a transitive verb.

(6)	o	da	tong	la	toma	ko	ma
	3.s	PAST	work	FACT	work	give	me

"S/he worked for me" (Bodomo 2002:30)

Causative:

(7)	o	da	daa	ma	la	lɔɔ
	3.s	PAST	push	me	FACT	CAUS-fall

"S/he pushed me down" (Bodomo 2002:30)

[2] Dagbane: Lexical similarity: 95% with Mampruli, 90% with Farefare, 89% with Kusaal (Retrieved June 1, 2017, from https://www.ethnologue.com/language/dag)

Inceptive "take":

As Lord (1993:128) already mentions, "take" in serial verb constructions shows inception; it "(…) does not necessarily express the normal lexical semantics of 'take' which invariably involve getting hold of something, grabbing something, moving or lifting it." (Bodomo 2002:31).

(8) o de la gane ko ma
3.s take FACT book give me

"S/he gave me a book / S/he donated me a book"

(9) o na de lá a toma bare
3.s FUT take FACT DEF work leave

"S/he will leave (=stop) the work" (Bodomo 2002:31)

Instrumental "take":

In these cases, "take" assumes the meaning of "with":

(10) o da de la soɔ ngmaa a nƐn ɔɔ
3.s PAST take FACT knife cut DEF meat chew

"S/he cut the meat with a knife and ate it" (Bodomo 2002:32)

Deictic:

(11) o da zo wa-Ɛ la
3.s PAST run come-PERF FACT

"S/he ran here / s/he came by running" (Bodomo 2002:32)

1.3.2 Kusaal

Abubakari (2011) devotes a chapter of her master thesis to SVCs in Kusaal in which she details their functions, properties and differences to coordinating constructions such as the latter consisting of more than one single predicate like SVCs do. Coordinating constructions in Kusaal employ the use of the conjunction *ka*, similar to Mooré which uses *la* in those cases as will be discussed in chapter 2.2.1.1, and, unlike SVCs, show no constraints regarding TAMP particles.

(12) Pua la zo ka bas biig la
Woman DEF run CONJ leave child DEF

"the woman ran and left the child" (Abubakari 2011:28)

She remarks that SVCs in Kusaal are "(…) used in the introduction of non-subcategorised arguments into monoclausal structures" and for "(…) the chaining together of series of verbs to describe a sequence of related events" (Abubakari 2011:27) as shown in examples (13) and (14), and (15) below respectively.

(13) buraa la kwi tis ti
man DEF die GIVE us

"The man died for us."

(14) o nok suug nwaa tiig la
he TAKE machete cut tree DEF

"He cut off a tree with a machete"

(15) o du'os zo yi kiŋ da'a diib la.
s/he got-up run come-out go buy food DEF

"S/he got up, run and came out and went and bought the food."

(Abubakari 2001:27)

By listing the properties of SVCs in Kusaal, Abubakari (2011) follows the proposed constraints by Bodomo (1993) which are as follows: Multiple verbs which belong to a single clause (16), subject and object or internal argument sharing (17) and (18) and TAMP particles (19) agreement. With regards to TAMP particles, Abubakari specifies that "(…) there is the need for a series of nodes for all the particles that may occur in a serial verb construction in Kusaal. The TAMP (…) will therefore be composed of several nodes since it is possible to have a particle from the various categories in a single construction" (Abubakari 2011:38).

(16) Bupuŋ la da da'e biig la bas tiŋ
girl the PAST push child the leave ground

"The girl pushed the child onto the ground."

(17) M ma sa mal diib tor tis biis la.
My mother PAST prepare food share give children the

"My mother prepared food and shared for the kids."

(18) Amina da da'a mui tor (*li).
Amina PAST buy rice share it

"Amina bought rice and shared it."

(19) O da bo kuosi-d mui
S/he PAST NEG sell-IMPERF rice

"S/he was not trading in rice." (Abubakari 2011:29-39)

Subsequently, the single-marker test, negation test, pronoun/empty category test and extraction test are carried out to show that the constructions in Kusaal are true SVCs.

(20) o da dug suma (*da) onb
3Sg. PAST boil groundnut PAST chew

"S/he boiled groundnut and chewed ot."

(21) *o bo dug nim bo onb
3Sg NEG cook meat NEG chew

"(Lit.) S/he did not cook meat and did not chew it."

(22) o da dug ni'im onb (*li)
3Sg PAST cook meat chew it

"S/he cooked meat and chewed it."

(23a) Bo ka o da dug onb
what CONJ 3Sg. PAST cook chew

"What did he cook and chew?"

(23b) *Bo ka o da dug ka da onb li?
What CONJ 3Sg. PAST cook CONJ PAST chew it?

"What did he cook and then chew?" (Abubakari 2011: 45-47)

With regards to extraction, Abubakari remarks that (23a) is an SVC since extraction is possible while (23b) is a coordinate construction showing a coordination particle and pronoun copy where extraction results in ungrammaticality.

1.3.3 Gurene

According to Kropp Dakubu (2003b: §1), Gurene is "(…) especially closely related to Dagaare and Mooré". As in all Mabia (Gur) language discussed in this thesis, Gurene shows common SVCs as can be seen below.

(24) bà dìki mà tá'asɪ z̲'ą̲ ná
3P take 1S send place DEF

they sent me to that place

(25) a tari wą̲'ą̲m wa pɪ̲
3S have come ING bury

he is coming to bury [him] (Kropp Dakubu 2003a:38)

Another frequent phenomenon consists of constructions with "give":

(26) báma tár-a kɔ́ɔs-er-a bɔ̀'-ɔr-a nɛ́reba
3P have-HAB sell-IMPF-HAB give-IMPF-HAB people
they sell [them] to people

(Kropp Dakubu 2003a:39)

Relevant to this thesis is, amongst other things, the similarity between Mooré and Gurene in terms of pre-verbal affixes and their role in identifying SVCs.

1	2	3	4	5	6	7	8
time	condition	aspectual	past	irrealis	negative	dynamic	inceptive
bee	**są́**	**pugum**	**daa**	**na**	**ka**	**ta, wa**	**le, maan**
nyaa		**kɔ'ɔm**		**nI**	**dá**		
zaam		**lagum**					
etc		etc				(Kropp Dakubu 2003b:§1)	

While certain types can, not all SVCs in Gurene have to agree in all aspectual affixes:

(27) A wá kiin -a la toogbɛɛ kɔ-ɔs -a
3S INGR fry.IMPF HAB AFF doughnuts sell-ITER-HAB

She [in those days] fried doughnuts for sale. (Kropp Dakubu 2003b: section II)

She suggests that imperfective and iterative share a feature which allows agreement and points out that the agreement criterion also applies to verb sequences which do not constitute SVCs before concluding that "(…) in serial verb constructions there is normally agreement in respect of what we may refer to as Pluractionality, involving one or more inflectional

suffixes. Since an exact match is not required we may conclude that the agreement condition on the shared feature of these (…) suffixes." (Kropp Dakubu 2003: section II)

1.3.4 Dagbane/Mampruli

Dagbane and Mampruli are spoken in Northern Ghana and mutually intelligible, hence they are listed together here. Lord (1993) observes similar constructions with "take" and "have" as seen above in the case of Dagaare and Gurene:

(28)	m	zang	m	suu	nmaai	nimdi
	I	took	my	knife	cut-PERF	meat

"I cut the meat with my knife" (the knife may already be in my hand)

(29)	m	mala	m	suu	nmaara	nimdi
	I	have	my	knife	cut-IMPERF	meat

"I am cutting the meat with my knife" (Lord 1993:128)

Lord (1993:128) suggests that "take" in Dagbane "(…) has lost its literal meaning" but can still be deduced through the possible objects constructions with it can take; SVCs with *zang* as V_1 are only grammatical when the object can be physically moved:

(30a)	o	zang	loori	peenti
	he	take	lorry	paint

"He painted the lorry"

(30b)	*o	zang	duu	peenti
	he	take	room	paint

(Lord 1993:128-129)

Bodomo (1993) states that Mampruli follows the same constraints as other Mabia (Gur) languages, such as agreement in tense, aspect and polarity. Example (31b) is not an SVC since the V_2 is also marked for past tense:

(31a)	O	da	dug	la	sinkaafa	ŋmɔbi
	He	PAST	boil	a.m	rice	eat

"He boiled some rice and ate it"

(31b) *O da dug la sinkaafa da ŋmɔbi
He PAST boil a.m rice PAST eat

He boiled some rice and ate it. (Bodomo 1993:40)

A relevant aspect for this thesis is the judgement of native speakers regarding SVCs and constructions with a connector present:

(32a) O dug la sinkaafa ŋmɔbi
S/he boiled a.m rice ate

"S/he boiled rice and [ate] it"

(32b) O dug la sinkaafa n ŋmɔbi
S/he boiled a.m rice and ate

"S/he boiled rice and then ate it" (Bodomo 1993:46)

Bodomo (1993:46) states that "[t]here is an almost consistent interpretation among native speakers of the various languages that the actions evoked by those constructions (…) without a conjunction in them are more tightly related than actions evoked by those with a conjunction." He further indicates two examples from Mooré, assuming that the same conclusion will be reached:

(33a) O sa duka mui di
S/he yesterday boiled rice ate

"Yesterday he boiled so rice and ate it."

(33b) *O sa duka mui n di
S/he yesterday boiled rice and ate

"Yesterday he boiled some rice and ate it." (Bodomo 1993:46)

In the literature review in chapter 2 I will now show that the construction with *n* in (33b) is in fact the grammatical one since SVCs in Mooré always exhibit the connector.

1.4 Summary

Chapter one gave a first glance at the issue and discussed some relevant syntactic features of Mooré before detailing the further organization of this thesis and turning to the question what constitutes SVCs. Two accounts, Haspelmath (2015) and Bodomo (2002) have been discussed to give insight on definitions, typology and constraints of SVCs. Subsequently I summarised four Mabia (Gur) languages, namely Dagaare, Kusaal, Gurene and Dagbane/Mampruli, to show the striking similarities between them, thus providing a strong argument that the closely related Mooré is also likely to exhibit SVCs.

2 Serial verb constructions in Mooré

2.1 Literature review

Mooré is a Mabia (Gur) language, primarily spoken in Burkina Faso by over six million people. It is "de facto [the] language of national identity [and u]sed as a trade language in the central part of the country, with sub-populations in all major cities" (Ethnologue, retrieved June 1, 2017). The opinions on whether serial verb constructions in Mooré exist or not differ quite largely. While Kouraogo (1976) argues extensively for their existence in his master thesis, Kabore (1985:589) rejects this viewpoint strongly. Delplanque (1998) writes about the myth of SVCs, assuming those structures to not be unique to a certain type but exist in every language. He states that "[t]he 'serial' effect results, in current works, from overconcentration on the absence of linking morphemes between the two verbal constituents" (Delplanque 1998:231) and refers to Mooré as supporting his argument of overly focusing on the phenomenon since it shows the connector *n* in what previous literature had classified as SVCs. While his analysis is certainly interesting, the quote from the beginning of his paper, cited above, already poses a problem since Delplanque assumes that only V1 and V2 are present in a SVC; two verbs in a sentence without conjunction between them are not uncommon in various languages. However, the number of verbs in SVCs is not, as has been argued before, limited to two verbs (see Bodomo 1997, Zongo 2014). Thus, the following chapter will discuss Kouraogo's arguments and compare them with analyses of Mooré by Nikièma (2003) and Zongo (2014), and will subsequently deal with the presence of an *n*-connector in multi-verbal constructions which seems to be problematic considering the definitions, and criteria for serial verb constructions given in chapter 1.2. [3]

Nikièma (2003:117) suggests the following structure for multi-verbal constructions in Mooré:

(1) (SN/subject) $[_{SV}\ [_{SV1}\ V_1 – (SN)] – [\text{conj. } \mathbf{n}] - [_{SV2}\ V_2 – (SN)]]\ Y$

As we can see, the verbs in the multi-verbal construction must share the subject. The subject cannot be repeated, not even in its pronominal form. Nikièma calls *n* a preverbal conjunction

[3] All examples taken from Nikièma (2003), Zongo (2014) and Kinda (2005) have been translated from French to English by me.

which links the verbs in this construction[4]. Note that his suggested structure contains only two verbs; I do not agree with this description; Serial verb constructions in Mooré can contain more than two verbs (see Zongo 2014:41). As we will see later, *n* is only used if verbs share their subject and differs in its syntactic function from other conjunctions. Since some features of the language are relevant in the context of SVCs, I will shortly discuss them below.

Word order:

Mooré is a SVOX language[5], with "[w]ords indicating location and time (…) occur after the verb object, or after the verb if there is no object." (Lehr et al. 1966:203)

(2) báag-ã gű-u zákǻ
dog-the guard-PERF house-the
"the dog guarded the house" (Kinda 2005:43)

Tense and Aspect:

Mooré has three temporal markers and two aspects differentiating accomplished and unaccomplished actions. The temporal markers mark the present, past and future respectively:

(3) a. *Present*

Màm wátàmé I come

b. *Past*

Màm **dá** wàtamé I came

c. *Future*

Màm **ná n** wàtamé I will come (Kinda 2005:38-39)

The past particle *da* can be used interchangeably with *ra*, a frequent phonetic phenomenon in Mooré. It should also be noted that the tone of the particles varies depending on their

[4] "The obligatory presence of *mɛ̀* before the *ń kő* construction is syntactic evidence that the pre-verbal conjunction *ń* actually introduces a second clause (at least historically) and that 'me' is (or was) not simply an oblique argument. If the latter were the case, *mɛ̀* would not be present because *mɛ̀* only appears when no core or oblique arguments or adverbs follow a given verb within the same (main) clause." (Pacchiarotti 2016:66)

[5] "Adjuncts of sentences in SVO languages generally follow the O(bject), giving a SVOX word order, where 'X' represents one or more adjuncts." (Watters 2000:200)

phonetic environment. There is only one aspectual marker which, again depending on the phonetic context, is realised as *t* or *d* and marks unfulfilment. Accomplished actions lack an overt aspect marker.

(4) a. *Unaccomplished (Imperfective)*[6]
À wá**t**àmé He comes

b. *Accomplished (Perfective)*
À wáamé He came (Kinda 2005:39-40)

Negation:
The negation marker in Mooré has two parts, one occurring before the verb and one at the end of the sentence.

(5) A ká wá yé
He NEG come NEG
"He didn't come" (Lehr et al. 1966:31)

2.1.1 Constraints for serial verb constructions in Mooré

2.1.1.1 Subject sharing

The subject in a serial verb construction in Mooré is in front of the first verb in the construction. As we can see in Nikièma's suggested structure above, it cannot be repeated or appear in its pronominal form. He notes that the object of the first verb can be shifted into the subject position when the structure undergoes passivization. This is not possible for objects of the following verbs which cannot even be moved in front of the verb they are a complement of.

(6a)	b	pãba	wagdrã	n	kʊ	ra-bʊre?
	They	beat+AFF	thief+the	PVC	kill	day which

"When did they beat the thief to death?

(6b)	wagdrã	pãbame	n	kʊ	ra-bʊre?
	thief-the	beat+AFF+IO	PVC	kill	day which

[6] Lehr et al. (1966:46) call the aspects *perfective* and *imperfective* while Kinda (2005:39-40) describes them as *accomplished* and *unaccomplished*. For the sake of completeness, I chose to mention both options.

"When was the thief beaten to death?" (Nikièma 2003:127)

Sentence (6a) is a serial verb construction with the conjunction *n* linking the verbs. The first verb has an object complement, wagdrã "the thief," following it. In the SVC in (6b), the object of the first verb has been moved into subject position and therefore stands at the beginning of the construction. This would however be impossible for objects of any verb after V_1.

2.1.1.2 Object complement sharing

Every verb in the construction can have its own complement or share it. If the object is shared, it follows the first verb in Mooré. As in the case of subjects, the object cannot be repeated or expressed as a pronoun in the series.

(7a)	rɪk	bɛngã	n	wãbe
	take	bean+DEF	PVC	eat

"takes the bean and eat"

(7b)	*rɪk	n	wãb	bɛngã
	take	PVC	eat	bean+DEF

(7c)	*rɪk	$bɛngã_i$	n	$wãb\text{-}a_i$
	take	$bean+the_i$	PVC	$eat\text{-}it_i$

(Nikièma 2003:128)

The phrase in (7a) is well formed. The object of the construction follows the first verb and is not repeated in the construction. In the second phrase, (7b), the object follows the second verb, therefore, this construction is as unacceptable as (7c), where the object is repeated in its pronominal form, the suffix *–a*, after the second verb.

The object of the first verb cannot be the subject for following verbs. In fact, for those cases, the conjunction *tɪ* is used instead of *n* to link the verbs, and the object of the first verb must be repeated in pronominal form.

(8)	m	data	pag_i	$t'a_i$	sakd
	I	want+IMPERF+AFF	$woman_i$	$that\ she_i$	respond+IMPERF

tommaa
tommaa

"I want a woman who responds with 'tommaa' (when called)" (Nikièma 2003:128)

Example (8) cannot be a serial verb construction since the object complement of the first verb, pag "woman," is being repeated as a pronoun in the subject position in the embedded phrase. The conjunction *tɩ*, which will be analysed in chapter 2.2.1.1, links the two phrases instead of the n-conjunction.

2.1.1.3 Agreement in polarity

The negation marker in Mooré consists of two particles, *ká…ye* or *pá…ye*.

(9) màm dátà kóóm "I want water"
màm ká rat kòom yé „I do not want water" (Kinda 2005:47)

We see that the first part of the negative marker precedes the verb, and the second one appears after it and its object.

There can only be one negation marker in serial verb constructions in Mooré. The first part is in front of the first verb of the construction while the second part is found at the end of the construction, taking scope over all verbs. It is not possible to negate one of the verbs in the construction independently from the others.

(10)	à	ká	góm-d	wʊsg	n	yúg-d	máam	yé
	he	NEG	talk+IMPERF	a lot	PVC	exceed+IMPERF.	me	NEG

"He does not talk a lot more than me." (Zongo 2014:100)

2.1.1.4 Affirmative marker

The affirmative marker[7] *(l)a*, optionally reinforced by an object indicator *me* when there is no complement present, can only be used once in the construction and follows the first verb. If there is no complement present, it can be moved to the second verb.

[7] "The appropriate glossing of this morpheme is (…) controversial. Alexandre (1953:96) calls it a 'marker of indicative mood'; Peterson (1971:112) a 'complement marker'; Canu (1974) a 'marker of realis mood'; Kabore (1985) a 'marker of modality'; and Nikièma (2003) a mark of the 'effectiveness and declaration of the process'." (Pacchiarotti 2016:66)

(11a)	à	góm-d-**à**	wúsg	n	yúg-d	máam
	he	talk+IMPERF+AFF	a lot	PVC	exceed+IMPERF	me

"He talks a lot more than me"

(11b)	à	kɛ́n-Ø	n	tá-Ø-**àmé**
	he	walk-PERF	PVC	arrive-PERF-AFF

"He walked until he arrived." (Zongo 2014:100)

In example (11a), we see that the affirmative marker is reduced to *a* and suffixed onto the first verb, which has a complement *wusg* "a lot" in this construction, therefore the marker cannot be moved onto the second verb. In (11b), there is no complement intervening and no object present. Consequently, the affirmative marker is moved onto the second verb and reinforced by *me*.

2.1.1.5 Shared propositional domain

The verbs of a serial verb construction form one single predicate and therefore express one single proposition. In consecutive constructions, there is a main and a subordinated proposition. This can be seen in the case of adverb placement. Whether the adverb is placed at the beginning or at the end of the phrase does not change the interpretation of a serial verb construction. It does, however, influence the meaning of a consecutive construction. Following this observation, I conclude that the verbs of a serial construction in Mooré form one single complex predicate. This constraint is closely linked to agreement in polarity, as seen in chapter 1.2.1, because it proves a valid method to determine monoclausality, see example (10).

Below I show examples from Nikièma (2002:123) with the adverb *zaamẽ* "yesterday." In the SVC, the meaning remains the same regardless the position of the adverb:

(12a)	págã	tállà	sʋ́-kãngá	n	wã̀	némdã́
	woman-the	have+PERF+AFF	knife-this	PvC	cut	meat-the

zaamẽ
yesterday

"the woman used this knife to cut the meat yesterday"

(12b) zaamẽ págã tállà sʊ́-kɛ̀ngá n wɛ̀
yesterday woman-the have+IMPERF+AFF knife-this PVC cut

némdɛ́
meat-the

"yesterday the woman used this knife to cut the meat"

In a complex phrase, the placement of the adverb changes the sense of the construction according to which position it stands at:

(13a) a yeelame tɪ pagã wãa nemdã
he say+aa+AFF+IO comp. woman-the cut+PERF+AFF meat-the

zaamẽ
yesterday

"he said that the woman cut the meat yesterday"

(13b) zaamẽ a yeelame tɪ pagã wãa
yesterday he say+PERF+AFF+IO comp. woman-la cut+PERF+AFF

nemdã
meat-the

"yesterday, he said that the woman cut the meat" (Nikièma 2002:123)

I will now list and discuss different types of multi-verbal constructions in Mooré and analyse whether they are suitable for serial verb constructions. While Kouraogo (1976) originally distinguishes seven types of constructions with the particle *n* in it and identifies only one of them as a real serial verb construction, both Nikièma (2003) and Zongo (2014) add more constructions, all of which will be described subsequently.

2.1.2 Multi-verbal constructions in Mooré

2.1.2.1 Enumeration of actions carried out by the same subject

All actions are carried out by or describe the same subject. Unlike the consecutive construction, this type of verbs follows no logical or chronological order. At the beginning of the sentence there is a summary verb which introduces the general idea of what the following verbs semantically detail. Kouraogo (1976) creates the following structure to show the underlying idea:

(14a) X: x1, x2, x3, …, xn

(14b) x1, x2, x3, …, xn: X (Kouraogo 1976:50-51)

Let's consider the following examples:

(15)

àSígi	tʊ̀má		wʊsg	runnâ:	à	wára	karaaga, ǹ
Sigi	work-PERF-AFF		much	today	he	till-PERF-AFF	backyard n
bʊ́d	nàngurí,	ǹ	mé	lalga, …,	ǹ	píl	sugrì
sow-P	peanuts	n	build	wall	… n	repair	roof

"Sigi worked very hard today: he tilled his backyard, sowed peanuts, built a wall, …, and repaired a roof."

(16)

kàmbã́	sũur	yʊ		noog(o)		zaamẽ:	Èb	
children-the	heart	be-PERF-AFF		good		yesterday	They	
páamà		fú	paala	ǹ	dɪ́	rɪ	noogo,	ǹ
get-PERF-AFF	clothes	new	n	eat-PERF		meals	good	n
yʊ̃́	rãam,	ǹ	gés	sinma				
drink-PERF	beer	n	watch	movie				

"The children were happy yesterday: they got new clothes, ate delicious meals, drank beer and watched a movie"

(17)

àFáti	sɪda	yaa		kʊʊma,	ǹ	nong
Fati	husband-the	be-(IMPERF)-AFF		lazy	n	like-(IMPERF)
zába, …	à	sɪ́d	yàa	ní	yoogò	
quarrels	he	really	be-(IMPERF)-AFF	man	bad	

"Fati's husband is lazy, likes quarrels, … he is really a bad person"

(18)

à sabá	yaa		wokò	ǹ	yér	fu	sablegà
person-the	be-(IMPERF)-AFF		tall	n	wear-IMPERF	shirt	black
ǹ	kéosdè,	ǹ	fʊ̃́g	zugpè(ogo)		kʊ́dre…	
n	limp-I	n	wear-IMPERF	hat		old	

"The person is tall, he is wearing a black shirt and an old hat, he is limping…"

(Kouraogo 1976:51-52)

In (15) and (16) a number of actions are summarised by an initial verb. In (15), *tʊ̀má* "work" functions as the generic topic which introduces all actions carried out in the course of the said

work. A similar observation can be made for (16): The structure starts with expressing a feeling, *suur yıı noog(o)*, meaning *happiness*, and subsequently explains all the actions carried out that lead to this state of happiness. In (17) and (18) we see the description of a person. In (17), there is a summarising phrase, *à sɩ́ yàa ní yoogò – he is really a bad person*, at the end. In (18), it becomes clear that in case of the description of a person, the summary can as well be omitted in this type of construction. The verbs in these constructions can be negated independently from each other. Furthermore, the fact that instead of *n*, the last verb of the construction can be linked to the previous ones by *là* with the subject being repeated after makes it obvious that the given type is not a serial verb construction. As will be explained in chapter 2.2.1.1, the conjunction *là* differs from *n* in different aspects and can never appear in a serial verb construction in Mooré.

(19) …	là	a	píl	sugrì
	and	he	repair-PERF	roof

(20) …	là	b	gés	sinma	
	and	they	watch-PERF	movie	(Kouraogo 1976:52)

The examples (15) and (16) we saw above might as well have the form of (19) and (20) and still be grammatical. In a serial verb construction, the use of the conjunction *la* is not possible.

2.1.2.2 Consecutive construction

Unlike in constructions where actions are carried out by the same subject, the verbs in the consecutive construction must be in a logical or chronological order. According to Kouraogo, this type of *n*-construction is "the most widespread in the language" (Kouraogo 1976:55). Since the consecutive phrases are pronounced without a pause, *ǹ*, which has an underlying low tone, can assimilate to the precedent tone.

(21)	Pògyáangã		tuu	yẽgn(a)	n	dʊg	n
	old-woman-the		dig-up-PERF-AFF	roots	n	boil-PERF	n
	sò						
	bathe-PERF						

(22)	kɛ̃̀	roogɛ́ n	pʊ̀ʊs	aLàalé	
	enter-IMP	room n	greet-IMP	Laale	
	"enter the room (and)/(to) greet Laale"				(Kouraogo 1976:56)

The translation in (21) corresponds to the old woman who has been digging up roots in order to boil them and bathe (with the water the roots were boilt in). Similarly, (22) is an imperative telling to enter the room in order to greet a person. Kouraogo states that it is more important for the sentences to establish a logical order than a chronological one.

(23a)	àTáng(a)	tʊu	pĩir(i)	n	gaandè
	Tanga	spread on the floor-PERF-AFF	mat	n	lie-down-PERF

"Tanga spread a mat on the floor and lay down/to lie on it"

(23b)	àTáng(a)	tʊu	pĩir(i)	n	yàol	n
	Tanga	spread on the floor-PERF-AFF	mat	n	then	n

gáandè
lie-down-PERF

"Tanga spread a mat on the floor before he lay down."

(Kouraogo 1976:56)

The chronological order in (23a) is secondary. The first action is carried out to achieve the second one; in this case, the mat was spread out for the purpose of laying down. (23b) is different in the sense that here the focus is on the chronological sequence. This is achieved by inserting the auxiliary *yàol* "prior to."

Consecutive constructions are clearly distinguishable from serial verb constructions. According to Aikhenvald's criteria (2006), the entire sequence has to be negated. This does not apply to consecutive constructions:

(24)	pògyáangã	tuu	yegn(a)	n	dʊg	n
	old-woman-the	dig up-PERF-AFF	roots	n	boil-PERF	n

pa	so	ye
NEG	bathe	NEG

"The old woman dug up some roots, boiled them, (and/but) did not bathe (with the hot water)"

(Kouraogo 1976:58)

We can see that the first part of the sequence is affirmative while the second one negative. In a serial verb construction, all verbs must agree in polarity.

2.1.2.3 TAMP + Main Verb Constructions

The surface structure of TAMP and main verbs looks like a serial verb construction since they are linked by *n* as well.

(25) àGómtʊʊg(o) ket ǹ gʊ́lsdà mé
Gomtiugo still n write-IMPERF-AFF

"Gomtiugo is still writing"

(26) àGómtʊʊg(o) zoe ǹ gʊ́lsa sɛba a yiibu
Gomtiugo already n write-PERF-AFF books two

"Gomtiugo has already written two books"

(27) m̀ tóolã yaa ǹ tá f là mé?
my message finally n reach you AFF

"Did my message finally reach you?"

(Kouraogo 1976:76)

According to Kouraogo (1976:76), "the class of auxiliary verbs is so complex and so composite in Moore that non-native speakers may find it hard to consider some of these auxiliaries as verbs." He classifies them under the same category as sentence modifiers (in his transformational grammar Modal node) because they share many features with them. Preverbal particles[8] do not take complements like main verbs and have neither aspect markers nor *la me*, the affirmative particle. We can see in the examples (25) - (27) above that it is acceptable for lexical verbs to be marked by the affirmative *la me*. However, (28) and (29) are ungrammatical because of the affirmative marker following the preverbal particles, *ket* and *yaa*.

(28) * àGómtʊʊg(o) ketà mé ǹ gʊ́lsdɛ̃
"Gomtiugo is still writing"

(29) *m̀ tóolã yaaà mé ǹ tá fò
"my message has finally reached you" (Kouraogo 1976:77)

[8] Kouraogo (1976) and Peterson (1971) refer to TAMP particles as *auxiliaries*, a term that I maintain in their direct quotes; in any other case I refer to them as *preverbal particles*, as it is common in Mabia linguistics.

Peterson finds it “interesting to note that Mooré uses auxiliary verbs to express meanings which are rendered by “auxiliary” adverbs in Indo-European languages” (Peterson 1971:202). Therefore, the translation process becomes difficult; due to the differences an exact translation of preverbal particles in Mooré is not possible. Since he does not write about serial verb constructions, in his theory, a process deleting the second NP if it is identical to the first one applies, and *n* appears to link the two parts.

30) a tol n kula me
he already n leave me

“He has already left.” (Peterson 1971:197)

According to his analysis, both verbs in the construction in (30) share the same subject, therefore, the second one preceding *kula* “leave” is deleted and the conjunction *n* is inserted instead. However, he follows a transformational approach which is not commonly used nowadays anymore.

Kouraogo (1976:77) suggests that there is a hierarchy amongst preverbal particles because their sequential order is restricted.

(31) àGoam(a) sɑ́g n dag n nib n wà
Goama if/when n in the past n sometimes n come

á kõtà tónd(o) ligdi
he gives us money

“Whenever Goama came, he would give us money”

(32) *àGoam(a) dág n sãg n nib n wà á kõtà tónd(o) ligdi

Kouraogo (1976:78)

In (31) and (32), it can be seen that the order of the preverbal particles cannot be changed arbitrarily. From a purely pragmatic viewpoint the semantic of the sentence would not be changed in example (32) but restrictions in the syntax do not allow *dag* “in the past” to appear before *ság* “if/when.”

The following table shows a short list of the most common preverbal particles (“auxiliaries” in Kouraogo’s thesis) in Mooré. The items of list A do not relate to any full verb. List B

contains preverbal particles which can also function as main verbs. Kouraogo assumes they became preverbal particlesthrough figurative use. (1976:78-79)

A		B	Full verb	Auxiliary
tól	even	zòe	run	already
níb	sometimes	yà	be tired	in the end, finally
náa	will, to be going on	kèl	to remain	even (so), to go on doing
ság	if	sòng	to help	to do one's best
wég	provided that	tʊ̀g	to travel	once there
pʊ̀d	really, in fact	sàag	to hope	to dare
dàg	in the past	kàos	to last	to take a long time to do
yèd	unfortunately	wènég	to turn around	immediately
pìnd	early	yìd(g)	to commit a blunder	mistakenly, not on purpose
		lèb	to return	again
		kèt	to remain	still
		good	to wander around	now and then, often

(Kouraogo 1976:78-79)

Peterson (1971:200) notes that some preverbal particles are becoming particles which can occur without *n*.

(33a) m nɪb n wãbda nemdo
I sometimes n eat meat

"I sometimes eat meat"

(33b) m nɪ wãbda nemdo
I sometimes eat meat

"I sometimes eat meat"

(33c) *m nɪ n wãbda nemdo (Peterson 1971:200)

Peterson also considers the negative particles *ka/pa/da* as preverbal particles and states that they never occur with *n*. This observation can be refuted. As will be shown below, serial verb constructions, and other multi-verbal constructions containing *n* can be negated and the negation particles can occur in the same structure as *n*.

Preverbal particle structures are not serial verb constructions for several reasons. As we saw in chapter 1.2 above, Haspelmath (2015) among others, states that verbs in a serial

construction cannot be "auxiliaries", modals or infinite complements of another verb. Also, Sebba (1999:345) notes that "there is usually a lexical relationship between the verbs in a true series, with the choice of later verbs being restricted by the semantic properties of the earlier verbs." Preverbal particles cannot be the only verb in a Mooré phrase because they lack lexical content, in contrast to verbs in serial constructions which have full lexical content and can occur as the only verb in a phrase in Mooré. I therefore conclude that the above discussed types of constructions involving preverbal particles are not serial verb constructions.[9]

2.1.2.4 Cleft subject noun phrases

In this structure, the subject is cleft and *n* is used to link the two parts.

(34) yáa f bàaba n bond fò
be-(I)-AFF your father n call-(I) you

"It is your father that is calling you"

(35) yàa yéndɛ̀ n pɛ́rg sebra
be-(IMPERF)-AFF he n tear-PERF book-the

"It is he that tore the book" (Kouraogo 1976:80)

This structure can be analysed from a pragmatic viewpoint where the focus is laid on the subject, *bàaba* "father" in (34), and *yéndà* "he" in (35), to enforce their importance.

In a similar construction, a specific indefinite NP cannot be the direct subject:

36) (yàa) kámb n zabd taab yɩnga
((be-(IMPERF)-AFF) children n quarrel-I reflexive outside

"There are children quarrelling outside"

37) '(yàa) kámb n zabda taab yɩnga (Kouraogo 1976:81)

[9] This conclusion is not without problems, as Nikièma (2003:121) explains. Preverbal particles need another verbal complement, but so do verbs in a serial verb construction. As seen above, preverbal particles often develop from full lexical verbs into preverbal particles; therefore, a distinction between the two categories in questions is not as clear as it might seem prima facie. However, a detailed investigation of this problem goes beyond the scope of this thesis but remains an interesting topic for the future.

These structures cannot be considered to be serial verb constructions because the verbs can be negated independently from each other and it is possible to have non-identical subjects in a phrase (Nikièma 2003:121).

2.1.2.5 Verbs that take a sentential complement

The verbs which belong to this category are verbs of command, affirmative, perceiving and willing. Below is a list taken from Peterson (1971:184-196):

Verbs of Command

yèele	to tell (someone) to do something
tõ̋ogè	to persuade/convince someone to do something
sàgle	to advise someone to do something
kɛ̃̀nge	to urge/encourage someone to do something
pɛ̃̀dge	to insist on someone's doing something
dɩ̀dge	to press someone to do something
kòse	to ask someone to do something
tɛ̃̀ege	to remind someone to do something
kɔ̃̀ noore	to give permission (to someone) to do something
dìgi	to forbid someone to do something
gɩ̀dge	to prevent someone from doing something

Verbs of Declaration

yèele	to tell/say (to someone) that
tõ̋ogè	to convince/persuade someone of something
wɛ̃̀ene	to swear (to someone) that
kã́abè	to promise (someone) that
déegè	to admit (to someone) that
tɛ̃̀ege	to remind someone that
sòke	to ask (someone) if
wìnegi	to show/indicate to someone that
sàage	to hope
tɛ̃́	to believe/think
bànge	to know
sàmbe	to doubt
màmse	to imagine
nàane	to guess

tɛ̀ege	to remember
wʊ̀me	to understand/hear
dat n yeele	to mean

Verbs of Perception

Peterson states he only came across the two following verbs belonging to this category during his research.

yɑ́	to see
mɪ́kè	to perceive/fin that

Verbs of Willing

dátè	to want
tʊ́lgè	to desire
nònge	to like
tóge	ought to, it is necessary that…
ségdè	to be suitable, to be right that
yɪ́le	purpose verb
módgè	to try, to force someone to do something
mákè	to try
tɔ̀e	to be able, can

Peterson claims that verbs of command and declaration cannot occur in structures with *n* bearing the following meaning:

38) m banga me tí mam yãa a la me
I know me that I saw him la me

"I know that I saw him"

39) *m banga me n yã a la me (Peterson 1971:186)

40) a yeel m la me t m kuli
he told me la me that I leave

41) *a yeel m la me n kuli (Peterson 1971:188)

He states that the structure in (41) can mean "He told me and (then he)) left," which would be a case of the dependent conjunction outlined shortly in section NR. According to Kouraogo (1976:82), they are never the main verb in a serial sequence and *n* appears when the subjects of both parts are identical:

(42) àSét(a) ratà mé n ges wɛ̀rbǎ
Seta want-(IMPERF)-AFF n watch dance-the (Kouraogo 1976:82)

Nikièma (2003:128) shows that these completive constructions distinguish themselves from serial verb constructions because it is possible for the object of the embedded phrase to be moved to proceed the first verb. As we can see in the examples below, both structures are acceptable, therefore the structure cannot be regarded as a serial verb construction since it violates the constraint of object sharing seen in chapter 1.2 above.

(43) pagbã rat n gesa warbã
women+DEF want+IMPERF PVC watch+AFF warba dance

"the women want to watch the dance 'warba' "

(44) pabgã rata warbã n ges
women+the want+IMPERF+AFF dance warba PVC watch

„the women want to watch the dance 'warba' " (Nikièma 2003:128)

In (43), the object *warbã*, a dance, appears as a complement to the second verb *ges* "watch" and therefore follows it. Example (44) bears the exact same meaning but the object is shifted to follow the first verb, *rat* "want." This is not possible in serial verb constructions.

2.1.2.6 Constructions resulting from movement of the subject

Nikièma (2003:120) adds this type to the list of multi-verbal constructions linked by *n* but concludes that they do not meet the criteria for serial verb constructions. In Mooré, we find structures like the following:

(45) sɛgdame tɪ d pʊʊ Soaala barka
be appropriate+AFF+IO that we greet the Lord thanks

"it is good to give thanks to the Lord" (Nikièma 2003:120)

Another way of expressing this meaning is (46a). The subject pronoun *d* "we" is shifted to the beginning of the structure into subject position. *Tɪ* is therefore not applicable anymore because the two verbs in the structure share the same subject now. Consequently, the conjunction *n* is used.

(46a)	d	sɛgdame	n	pʊʊs	Soaala	barka
	we	be appropriate+AFF+IO	PVC	greet	the Lord	thanks

"it is good to give thanks to the Lord" (Nikièma 2003:120)

The affirmative marker can also be transferred onto the second verb because there is no object intervening between the two verbs. This does not influence the meaning of the phrase.

(46b)	d	segd	n	pʊʊsa	Soaala	barka
	we	be appropriate	PVC	greet+AFF	the Lord	thanks

"it is good to give thanks to the Lord" (Nikièma 2003:120)

These constructions where verbs are linked by *n* cannot be considered as serial verb constructions since there does not have to be an agreement in polarity in the phrases; the verbs can be negated independently from each other.

2.1.3 Types of serial verb constructions in Mooré

Kouraogo (1976) notes that the SVC construction can be distinguished from other structures with *n* by the fact that the verbs here have to agree in valence and aspect, which matches the description in chapter 1.2 above. The following examples are considered as genuine serial verb constructions in Mooré, according to previous literature (Kouraogo 1976, Nikièma 2003, Zongo 2014).

2.1.3.1 Instrumental

(47)	kòasɑ́	tallà	sú(ga)	regd(o)	n	wɑ̀	némdã
	butcher-the	hold-PERF-AFF	knife	dirty	n	cut-PERF	meat-the

"the butcher cut the meat with a dirty knife"

(48)	kòasɑ́	waa	nemdã	ne	sù(ga)	régdò
	butcher-the	cut-PERF-AFF	meat-the	with	knife	dirty

"the butcher cut the meat with a dirty knife"

(49) kòasɑ́ tarà sú(ga) regd(o) n wɑ̀d némdã
"the butcher is cutting the meat with a dirty knife"

(50) kòasɑ̃́ wãdà némdã ne sù(ga) régdò
"the butcher is cutting the meat with a dirty knife" (Kouraogo 1976:67)

In these constructions, both verbs can have their own object complements. The first two structures have a perfective aspect while the latter two have an imperfective one throughout the constructions. The serial verb constructions in (47) and (49) have non-serial counterparts containing the conjunction *ne* instead, as seen in (48) and (50). As we saw above, one constraint of serial verb constructions is that there is only one affirmative marker *(l)a* expressed in the phrase which can be reinforced by *me* in case the first verb does not have an object complement (51). Another possibility for it in absence of an object complement is to be placed on the second verb, as can be seen in (52).

(51)	a	talldame		n	wãad	nemdã
	he	use+IMPERF+AFF+IO	PVC	cut+IMPERF	meat-the	

„he uses the knife to cut the meat"

(52)	a	talld	n	wãada	nemdã
	he	use+IMPERF	PVC	cut+IMPERF+AFF	meat-the

„he uses to cut the knife" (Nikièma 2003:122)

2.1.3.2 Benefactive

The verb *ko* "to give" marks the benefactive. According to Zongo (2014), it can never be in an initial position in a serial verb construction. Every verb has to have an object complement, as can be seen below:

(53a)	m̀	baabá	nà	n	bas-a	bʊ́mb	n	kó	máam
	my	father	fut.	PVC	leave+AFF	something	PVC	give	me

"my father will leave something for me"

(53b)	* m̀	baabá	nà	n	kó	máam	n	bas-a	bʊ́mb
	my	father	fut.	PVC	give	me	PVC	leave+AFF	something

(Zongo 2014:60)

Just like in Dagaare, the object of initial verb in Mooré is the direct argument of "to give" (see Bodomo 2002:30). (53a) is a serial verb construction with *ko* being the non-initial verb in the sequence. This does not apply to (53b), the construction is therefore ungrammatical.

2.1.3.3 Goal

This construction contains at least three verbs in Mooré since the presence of *wa* "to come," and *kó* "to give" is mandatory and accompanies *tall* "to take." We can see that in this construction as well, *ko* cannot be placed as intial verb, otherwise the result is ungrammatical.

(54a) à tall-d-à teed n wa-t n
he take+IMPERF+AFF PVC come+IMPERF PVC

kò-t máám
give+IMPERF me

"He brings me some things."

(54b) *à tall-d-à teed n wa-t yir
he takes+IMPERF+AFF PvC come+IMPERF house

n kò-t máám
PvC give+IMPERF me

"He brings some things to my house." (Zongo 2014:61)

2.1.3.4 Comitative

In comitative structures, the idea of accompaniment is expressed as the following examples show:

(55a) àsúʋr(e) tũu aRindibg(u) n keng Baam
Suure follow-PERF-AFF Rindibgu n go-PERF Baam

"Suure went to Baam with Rindibgu"

(55b) àSúʋr(e) kengà Báam ne aRindibgu
Suure go-PERF-AFF Baam with Rindibgu

"Suure went to Baam with Rindibgu"

(56a) àSúʋr(e) tũuda aRindibg(u) n dabd Baam
Suure follow-IMPERF-AFF Rindibgu n go-IMPERF Baam

"Suure is going to Baam with Rindibgu"

(56b) àSʊ̀vr(e) rabdà Báam ne aRindibgu
Suure go-IMPERF-AFF Baam with Rindibgu

"Suure is going to Baam with Rindibgu" (Kouraogo 1976:68)

Again, the aspect has to be the same throughout the entire serial verb construction, and that the serial construction has counterparts with *ne* in (55) and (56) which do not differ in meaning.

2.1.3.5 Locative

(57) aTɪpók(o) zindà zákẽ n kàrem sébrè
Tipoko read-IMPERF-AFF house-LOC n read-P book

"Tipoko read a book in the house"

(58) àTɪpók(o) karemà sébre(e) zàkḗ
Tipoko read-PERF-AFF book house-LOC

"Tipoko read a book in the house"

(59) àTɪpók(o) bee zakẽ n kàremd sébrè
Tipoko be-IMPERF-AFF house-LOC n read-IMPERF book

"Tipoko is reading a book in the house"

(60) àTɪpók(o) karemdà sébr(e) zàkḗ
Tipoko read-IMPERF-AFF book house-LOC (Kouraogo 1976:68)

2.1.3.6 Deictic

(61) bɔ̀asá kenà ne nao n keng Kompoga
beggar-the walk-PERF-AFF on foot n go-PERF Kompoga

"the beggar went to Kompoga on foot"

(62) bɔ̀asá kenga Kompog(a) ne nao
beggar-the go-PERF-AFF Kompoga on foot

"the beggar went to Kompoga on foot"

(63) bɔ̀asá kendà né nao n ràbd Kompóga
"the beggar is going to Kompoga on foot"

(64) bɔ̀asá rabdà Kómpog(a) ne nao
"the beggar is going to Kompoga on foot" (Kouraogo 1976:69)

The verbs in the construction agree aspectually. In the serial constructions (61) and (63), the adverb *ne nao* "on foot" follows the first verb. In the non-serial sequences (62) and (64), the adverb stands at the end of the phrase.

2.1.3.7 Causative

The causative serial verb construction corresponds to the one in Dagaare. "An inherently causative verb is expressed subsequent to an action/activity verb" (Bodomo 2002:31).

(65) ráwã takà bíigã n yiisì
man-the pull-PERF-AFF child-the n go-out-CAUS

"the man caused the child to go out by pulling him"

(66) ráwã taetà bíigã n yiisdẽ
"the man is causing the child to go out by pulling him" (Kouraogo 1976:69)

(65) is perfective, (66) imperfective. Note that the Mooré aspects do not exactly correspond to the English past and present tense. As with auxiliaries, there are elements and structures in the language which do not have English correspondents.

2.1.3.8 Circumstantial verb – main verb

The following is one of the five multi-verbal constructions Nikièma (2003:119) adds. The first verb indicates the circumstances (manner etc.) in which the action of the second verb is realised.

(67) a kala biigã n lubi
he trip up+AFF child-the PVC

"he made the child fall by tripping it up"

(68) a tusa weefã n kẽes to-taoore
he push+AFF bicycle-the PVC CAUS-enter room

"he pushed the bicycle into the room" (Nikièma 2003:119)

2.1.3.9 Multi-verbal construction where V_2 is a complimentary predicate

In these constructions it is always V_2 which completes the sense of V_1:

(69) mam tʊm n same
I work PVC finish+AFF

"I finished work"

tõnd dɩme n tɩge
we eat+AFF PVC have enough

"we ate until satiety" (Nikièma 2003:120)

2.1.3.10 Multi-verbal constructions with composed verbs

At least two verbs are present, linked through *n* and are inseparable; the expression is often completely figurative. The sense of the composed verb is not always in line with the sense of every component:

(70) kẽ n bõoge
enter PVC take/deduct

"be imminent (an event)"

(71) kibsã kẽeme n bõoge
party-the enter+AFF PVC take/deduct

"(the day of) the party is already here, imminent" (Nikièma 2003:120)

Zongo (2014:91) states that there is no syntactic dependency marker between the components; the verbs form one single predicate and follow all the constraints in chapter 1.2 for SVCs as shown below.

(72a) kàmbã́ yɩg-ø-àmé ǹ ful-ø-e
children+the jump-PERF-AFF PVC evaporate+PERF

"The children vanished/disappeared in the nature"

(72b) kàmbã́ ká yɩg-ø n ful-ø yé
children+the NEG jump+PERF PVC evaporate+PERF NEG

"The children did not vanish/disappear in the nature"

(72c) *kàmbɑ̃́ yɪg-ø-àmé n ká ful-ø yé
*children-the jump+PERF PVC NEG evaporate+PERF NEG

(72d) *kàmbɑ̃́ ful-ø-àmé n yɪg-ø
*children-the evaporate+PERF+AFF PVC jump+PERF (Zongo 2014:91)

Sentence (72b) and (72c) show that negation has to take scope over both verbs; negating only one of the two verbs results in ungrammaticality. Sentence (72d) is also impossible since the verb sequence is changed, thus, the meaning of the figurative construction is lost.

2.1.3.11 Multi-verbal construction with verbal reduplication

Reduplication sometimes is used to express intensity in Mooré. According to Bodomo (1997:120), reduplication in the closely related Gur language Dagaare also denotes the repetition of actions.

(73) a tebga rãamã n yũ n yũ tɪ
he lift+PERF+AFF dolo-the PVC drink PVC drink COMP

wa sa
come finish

"he lifted the calabash with dodo and drank it empty"

(74) a tʊmame n tʊm n tʊ
he work+AFF PVC work PVC work

„he worked hard/for a long time" (Nikièma 2003:120)

Nikièma (2003:120) rejects this type of construction, saying "les cas de verbes réduplіqués ne peut non plus être retenu, pas plus que les cas des complétives sous le verbe 'vouloir', faute de qualifier comme cas de prédicats complexes." In this thesis, I disagree with this viewpoint and consider them as serial verb constructions, following Zongo (2014:45) who states that this construction is excluded without any satisfying justification; in her analysis, reduplicated structures meet the criteria for serial verb constructions.

The data from my field work in Burkina Faso (2015) also showed an interesting variation of reduplicated verbs where one of the informants insisted on an additional form of reduplication without *n*:

(75) kó “to cultivate”
kó-kó “to cultivate many times”

(76) di/ri “to eat”
ri-ri “to eat many times”
(77) wàbe “to walk”
wàb-wàbe “to walk many times”

Since none of the other informants confirmed the grammaticality of the structures above, I did not pursue further examples; nonetheless this would be an interesting phenomenon to study on a larger scale.

2.2 The *n*-connector in multi-verbal constructions in Mooré

After reviewing the existing literature on serial verb constructions in Mooré and the corresponding data, I will now continue with an analysis of the *n*-connector. While section one offers a theoretical discussion and possible framework, section two will continue to apply this framework on the relevant data after discussing various arguments in favour of distinguishing *n* from other connectors in the language.

2.2.1 Analysis of the *n*-connector in Mooré

The following section will provide an overview of different types of connectors in Mooré, followed by a differentiation of *n* as a serialisation connector and a comparison to a similar phenomenon in the Gbe language Fɔngbè. Aikkhenvald (2006:20) states that "[u]nlike coordinate or subordinate structures, SVCs cannot, by definition, contain any marker of syntactic dependency" while observing possible exceptions of this rule, such as the language Yimas, in a footnote. Schiller (1991) has analysed the n-connector in SVCs in Mooré as optional and thus a coordinating SVC:

(78)

a	iku	suuga	n	wag	nemda
S/he	took	knife	CM	cut	meat

"He cut the meat with a knife"

As seen in chapter 2.1, the connector is not optional but always present in SVCs in the language. Subsequently I will show differences between connectors and continue with an analysis of subordinated, not coordinated SVCs in Mooré.

2.2.1.1 Types of connectors in Mooré

A difference in semantics and syntax between the connectors in Mooré has been observed throughout the literature (Alexandre 1953, Canu 1974, Kouarogo 1976, Nikièma 2003, Peterson 1971). Nikièma (2003:117, own translation) briefly lists the most prominent features of those who cannot be considered for serial verb constructions:

a) Coordination with *la*

It is used in the enumeration of actions eventually done by the same subject. This construction is excluded because the subject is repeated by a pronoun in

front of every subsequent verb of the series. Every component of a phrase can have aspectual and modal markers and receive negation independent from the others.

b) Subordination with *tɪ*

These constructions do not authorise the partition of the subject between the different verbs.

c) Coordination with *ne*

The connector *ne* connects nominal or nominalised syntagma and doesn't intervene between the coordination of phrases or verbal syntagma.

d) Disjunction with *bɪ*

Each subject can be re-inserted by a pronoun. Within the constructions every verb can have its own aspect and modal marker and receive negation independently from other verbs.

Peterson, author of the first syntactic analysis of Mooré in 1971, identifies *n* in connection with dependent clauses. He distinguishes conjunction and disjunction as syntactical phenomena and sub-categorises the former further in dependent and independent conjunctions. Dependent ones behave like subordinate clauses and describe "actions or ideas (…) closely linked in a sequential or simultaneous dependence" (Peterson 1971:248). In independent conjunctions, *la* is used as a connector even if the subjects of both clauses are not identical. Dependent clauses with the same subject occur with *là* as a connector; if the subject is different, *tì* is used to connect them.

79a)	aKulg	kula	me	la	a	gaande
	Kulga	went home	me	and	he	went to bed

"Kulga went home and went to bed.

79b)	*aKulg	kula	me	la	aTene	gaande
	Kulga	went home	me	and	Tene	went to bed

*"Kulga went home and Tene went to bed"

80a) aKulg kula me t' àTene gaande
Kulga went home me and Tene went to bed

"Kulga went home and Tene went to bed"

80b) *aKulg kula me t' a gaande
Kulga went home me and he went to bed

*"Kulga went home and went to bed" (Peterson 1971:249)

"Dependently conjoined sentences with identical subjects may be reduced to VP conjunction, in which case the connective particle is *n̄*" (Peterson 1971:250). Note that this theory develops from a transformational approach while this thesis uses lexical functional grammar. Nonetheless, Peterson's work and observations are valuable and stated the first syntactic approach to this topic. He notes further that the verbs succeeding the first verb do not have to bear an imperfect aspect marker.

81a) aKulg kula me n gaande
Kulga went home me and went to bed

"Kulga went home and went to bed"

82b) pagã sõsda me n werda
woman-the is conversing me and grinding (meal)

"The woman is conversing and/while grinding meal" (Peterson 1971:250)

He states that those structures look very similar to those constructed with auxiliaries and verbs of willing, as we saw in the chapter above.

Kouraogo (1976:9) disagrees with the view that the presence of *n* in Mooré consequently means that it cannot be a serial verb construction and argues for it within a transformational grammar approach. We saw above in chapter 2.1.2.1 that the last verb in the description of sequential events or actions can be linked to the previous verbs by *là* instead of *n*.

83) … là a píl sugrì
and he repair-PERF roof

84) … là b gés sinma
and they watch-PERF movie (Kouraogo 1976:52)

Kouraogo (1976:53) assumes that *n* derives from *né* since the appearances of *n* and *la* together in a sentence show similarities to structures containing *né* and *la*:

(85) àSóamb(a) ne aGũr(i) la aWaaf(o) rabdà
Soamba and Guri and Waafo go-IMPERF-AFF

Sǻab(a) raga
Saaba market

"Soamba, Guri and Waafo are going to the market of Saaba"
(Kouraogo 1976:53)

Following Peterson's theory, there are two types of conjunctions, dependent and independent ones. Kouraogo notes that in Mooré, *né* is used for the former one and *là* for the latter. *Ne* takes the meaning of "with", indicating that the two nouns of a sentence do not carry actions out independently from each other.

86) m yǻa aSoamb(a) la aGũri
I see-PERF-AFF Soamba and Guri

"I saw Soamba and Guri"

87) m yǻa aSoamb(a) ne aGũri
"I saw Soamba and/with Guri"
(Kouraogo 1976:54)

(86) means that the speaker might have seen both of them but not necessarily together while this interpretation is not possible in (87).

The problem with this analysis is that *n* and *ne* behave differently:

88) VP n VP n VP la/n VP #
89) NP ne NP la NP la NP #

N can be used in these constructions repeatedly, only the last verb in the sequence can be preceded by *la* whereas *ne* can only occur between the first two words in a construction, all successive verbs must be linked by *la*.

90) *àSóamb(a) ne aGũr(i) ne aNang(a) ne aSòas(a) lá aBùsl(a) kéngà Sǻab(a) raga

"Soamba, Guri, Nanga, Soasa and Busla went to the market of Saaba"

91) àSóamb(a) ne aGũr(i) la aNang(a) la aSòas(a) lá aBùsl(a) kéngà Sáab(a) raga

(Kouraogo 1976:55)

2.2.1.2 Arguments for *n* as a serialising connector

Nikièma (2003) lists various reasons in favour of *n* as a different connector compared to the other ones seen in Mooré, one of them being lexical restrictions between V_1 and V_2 when *n* is present between them. As an example, he cites composed verbs. Consider the following case where two verbs, linked by *n,* are inseparable. These structures often have a fixed semantic meaning that cannot be deducted by the components alone.

(92a) kẽ n bõoge
enter PVC take/deduct

"be imminent (an event)

(92b) kibsã kẽeme n bõoge
party-the enter+AFF PVC take/deduct

(the day of) the party is already here, imminent" (Nikièma 2003:120)

Such restrictions usually do not apply for coordinated structures. Furthermore, while the verb sequence in coordinated structures can be reversed, this is not possible in constructions containing *n*. The perhaps strongest and most widely cited criterion that extraction and replacement of objects is possible in serial verb constructions applies to Mooré:

(93a) pagã talla sʊ-kãngã n wã nemdã
woman-the use+AFF knife-this PVC cut meat-the

"the woman cut the meat with this knife"

(93b) yaa sʊ-kãngã la pagã tall n wã nemdã
it is knife-this FOC woman-the use PVC cut meat-the

"It is with this knife that the woman cut the knife"

(93c) yaa nemdã la pagã tall sʊ-kãngã n wã
it is meat-the FOC woman-the use knife-this PVC cut

"It is the meat which the woman cut with this knife" (Nikièma 2003:129)

These examples further show how constructions with *n* differ from coordination constructions. As shown in various other languages, when a conjunction is present in a coordinated or subordinated structure, a subject or copy of the subject in form of a pronoun has to be inserted before the second verb. This is also the case in Mooré; In a coordinated structure with *la* or a subordinated structure with *tɩ*, a subject has to precede the second verb. Additionally, it is not possible to replace a nominal V_2 in serial verb constructions during passivation.

(94)	àPók(o)	rɩɩ	mui	là	a	yű	raam	tì
	Poko$_i$	eat-PERF-SM	rice	and	she$_i$	drink-PERF	beer	and/while
	aRáog(o)	rɩ	sagbo					
	Raogo	eat-PERF	dough					

"Poko ate rice and drank beer while Raogo ate dough." (Kouraogo 1976:20)

Nikièma adds two strong arguments for *n* as a serialising connector. In a structure with *n*, the verbs always have the same subject. Additionally, *n* exclusively links verbal syntagma (2003:117).

I agree with Nikièma by saying that the data shows that *n* is not a connector in coordinate and subordinate structures. This further strengthens the claim I will make in chapter 2.2.2: Serial verb constructions are subordinating structures but distinguish themselves from ordinary ones in the sense that they are complex predicates as well, which explains their unique features subordinate structures do not show.

As we will see below, Fɔngbè, discussed by Tossa (1994) shows a similar structure in serial verb constructions.

2.2.1.3 The case of Fɔngbè

Fɔngbè is spoken in Benin and part of the Volta-Niger branch, more specifically the subgroup Gbe. The language has been exhaustively studied, amongst others, by Tossa (1994). It has two lexical tones, high and low (Lefebvre and Brousseau 2002:20).

Tossa discovered in his doctoral thesis that Fɔngbè also exhibits what he calls a "serialisation morpheme" (1994:144). He cites the following examples presenting the morpheme *bó*:

(95a) kɔ̀jó zé àsɔ́n bó yì àxìmɛ̀
K. take crab SM go market

"Kodjo took the crab and went to the market."

(95b) kɔ̀jó ná zé àsɔ́n bó ná yì àxìmɛ̀
K. IRR take crab SM IRR go market

„Kodjo will take the crab and go to the market."

(95c) kɔ̀jó ná dò àsɔ́n zé bó ná àxìmɛ̀ yì wɛ̀
K. IRR be crab take SM IRR be market go ASP

Kodjo is taking the crab and is going to the market.
(Tossa 1994:144-145)

While these examples match the structure of a regular coordination, their behaviour follows different patterns. The first distinction is that the subject cannot be realised preceding the second verb as well, not even as a pronoun. A construction with a regular connector would allow for this.

(96a) *kɔ̀jó zé àsɔ́n bó kɔ̀jó yì àxìmɛ̀
K. take crab SM K. go market

(96b) *kɔ̀jó zé àsɔ́n bó é yì àxìmɛ̀
$K._i$ take crab SM he_i go market (Tossa 1994:146)

Furthermore, extractions are allowed in constructions with *bó* but not in coordination structures which corresponds to the Coordinate Structure Constraint by Ross[10].

(97a) àxìmɛ̀$_i$, wɛ̀ kɔ̀jó zé àsɔ́n bó yì e_i
Market it is K. take crab SM go

"It is the market where Kodjo brings the crab."

(97b) àsɔ́n$_i$, wɛ̀ kɔ̀jó zé e_i bó yì àxìmɛ̀
Crab it is K. take SM go market

It is the crab Kodjo brings to the market. (Tossa 1994:146-147)

[10] *Coordinate Structure Constraint :* "In a coordinate structure, no conjunct may be moved, nor may any element contained in a conjunct be moved out of that conjunct." (Ross 1967:89)

Perhaps the most striking argument for a serialising connector in Fɔngbè is the existence of a connector morpheme *bò* which marks regular coordination structures.

(98a)	kɔ̀jó	zé	àsɔ́n	bɔ̀	é	yì	àxìmɛ̀
	K.	take	crab	and	he	go	market

"Kodjo took the crab and went to the market."

(98b)	kɔ̀jó	ná	zé	àsɔ́n	bɔ̀	é	ná	yì	àxìmɛ̀
	K.	IRR	take	crab	and	he	IRR	go	market

"Kodjo will take the crab and go to the market."

(98c)	*kɔ̀jó	zé	àsɔ́n	bɔ̀	yì	àxìmɛ̀	
	K.	take	crab	and	go	market	(Tossa 1994:148)

We see that in example (98a) and (98b), the pronoun *é* must precede the second verb when the connector *bò* is present. (98c) is ungrammatical because of the absence of the pronoun.

Tossa states that the two connectors are used for different structures. While bò is a regular conjunction used in coordination structures, bó appears exclusively in structures fulfilling criteria for serial verb constructions and thus show a behavioural pattern different to coordination. At first, this case sounds strikingly similar to Mooré. However, the connector in Fɔngbè is solely used in one construction whereas the *n*-connector in Mooré appears in various multi-verbal constructions that show a considerable similarity to regular coordination constructions and do not pass as SVCs. Therefore, a parallel between the two languages can only be drawn to a certain extent because of the frequency with which *n* in Mooré is used in diverse syntactic environments.

2.2.2 A theoretical framework for *n* as a serialising connector

Bodomo (2002) discusses possible outcomes of proposing a subordinate structure for serial verb constructions. He refers to an article by Cormack and Smith (1994) where a subordinating conjunction *$* is suggested to have the meaning *and* and is different from a second type of connector *&* which represents a semantically full conjunction. "According to this analysis, the idea of the *$* is that it first explains what licenses this structure, and secondly, it gives a proper semantics for the structure" (Bodomo 2002:41).

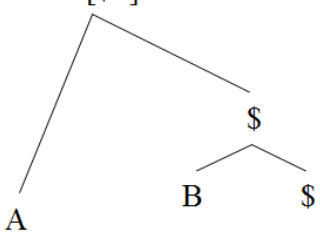
According to Cormack and Smith, a theory of serial verb constructions must account for at least five properties:

a. The "object sharing" and word order [in an example cited in the article]: that is, where both verbs (…) are transitive, the NP argument (…) functions as the object of both of them.
b. The restriction that if the second verb (…) is intransitive then it must be ergative.
c. The possibility of extraction [in certain structures].
d. Asymmetries, such as tense choice, between the first of the verbs and others.
e. The various interpretations, semantic and pragmatic, of serial verb constructions.

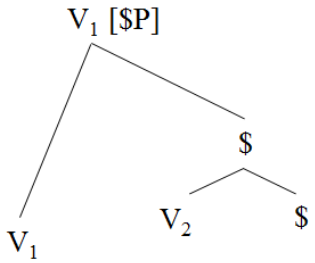
(Cormack and Smith 1994:73)

Cormack and Smith propose subordination as the essential underlying structure of serial verb constructions instead of coordination. Since all structure is head mediated, *$* is a functional head and subordinating connector. This connector is covert in the case of serial verb constructions. Furthermore, this subordinate approach requires an asymmetric structure:

(99) a.



b.



(Cormack and Smith 1994:73)

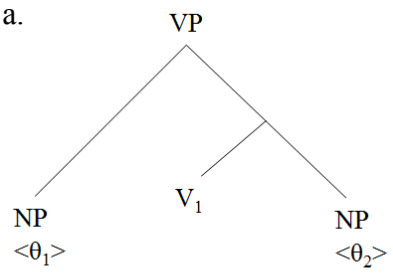
(99a) shows a general representation while (99b) is adapted to show the case of serial verb constructions. This proposed asymmetry accounts for several verbal phenomena in connection with serial verb constructions, such as movement and tense morphology. Cormack and Smith (1994:74) show that for example in Nupe, only the first verb in a serial construction is marked for tense/aspect, something that is to be expected when assuming an asymmetric underlying structure:

(100) a. mi à-du eci gï
I shall boil and eat the yam

b. *mi du eci à-gï
c. *mi à-du eci à-gï (Cormack and Smith 1994:74)

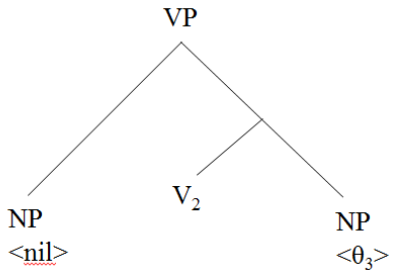
Their approach also explains Baker's observation: "(…) V_2 must belong to the so-called unaccusative class of intransitives, and not the unergative class (…)" (1989:531) because in their framework, the involved head must c-select and s-select identically. In the case of an intransitive verb this would demand an ergative since only those types can c-select internally.

(101) a.



transitive V_1

b.



ergative V_2
(overt θ role *in situ*)

(Cormack and Smith 1994:75)

Furthermore, Cormack and Smith show examples from extraction and wh-movement to strengthen their claim (Note that wh-movement is non-existent in the LFG framework adapted in this thesis but will, nonetheless, be named here for reasons of completeness of arguments in regard to Cormack and Smith's article), as shown in the Nupe examples (102) – (94).

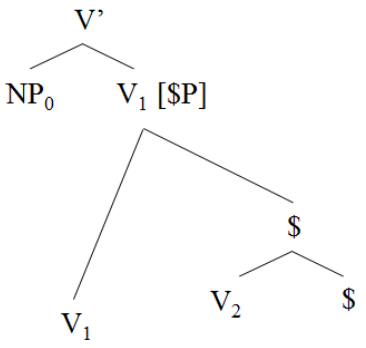
(102) a. Musa cī egi lë - Musa looked at the child
b. zê Musa cī *t* lë o - who did Musa look at?
Who Foc

(103) a. Musa du eci gï - Musa boiled the yam and ate it
b. kî Musa du *t* gï o - What did Musa boil and eat?
What

(104) a. kî u wu t nìkî nyi o - What did he knock down?
b. kî u lá t bë o - What did he bring? (Cormack and Smith 1994:77)

The explanation lies in the proposed structure in (105) where we can see that V_1 and V_2 form a single verb when there is a V^0\$-conjunction present.

(105)



(Cormack and Smith 1994:77)

They conclude that "(…) for true serial constructions this operates at the V zero level, so § has the semantics of generalised conjunction" (Cormack and Smith 1994:65). Bodomo notes that while this approach is attractive, it generates problems when trying to distinguish coordination, subordination and serial verb constructions. He represents the point of view that serial verb constructions are monoclausal complex predicates and are different from coordinations in the sense that "coordinations have a semantically full connective while complex predicates (e.g. SVCs) do not. Even if they have a phonologically full connective, like Scandinavian subcoordinates, (…) these connectives are semantically null or, at least, semantically degenerative (…)" (Bodomo 2002:41).

Subcoordination

"The term subcoordination refers extensionally to instances of VP coordination which violate the Coordinate Structure Constraint (CSC) of Ross (1967), and its companion the Across The Board rule application (ATB) (…)" (Johnsen 1988). This structure is different from coordination for various properties:

> P0: Extractions out of the first and second conjunct are possible.
> P1: A modal auxiliary in the second conjunct blocks extraction.
> P2: No (modal, time) adverbs can occur in the second conjunct, while they are fine in the first.
> P3: There can be no subject in the second conjunct whether it is a coreferring pronoun or not.
> P4: The coordinator *og (and)* is degenerate in the sense that it cannot be substituted with *men (but)* nor *eller (or)*.
> P5: Not all verbs can head two conjuncts. (Johnsen 1988:1-3)

We can see that Norwegian shows similar properties to serial verb constructions and like Mooré, has a connector which Bodomo (1997:110) already remarked:

> Scandinavian constructions such as:
> Ta og kaste stein
> Take and throw stone
>
> "Take a stone and throw it"
>
> and
>
> Gå og kjøpe billet
> Go and buy ticket
>
> "Go and buy a ticket"
>
> may have semantics similar to that of some types of serial verb constructions.

Pseudo-Coordination

Pseudo-Coordination has been observed in Norwegian and its properties show many similarities to serial verb constructions in Mooré; they are different to ordinary coordination and also show non-subordinate properties. Asymmetric extraction, which would violate the CSC, is allowed. The order of the verbs has to be fixed and the aspect has to be the same. Furthermore, only one subject is possible for those structures (Gjersøe 2016). It is not allowed to use the distributive operator *både*, selecting two different events, which is the same for serial verb constructions where only one event sequence can be constructed. Norwegian differs from SVCs in the sense that those structures show monoclausality but also biclausality since the verbs can be headed by auxiliaries. Furthermore, there are three different types taking a restricted class of verbs. Gjersøe proposes a "multidominance analysis where the two verbs share their subjects" (2016:353).

Cormack and Smith comment that

> [d]espite these parallels, it is clear (…) that "real" serial verb languages are systematically (and presumably parametrically) different from non-serial languages. (…) Given that $ is entered in the lexicon, together with its permitted operands in any particular language, it is straightforward to account in the lexicon for a restricted range

of serial constructions, rather than by means of a parameter. For instance, if a language has only take serials: then $ selects for the pair of operands V^0 and V^0 [take]. (1994:81-82).

Bodomo suggests two possible approaches in regard to the connection between verbs in a serial construction: "The first is to build on Cormack and Smith's interesting idea of a *$* connector and call it the serializing connector; the second is our idea of treating the verbs in the series as a single, albeit complex predicate" (2002:42). Since Bodomo's standpoint is well argued and has been proven to be true for Dagaare and a unified concept on this issue would be desirable, I suggest to unify both ideas. In a lexical-functional framework, nothing speaks against a syntactically subordinate construction at c-structure but a complex predicate at f-structure. In the case of Mooré it means that there is a phonetically full connector which causes a subordinate c-structure. Since the connector is semantically empty this results in a f-structure in the form of a complex predicate.

Complex predicates

Complex predicates have been mentioned throughout this thesis. Bodomo dedicates his master thesis to the topic, followed by mentions in several articles and conference proceedings (1993, 1996, 2002). Butt states the following definition:

Definition of a Complex Predicate (Butt 1995:230)

- The argument structure is complex (two or more semantic heads contribute arguments).
- The grammatical functional structure (f-structure) is that of a single predicate. It is flat: there is only a single predicate (a nuclear PRED) and a single subject).
- The phrase structure (c-structure) may be either simple or complex. It does not necessarily determine the status of a complex predicate.

The majority of constraints seen in chapter 1.2 and Bodomo's tests (1996: section 3), negation and questioning of the constructions in Dagaare, lead to the conclusion that SVCs are complex predicates.

(106) Bayuo da ba ngmɛ Ayuo
Bayuo PAST NEG knock Ayuo

"Bayuo did not knock Ayuo"

(107) Bayuo da ba lɔɔ Ayuo
Bayuo PAST NEG CAUS+fall Ayuo

"Bayuo did not cause Ayuo to fall"

(108) Bayuo da ngmɛ-ø la Ayuo lɔɔ-ø
Bayuo PAST beat-PERF FACT Ayuo CAUS+fall-PERF

"Bayuo knocked Ayuo down" [Bayuo knocks Ayuo, Ayuo falls]

(109) Bayuo da ba ngmɛ-ø Ayuo lɔɔ-ø
Bayuo PAST NEG beat-PERF Ayuo CAUS+fall-PERF

Bayuo did not knock Ayuo down"

(110) *Bayuo da ngmɛ-ø la Ayuo ba lɔɔ-ø
Bayuo PAST beat-PERF FACT Ayuo NEG CAUS+fall-PERF

Sentences with a single predicate can be negated, as can an SVC be if the negation takes scope over the entire construction. However, it is not possible to negate only one verb in the SVC. The second test Bodomo (1996: section 3) proposes is questioning. As can be seen below, it is not possible to question only one verb in SVCs:

(111) Ayuo da za-ø la a bie lɔɔ-ø
Ayuo PAST throw-PERF FACT DEF child CAUS+fall-PERF

"Ayuo threw the child down"

(112) *Bong la ka Ayuo e-ø a bie lɔɔ-ø?
What FACT that Ayuo do-PERF. DEF child CAUS+fall-PERF

(113) *Bong la ka Ayuo za-ø a bie e-ø?
What FACT that Ayuo throw-PERF. DEF child CAUS+fall-PERF

(114) Bong la ka Ayuo e a bie?
What FACT that Ayuo do DEF child

"What did Ayuo do to the child?" (Bodomo 1996: section 3)

Returning to the connector issue, Bodomo shows that while serial verb constructions conceptualise one event, a structure with a conjunction or otherwise overtly connected has two events in Dagaare:

(115a)	o	da	mɔng-∅	la	saao	di-∅
	3.s	PAST	stir-PERF	FACT	food	eat-PERF

"S/he made-ate food": one event conceptualized

(115b)	o	da	mɔng-∅	la	saao	a	di-∅
	3.s	PAST	stir-PERF	FACT	food	&	eat-PERF

"S/he made food and then ate it": two events conceptualized

(115c)	o	da	mɔng-∅	la	saao	naa	di-∅
	3.s	PAST	stir-PERF	FACT	food	in order	eat-PERF

"S/he made food in order to eat it": two events conceptualized

(Bodomo 2002:42)

Since all examples above differ from each other semantically and show serialisation, coordination and subordination respectively, proposing a coordinator for each structure could be useful in order to prevent further confusion.

(116) & - coordinating connective
$ - serializing connective
§ - subordinating connective (Bodomo 2002:43)

He says that "In this way verbs in a language may have, at least, three types of logical relationships between them: coordination, serialization and subordination. Each of these can have null or full phonological realization but there is always a full semantic realization" (Bodomo 2002:43). The other approach would be to eliminate the serialisation connective but instead recognise serial verb constructions as complex predicates.

The third approach Bodomo states is the one I will adopt here. While serial verb constructions are complex predicates, they still are subordinating[11] and connected by what he calls the "cormackian connective" (2002:43), *$,* which I will adopt here as a *serialising connector*.

Developing this thought further, having an overt connector *$* in, for example, Mooré, is not impossible. There are no reasons stated so far on why this should not be allowed. I assume therefore that the *n*-connector in Mooré is a phonologically realised, but semantically empty serialising *$*-connector. The crucial difference to previous approaches here is my language-specific assumption that in the case of Mooré, the serialising connector is not phonologically empty but overt. However, this does not change its semantic degenerateness. Even Cormack and Smith mention in their discussion a parameter which decides whether a *$* connector is overt or covert. It seems that in Mooré the former is the case.

[11] „Evidence for considering one of the verbs as syntactically subordinate in Dagaare is due to the fact that it is the first verb which is the host (superordinate) head. This seems to be so in most languages (Bodomo 2002:43)". The same holds for the closely related Mabia language Mooré.

2.3 Analysis of Mooré SVCs

2.3.1 Key components

Let us return to Haspelmath's model again at this point:

Serial verb construction: a definition

> A serial verb construction is a monoclausal construction consisting of multiple independent verbs with no element linking them and with no predicate-argument role between the verbs.

> key components of the definition
> a. construction
> b.monoclausal
> c. independent verbs
> d. no linking element
> e. no predicate-argument relation between the verbs (Haspelmath 2015:306)

In this section, constructions from Mooré will be tested to determine whether they fulfil the criteria.

Construction:

A serial verb construction must be "(…) a productive schematic construction such that the meaning of a concrete construct can be determined on the basis of the meanings of its part and the construction meaning" (Hasplemath 2015:6). This is the case for Mooré.

(117)	A	rɪka	sʊʊg	n	wãag	nemdã	n	wãabe
	3s	take-PERF	knife	n	cut-PERF	meat	n	chew-PERF

S/he cut the meat with a knife and ate it.

Monoclausal:

Serial verb constructions must for a single clause; This can be deducted through polarity. As we saw in chapter 2.1.1.3, this applies to Mooré.

(118)	à	ká	góm-d	wʊsg	n	yúg-d	máam	yé
	he	NEG	talk+IMPERF	a lot	PVC	exceed+IMPERF.	me	NEG

"He does not talk a lot more than me" (Zongo 2014:100)

Independent verbs:

The verbs in a serial verb construction must be independent; This excludes auxiliaries and adpositions. As seen in chapter 2.1.2.3, TAMP + main verb structures like the following example are not to be classified as serial verb constructions in Mooré:

(119) àGómtʉʋg(o) ket ǹ gʹúlsdà mé
Gomtiugo still n write-IMPERF-AFF

"Gomtiugo is still writing"

(Kouraogo 1976:76)

No linking element:

Undoubtedly, Mooré shows a linking element between verbs. As previously stated, this connector is semantically empty and according to Cormack and Smith (1994), in covert form, present in all serial verb constructions.

(120) A rıka seba/sebr n kõ maam
3s take-PERF book $ give-PERF me

S/he gave me the book.

No predicate-argument relation between the verbs:

This means "(…) it should not be the case that one of the verbs is (part of) an argument of the other verb" (Haspelmath 2015:314). Consequently, causative constructions like the following would not be classified as serial verb constructions:

(121a) A tusa maam n lubi
3s push-PERF me n CAUS-fall-PERF

S/he pushed me down.

(121b) A tusa maam n luı
3s push-PERF me n fall-PERF

S/he pushed me and fell.

Haspelmath (2015:305) argues that in case of acceptance, one would have to consider structures like the following as well:

(122) English
a. She helped me solve the problem.
b. He made her cry.

I am cautious of this view, since, in my opinion, it can be debated whether the English constructions are monoclausal. Furthermore, they do not show a causative marker like constructions in Mooré or Dagaare. While I fully agree with Haspelmath that one should be wary of allowing too many languages in this construct, I suggest further research should be done on the differentiation between those structures.

2.3.2 Constraints

In a next step, I will apply the constraints from Bodomo (2002) to Mooré.

> *Constraints on serialization (in Dagaare):*
>
> i. **The subject sameness constraint:** All the verbs in an SVC share a single structural or functional subject.
> ii. **The TAP constraint:** In an SVC there is only a single TAP (tense, aspect and polarity) node.
> iii. **The connector constraint:** There is an absence of conjunctions or complementizers within the string of verbs.
> iv. **The object sharing constraint:** All the verbs in the series share referentially identical direct objects.
> v. **The predicate constraint:** Finite verbs expressing different parts of the same event occur together [single eventhood].
>
> (Bodomo 2002:33)

Since Mooré and Dagaare show strikingly similar structures, I will assume that these constraints stated above apply to Mooré as well.

2.3.2.1 The subject sameness constraint

"All the verbs in an SVC share a single structural or functional subject" (Bodomo 1996:2). This constraint applies to Mooré:

(123) A zoeeme n wa n dık sʊʊga n
3s run-PERF n come n take-PERF knife n

kõ maam
give-PERF me

S/he ran here and took the knife for me.

2.3.2.2 The TAP constraint

"In an SVC there is only a single TAP (tense, aspect and polarity) node" (Bodomo 1996:2).

(124) A zoeeme n wa ka
3s run-PERF n come-PERF here

S/he ran here / s/he came by running.

As can be seen, all elements in the construction have the same tense, aspect or polarity marker. Different TAP marker on verbs are not possible:

(125) *bɔ̀asɑ́ tallà sʊ(ga) regd(o) n wâd
butcher-the hold-PERF-AFF knife dirty n cut-IMPERF

némdã
meat-the

(126) *aSʊvr(e) tũuda aRindibg(u) n keng Baam
Sʊvre follow-IMPERF-AFF Rindibgu n go-PERF Baam

(127) *àTıpók(o) pa be zakẽ ye n kàremda
Tipoko NEG be-IMPERF house-LOC NEG n read-IMPERF-AFF

sébrè
book

(Kouraogo 1976:69)

Even with more than two verbs, the constraint is fulfilled:

(128) A zoee-Ø be n wa-Ø wob-Ø tııgã biis
3s run-PERF there n come-PERF pick-PERF tree children

ka
here

S/he ran here (and) collected berries.

2.3.2.3 The connector constraint

"There is an absence of conjunctions or complementizers within the string of verbs" Bodomo 1996:2). I already discussed the presence of the connector *n* in Mooré and suggested an analysis for it that argues for the presence of an underlying connector on all serial verb constructions. This connector is mostly covert; In the case of Mooré and Fɔngbè it is overt but still semantically empty.

(129)	A	tomame	n	kõ	maam
	3s	work-PERF	$	give-PERF	me

S/he worked for me.

2.3.2.4 The object sharing constraint

All the verbs in the series share referentially identical direct objects. Baker (1989:519) proposes the possibility of double headed VPs to account for this phenomenon:

Generalized Serialization Parameter

VPs {can/cannot} count as the projection of more than one distinct head.

CAN: Yoruba, Sranan, Ijo, …

CANNOT: English, French, …

(130)	A	rɪka	sʊʊg	n	wãag	nemdã	n	wãabe
	3s	take-PERF	knife	n	cut-PERF	meat	n	chew-PERF

S/he cut the meat with a knife and ate it.

As can be seen in the example above, the object-sharing constraint is fulfilled in Mooré.

2.3.2.5 The predicate constraint

Finite verbs expressing different parts of the same event occur together [single eventhood].

"In an SVC, two or more different finite verbs occur monoclausally, integrating in such a way that together they express various parts of a single event or a set of tightly related events." (Bodomo 2002:47)

Consistently, structures as the following are excluded:

(131)	A	wukame	n	wuk	n	wuk	taamã
	3s	pick-PERF	n	pick-PERF	n	pick-PERF	sheafruits

S/he picked sheafruits (many times/a lot).

However, Bodomo predicts a structure like this to be a serial verb construction:

(132)

A	miimame	n	miim	taamã	n	di	
3s	collect-PERF	n	collect-PERF	sheafruits	n	eat-PERF	
n	di						
n	eat-PERF						

S/he collected and ate sheafruits (many times/a lot).

Constraints on serialisation in Mooré

Constraints	**Dagaare**	**Mooré**
Subject sameness constraint	✓	✓
TAP constraint	✓	✓
Connector constraint	✓	$
Object sharing constraint	✓	✓
Predicate constraint	✓	✓

2.4 Theoretical discussion

By running multi-verbal constructions through various constraints and comparing it to different approaches, it becomes quite clear that there are serial verb constructions in Mooré which differ from other multi-verbal constructions in the language. The only problem so far is the presence of a connector, which I have accounted and provided an analysis for.

While I agree with Haspelmath (2015) that broadening the concept and definitions leads to confusion and allows too many constructions which are not to be classified as SVCs, the case of Mooré is different. It is not just one structure showing a property of a serial verb construction, it is an actual phenomenon widely used in the language and others closely related to it. Serial verb constructions are widespread in the group of Gur languages, as shown in chapter 1.3 where I presented a few selected ones. Moreover, Mooré, Dagaare and Kusaal are closely related and show many similarities that one could argue for it to be highly unusual not to find corresponding SVCs in all languages.

In his paper, Haspelmath (2015) refers to a difference between comparison and description of serial verb constructions and suggests to classify languages which fulfil most but not all criteria for SVCs as having “verb seriations” or “seriational constructions” (2015:14). While his approach is well-constructed and the suggestion is certainly attractive, I do not believe

that Mooré should be classified within this new comparative concept for the reasons stated above.

The case of Fɔngbè in chapter 2.2.1.3 has shown that Mooré is not the only African language exhibiting the phenomenon of a linker in SVCs. Even more interesting is the similarity between the serialising marker and the conjunction marker in Fɔngbè; they are only distinguished by low/high tone. Thus, it could be argued that in this language, the serialising connector acts as a semantically empty placeholder for the conjunction in SVCs.

To summarise, in my opinion Haspelmath's approach is valid and his suggestion of a subcategory of SVCs fulfilling the criteria mostly is useful to capture languages showing similar phenomena. However, since the connector in Mooré, and as shown also in Fɔngbè, is not a conjunction but simply a phonetically overt and semantically empty element, I will classify the language in this thesis as possessing SVC structures. In an LFG framework, as will be shown in chapter three, the phenomenon of a serial connector can be perfectly accounted for.

2.5 Summary

In this chapter, I have reviewed previous literature on the topic and, on this base, stated contraints regarding SVCs in Mooré. Deducing from these constraints I differentiated between multi-verbal constructions and true SVCs and, following Kouraogo (1976), Nikièma (2003) and Zongo (2014), identified eleven types of SVCs in Mooré:

1. Instrumental
2. Benefactive
3. Goal
4. Comitative
5. Locative
6. Deictic
7. Causative
8. Circumstantial verb – main verb
9. Multi-verbal constructions where V_2 is a complimentary predicate
10. Multi-verbal constructions with composed verbs
11. Multi-verbal constructions with reduplication

Subsequently, I have provided an account of different connectors in Mooré and proposed an analysis for *n*, which I assume to be a serialising connector. The hypothesis of a serialising connector is further supported through a smiliar phenomenon in SVCs in the Gbe language Fɔngbè, which also exhibits a serialising connector. The analysis is based on Cormack and

Smith's model (1994) which was further discussed in Bodomo (2002) and essentially assumes SVCs in Mooré to be subordinate structures on a syntactic level where the connector *n* is represented as *$*. Furthermore, it is phonologically realised but semantically empty. This answers my research question for an analysis which explains the presence of the connector in SVCs in Mooré.

In the last part of the chapter, I applied the definitions and constraints from chapter 1.2 to Mooré and concluded that the eleven types listed above are in fact true SVCs and justified why I choose to argue in favour for it on theoretical grounds, thus answering my research question on the status of multi-verbal constructions in Mooré.

3 A Lexical Functional Grammar analysis of SVCs in Mooré

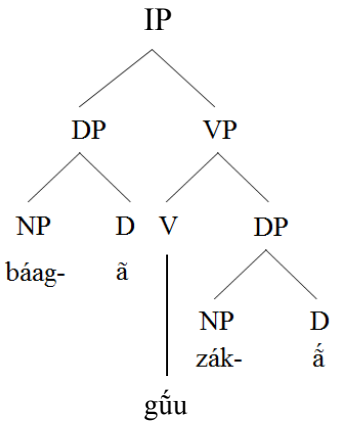
3.1 Introduction to Lexical Functional Grammar

The architecture of Lexical Functional Grammar is non-transformational, level-based and builds on three basic principles: Monotonicity, universality and variability. Monotonicity regulates the mapping between c- and f-structure, resulting in preservation of grammatical forms (see Bresnan 2001:73-86). Universality means that the constituent structure (external) varies cross-linguistically while the principle of variability ensures that the functional structure (internal) is mostly consistent. Two additional fundamental bases are the principle of Economy of Expression which prevents empty categories, and the Lexical Integrity principle which forbids constituent movement. As Dalrymple (2005:82) writes, "(…) the theory is lexical: the lexicon is richly structured, with lexical relations rather than transformations or operations on phrase structure trees as a means of capturing linguistic generalizations. It is also functional: grammatical functions like subject and object are primitives of the theory, not defined in terms of phrase structure configuration or semantic roles."

Constituent structure (c-structure) in LFG represents the syntactic hierarchy and categories within head-dependent X'- theory. The underlying phrase structure rules are context-free. Information is passed up by functional annotations and is developed by phrase structure rules. The sentences in examples (1) – (15) are taken from Kinda 2005.

(1) báag-ã gű-u zákǎ
dog-the guard-PERF house-th

"the dog guarded the house"



(2) a. IP → DP VP

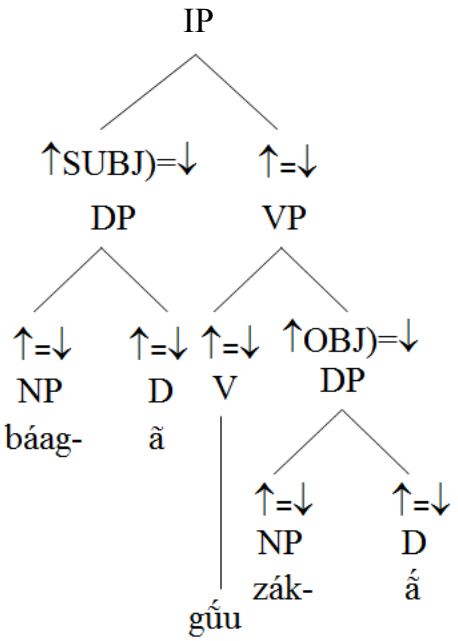
b. VP → V DP

(3) a. IP → DP VP
(↑SUBJ)=↓ ↑=↓

b. VP → V DP
↑=↓ (↑OBJ)=↓

c. DP → NP D
↑=↓ ↑=↓

(4)



Another source of grammatical information is the lexicon; it provides categories such as aspect, number and tense.

(5) báag-: N (↑PRED)= 'BÁAG'
(↑NUM) = SG

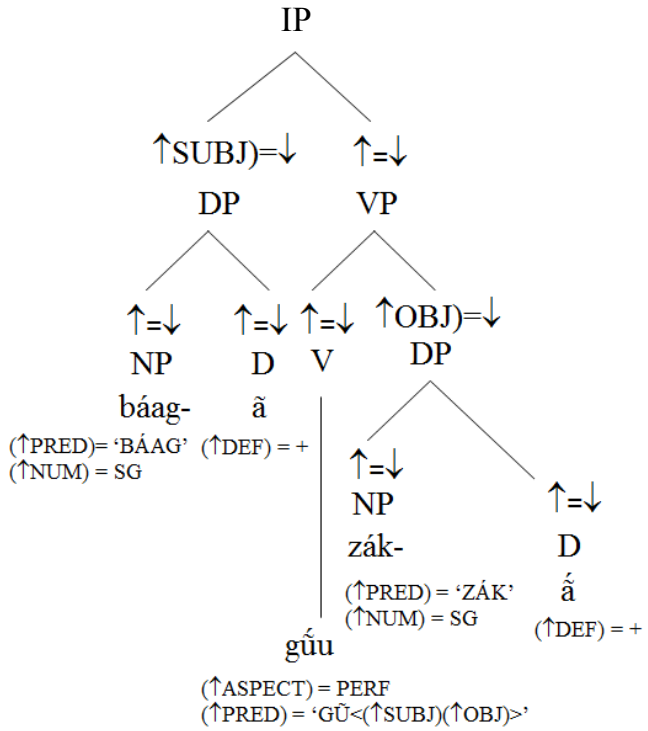
gű́u: V (↑ASPECT) = PERF
(↑PRED) = 'GŨ<(↑SUBJ)(↑OBJ)>'

ã: DET (↑DEF) = +

zák-: N (↑PRED) = 'ZÁK'
(↑NUM) = SG

Example (6) shows a fully annotated X'-tree where the two components, phrase structure rules and lexical entries, are combined.

(6)

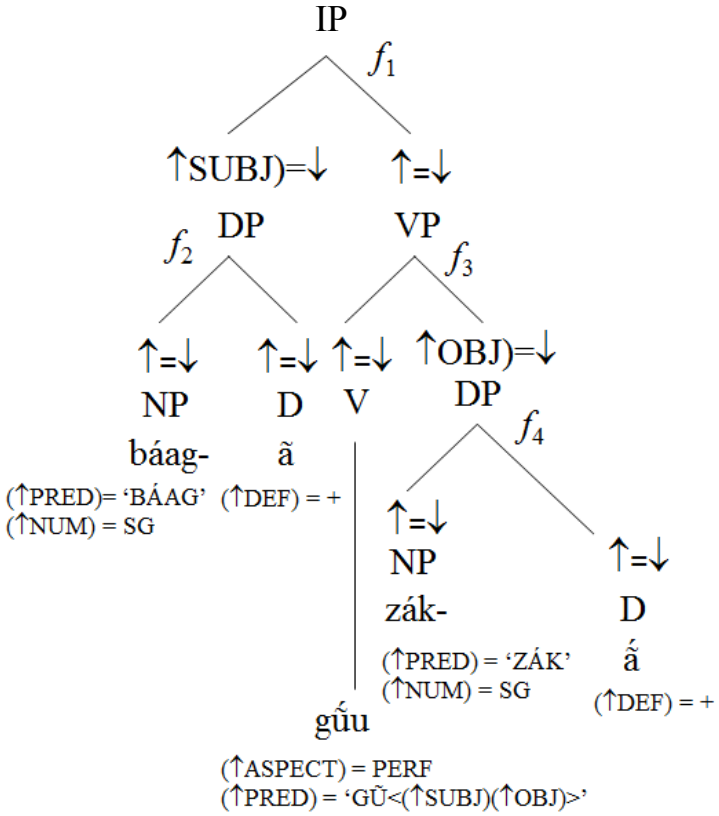


Functional structure (f-structure) contains relations of grammatical functions and features with values such as +/-, semantic forms or other subordered f-structures and is depicted as an attribute-value matrix. The schemata of lexical entries we saw above are replaced by an Instantiation Procedure which swaps metavariables for actual ones. Each node with a down arrow receives a variable. The result is a functional description (f-description).

(7)

$$\begin{bmatrix} \text{SUBJ} & \begin{bmatrix} \text{DEF} & + \\ \text{NUM} & \text{SG} \\ \text{PRED} & \text{BÁAG-} \end{bmatrix} \\ \text{ASPECT} & \text{PERF} \\ \text{PRED} & \text{'gũ (↑SUBJ)(↑OBJ)'} \\ \text{OBJ} & \begin{bmatrix} \text{DEF} & + \\ \text{NUM} & \text{SG} \\ \text{PRED} & \text{ZÀK-} \end{bmatrix} \end{bmatrix}$$

(8)



(9)

f_1 f_3

SUBJ	f_2	DEF	+
		NUM	SG
		PRED	BÁAG-
ASPECT		PERF	
PRED		'gũ (↑SUBJ)(↑OBJ)'	
OBJ	f_4	DEF	+
		NUM	SG
		PRED	ZÀK-

There are three conditions central to an f-structure: Completeness, consistency and coherence. The completeness condition prevents incomplete f-structures by demanding all functions of a PRED value to be represented in the local f-structure; Consistency stands for functional uniqueness of attributes and values while the coherence condition specifies every local PRED feature to select all their argument functions. Types of grammatical functions

include subject (SUBJ), object (OBJ), secondary object (OBJ_θ), obliques (OBL_θ), open complements (XCOMP), closed complements (COMP), adjuncts (ADJ), topic (TOP) and focus (FOC) (Bresnan 2001:97). The grammatical functions of an f-structure are called the *primitive element of syntax* in LFG (Bresnan 2001:96). They are divided into core functions when linked to arguments of the verb and noncore functions which constitute all other categories represented in a c-structure and hierarchically organised (see Keenan and Comrie 1977).

(10) $SUBJ > OBJ > OBJ_\theta > OBL_\theta > COMPL > ADJ$

Furthermore, functions are classified as argument or non-argument functions, depending on their relation to the predicate; non-argument functions such as topic, focus or adjuncts do not enter an argument relation with the PRED and are therefore not affected by the consistency condition. The last sub-classification is discourse functions which include subject, topic and focus, and non-discourse functions.

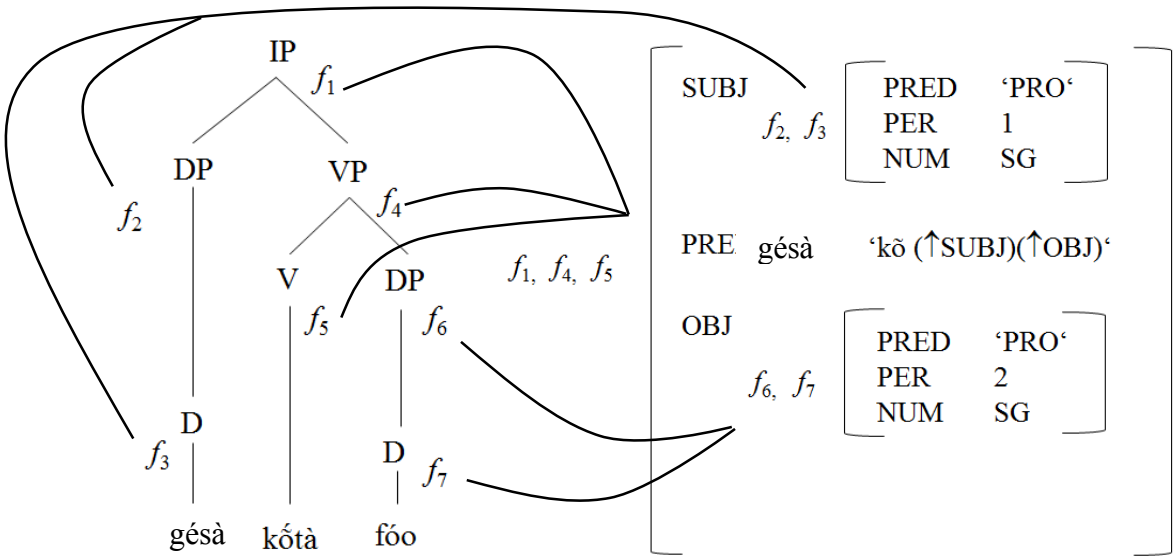
(11) *Argument and Non-Argument Functions (Börjars & Vincent 2004):*

<table>
<tr><td colspan="2" rowspan="2">Non-argument</td><td>TOP</td><td rowspan="3">Discourse function</td></tr>
<tr><td>FOC</td></tr>
<tr><td rowspan="5">Argument</td><td rowspan="3">Core</td><td>SUBJ</td></tr>
<tr><td>OBJ</td><td rowspan="5">Non-discourse function</td></tr>
<tr><td>OBJ_Θ</td></tr>
<tr><td rowspan="2">Non-core</td><td>OBL_Θ</td></tr>
<tr><td>COMP</td></tr>
<tr><td colspan="2">Non-argument</td><td>ADJUNCT</td></tr>
</table>

The two structures described above are independent but correspond with each other via a mapping process called structure-function correspondence which is carried out many-to-one and piecewise from c- to f-structure (Bresnan 2001:98) through assignment of variables.

Mapping is either based on endocentric principles for configurational languages, or lexocentric principles in non-configurational languages.

(12) màm gésà fóo
I saw you



A third level in LFG is the argument structure (a-structure) which contains lexical information about the number, type and organisation of arguments in the form of a predicator and its argument roles such as agent, patient, beneficiary, theme etc. The roles are ordered in a thematic hierarchy and classified semantically and subsequently syntactically by features. The a-structure also allows for empty (athematic) roles (Bresnan 2001:97).

(13) *Thematic Hierarchy (Bresnan & Kanerva 1989)***:**

AGENT > BENEFACTIVE > RECIPIENT/EXPERIENCER > INSTRUMENT > THEME/PATIENT > LOCATIVE

(14) *Features in LFG (Dalrymple 2005):*

	-R	+R
-O	SUBJ	OBL_θ
+O	OBJ	OBJ_θ

(15) *Syntactic features in the a-structure (Bresnan & Zaenen 1990):*

Patientlike roles:	θ
	[-r]
Secondary Patientlike roles:	θ
	[+o]
Other semantic roles:	θ
	[-o]

The mapping process from a- to f-structure is called lexical mapping theory (LMT) and involves for components: hierarchically-ordered thematic structure, classification of syntactic functions, lexical mapping principles and two well-formedness conditions, the function-argument biuniqueness which demands that each role must be associated with a unique function and conversely, and the subject condition which specifies that every predicator must have a subject (Bresnan 2001: 311). Lexical mapping first assigns features to the roles and optionally applies morphological operations to them. Subsequently the a-structure is mapped to grammatical functions according to the rules below (Bresnan 2001: 311).

(16) *Mapping to syntactic functions (Bresnan 2001:311):*

a. Subject roles:

(i) θ ↘ is mapped onto subject when initial in the a-structure

[-o]

otherwise

(ii) θ is mapped onto SUBJ

[r]

b. Other roles are mapped onto the lowest compatible function in the following partial ordering of argument functions:

SUBJ > OBJ, OBL_{θ} > OBJ_{θ}

Additionally to c-structure, f-structure and a-structure, I assume a phonologic and a semantic structure which I will describe in detail in the following subchapter.

3.2 The syntax-phonology-semantics interface

The level-based structure of the LFG framework enables an analysis of SVCs in Mooré where the connector *n* can be present on some levels and absent on others. As Kaplan and Maxwell (1988:303) state in their paper on constituent coordination, "[i]n lexical-functional grammar, surface constituents are taken to be the units of phonological interpretation. These may differ markedly from the units of functional or semantic interpretation, as shown in the analysis of Dutch cross serial dependencies given by /Bresnan et al. 1982/." Therefore, I will assume that *n* is represented in the c- and p-structure since it is phonetically realised. However, in the a-structure, f-structure and on a sematic level, SVCs are complex predicates as previously stated for Dagaare in Bodomo (1996, 2002). As a base for my analysis I take the proposal by Dalrymple and Mycock (2011:174) and agree in line with them to a "(…) a formal treatment of the interactions between prosody, syntax and semantics, motivated by a strong commitment to modular specificity, that is consistent with LFG's co-description architecture." This subchapter gives an overview of the theory behind the interfaces in LFG.[12]

LFG's modular subject results in sometimes great discrepancies between the levels. The c-structure, f-structure and a-structure, though connected overall, process linguistic information independently but they alone can't account for all phenomena. For these reasons, Dalrymple and Mycock assume interfaces for prosody and semantics which place the lexicon at the centre of the analysis as "(…) each lexical entry defines a relation between the s(yntactic)-form and of a word and its p(honological)-form (…)" (2011:177). Examples (17) – (21) are all taken from Dalrymple and Mycock (2011).

(17) *Lexical entries (Dalrymple & Mycock 2011:177):*

Lexical entries

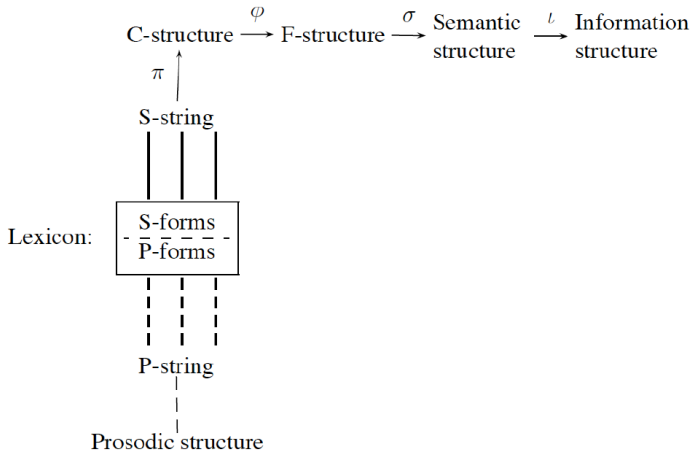
s-form *f-descrip* *p-form*	Anna N (↑PRED) = 'Anna' /æ$_S$.nʌ$_W$/	was I /wɒz/	studying V (↑PRED) = 'study⟨SUBJ⟩' /stʌ$_S$.di$_W$.ɪŋ$_W$/

at P (↑PRED) = 'at⟨OBJ⟩' /æt/	the D (↑SPEC) = 'the' /ði/	university N (↑PRED) = 'university' /ju$_W$.nɪ$_W$.vɜː$_S$.sɪ$_W$ .ti$_W$/

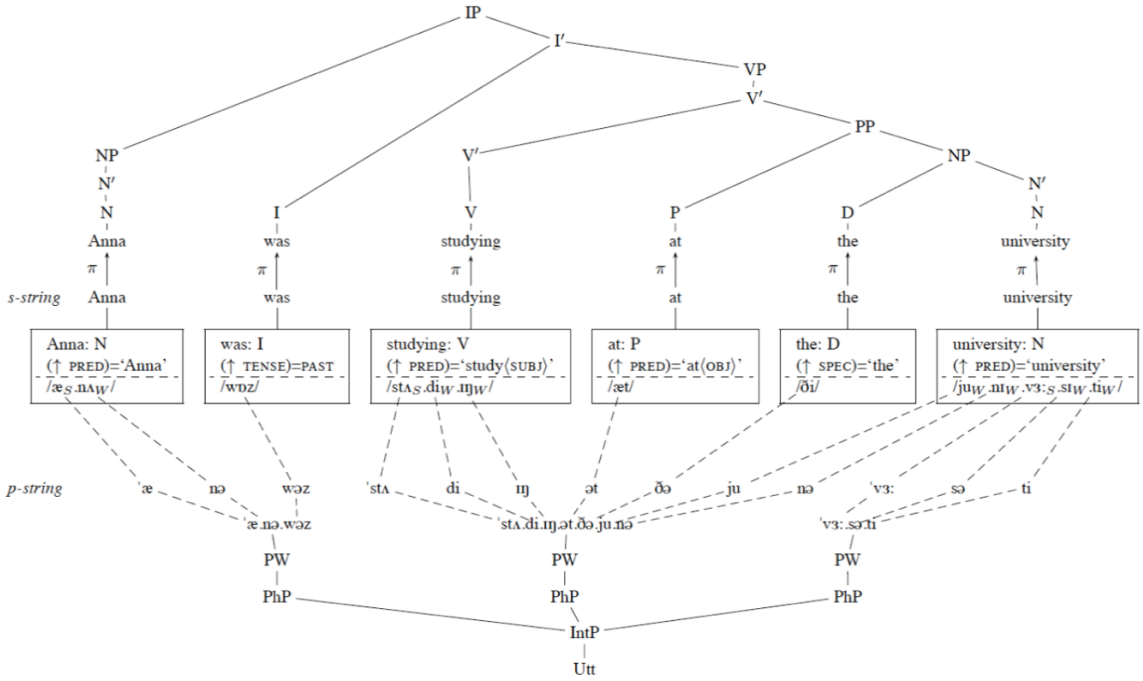
[12] Bögel (2015) gives a detailed account and model of the syntax-prosody interface going beyond the scope of this chapter and my analysis.

The lexical entry specifies the s-form, f-description and the p-form. Every line of the entry deals with its own macromodules. The same holds for the s-string and p-string: "In each case, the string's features are module specific: the s-string is composed of syntactic units and information relevant at the levels of syntactic structure including syntactic category, whereas the p-string is composed of phonological units and phonologically relevant information such as stress placement and syllable structure" (Dalrymple & Mycock 2011:178). The diagram below represents the structural approach:

(18) *Mapping model (Dalrymple & Mycock 2011:178):*



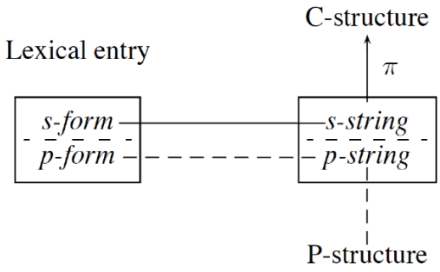
(19) *Default phrasing: (Anna was)$_{PW}$ (studying at the uni)$_{PW}$ (versity)$_{PW}$.*



(Dalrymple & Mycock 2011:181)

We can see that the lexicon represents the meeting point for the c- and p-structure, instead of a mapping process between other structures as seen on the top of the diagram. The structure in (19) shows the preliminary structure and how all different parts are connected by Dalrymple and Mycock (2011:181). It shows that the different levels don't exactly align as there can be fewer terminal nodes in one structure than in another. The string relates the structures to the strings through their lexical entries where the forms are linked to each other.

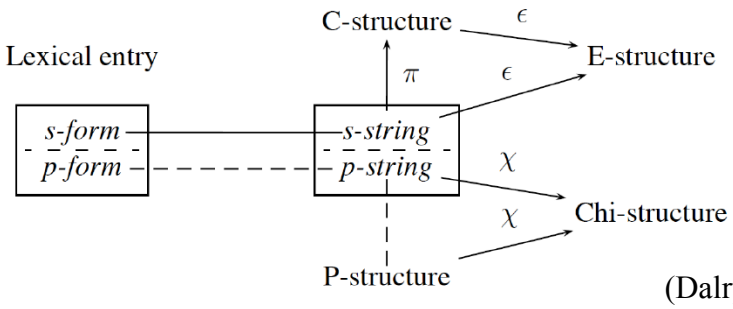
(20)



(Dalrymple & Mycock 2011:182)

In order for this model to work, information about both structures must be accessible simultaneously. For these reasons, a chi-structure – a protection from p-structure and p-string - and an e(psilon)-structure – a projection from c-structure and s-string – are introduced which pass relevant information through the structures and the string, where they are aligned[13].

(21)



(Dalrymple & Mycock 2011:184)

Their article does not suggest a direct connection between prosody and semantics but "semantic harmony" (2011:187) which has to happen at the syntax-prosody interface by making semantic information from a c-structure note available for the chi-structure. "At the

[13] "Chi-structure and e-structure contain information which is potentially relevant to the interaction between syntax, prosody and semantics, for instance for the purposes of alignment (…). In order for any alignment to occur though, similar information about syntactic constituent boundaries must also be available at the interface. This information is part of e-structure, which serves to pass it through c-structure and into the s-string, where the location of these boundaries is available to be aligned with the location of p-structure boundaries (…). The relevant interface principles are thus able to apply. They determine the appropriate degree of isomorphism and enforce this on the basis of information about syntactic and prosodic structure contained within e-structure and chi-structure, respectively." (Dalrymple & Mycock 2011:184)

interface, principles of semantic harmony require a meaning contribution that represents an attribute-value set member at e-structure to be a member of the corresponding chi-structure as well" (Dalrymple & Mycock 2011:187). In turn, this principle also applies to meaning contributions from the chi-structure which must also be present at e-structure which ultimately means also at c-structure which f-structure and the s-structure are projections of.

In the case of Mooré, the relevant information being passed on would be */n/* on the chi-structure and *$* on the s-structure. The lexical entry for *n* is shown below; the f-description is non-existing since there is no semantic value to be specified.

(22) *Lexical entry for the serialising connector in Mooré:*

s-form	$
p-form	/n/

Since */n/* is a purely phonetic item without semantic content, semantic harmony at the syntax-prosody interface cannot be established in this case since there is no meaning contribution present. Thus, there is no information at e- and in turn s-structure to be projected into f- and from there s-structure.

3.3 Lexical Functional representation of SVCs in Mooré: An example

3.3.1 C-Structure

LFG provides the ideal framework for cases such as SVCs in Mooré where the different structure properties don't align; the multilevel approach allows for grammatical phenomena to be represented differently on distinct levels. The "mismatch approach" (Belyaev 2015; Yuasa & Sadock 2002) constitutes a central point of my analysis. It states that three levels, c-structure, f-structure and s-structure, are involved in this process resulting in mismatches in coordination and subordination structures. Although SVCs in Mooré are neither on a semantic level, at c-structure I will follow this approach and assume them to be *pseudosubordinations* (see Yuasa & Sadock 2002). At f-structure, they are represented as complex predicates, following Bodomo's approach (1996, 2002). The mismatch approach has been first suggested by Culicover and Jackendoff for $_{LS}$*and* constructions in English which show properties of coordination as well as subordination (1997:198-199) and are thus termed pseudocoordination. In line with Belyaev, I will refer to these constructions as c-subordination since they show these properties at c-structure, but not on any other level (see below).

Nikièma (2002:123) assumes that certain SVC structures are neither subordinated nor coordinated after discussing the following examples:

(23a)	a	talldame	n	wãad	nemdã
	he	use+IMPERF+AFF+IO	PVC	cut+IMPERF	meat-the

„he uses the knife to cut the meat"

(23b)	a	talld	n	wãada	nemdã
	he	use+IMPERF	PVC	cut+IMPERF+AFF	meat-the

„he uses to cut the meat" (Nikièma 2003:122)

Nikièma says that *talle* "to use", can be replaced by *ne* „with", following the object complement of the first verb (24b), instead of a sentence like (24a) where *sv* would follow *talle*.

(24a) pagã talldame sʊ n wãad nemdã
woman-the use+IMPERF+AFF+IO knife PVC cut+IMPERF mea

"The woman uses the knife to cut the meat"

(24b) pagã wãa nemdã ne sʊ-kãngã
woman-the cut meat-the with knife-this

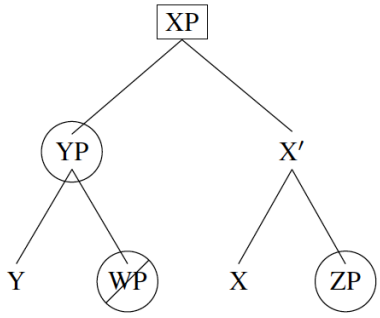
"The woman used this knife to cut the meat" (Nikièma 2002:122)

Nikièma concludes that examples (23a) and (23b) are simple phrases. However, as Bodomo (1993:46) states after analysing data from native speakers, "(…) in the examples without conjunctions [as *ne* is one], the speaker intends to conceive of the actions s/he expresses through these verbs as a single event while those expressed with the conjunction would preferably be treated as being separate, sequential events." In other words, there is a fine semantic difference between SVCs in (23a) and (23b), and (24b) so that the replacement of *talle* with *ne* will not produce the exact same meaning.

Thus, since I analysed *n* to be an empty connector after Cormack and Smith's model (1994), I assume it to be a c-subordinate with endocentric constituent structure. "Endocentricity in LFG is modeled via a version of X′ theory, thus c-subordination amounts to the requirement that the subordinate constituent occupy [sic!] the complement, specifier or adjunct positions of the X′ structure it is subordinate to. For the only non-endocentric category S, one may assume that all constituents immediately dominated by S are c-subordinate to S." (Belyaev 2015:305) Belyaev (2015:305) states the generalization as follows:

> A maximal projection B is c-subordinate to a maximal projection A iff both of the following are true:
> – A dominates B ;
> – Every maximal projection that dominates B, if it is not B itself, dominates A

(25)



(Belyaev 2015:305)

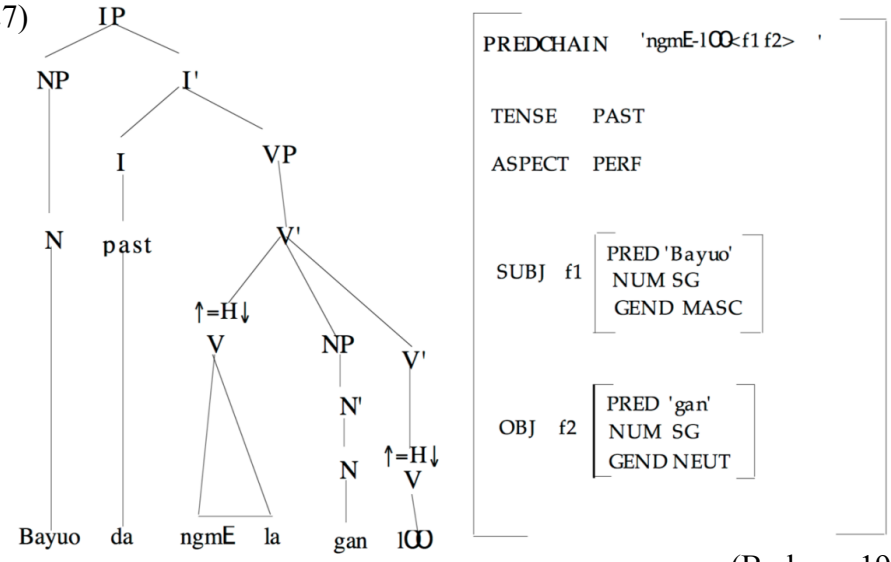
Belyaev's approach also goes further in terms of semantic representation and mapping while in the case of this thesis, these extensions will not be described for the sake of coherence; the phenomena described in his article and this thesis differ, thus a different approach for other levels is appropriate here.

However, there seems to be a problem with this analysis: "While coordinate structures can be considered to be multi-headed, with each of the conjuncts determining the external distribution of the coordinate phrase, subordinating constructions have only one head, with the subordinate constituents subcategorized for by this head (…)" (Belyaev 2015:304). Subordinations are generally considered to contain a single head while, as seen in chapter 2.3.2.4, SVCs are assumed to have double-headed VPs (see Baker 1989:519). Bodomo (1996: section 5.2.2) recognised this problem when proposing a flat f-structure with one complex predicate for SVCs (see chapter 3.3.3 below). He combines analyses by Alsina (1994) and Baker (1989).

(26) ↑ = H ↓ = def (↑ \PRED) = (↓ \PRED)
(↑ PRED) = (F(↓PRED), (→ H PRED)) (Alsina 1994:33)

Bodomo (1996: section 5.2.2) explains that "(…) if a c-structure node has the head equation, its features are identical to the features of its mother node M except for PRED, and its PRED feature composes with that of its head sister node to yield the PRED feature of M". Combining this with Baker's (1989) approach of primary and secondary heads further, the following structure from Bodomo (1996) is unproblematic:

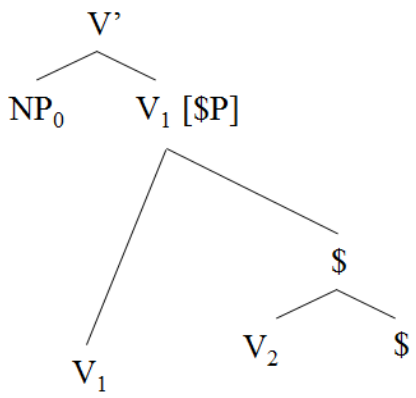
(27)



(Bodomo 1996: section 5.2.2)

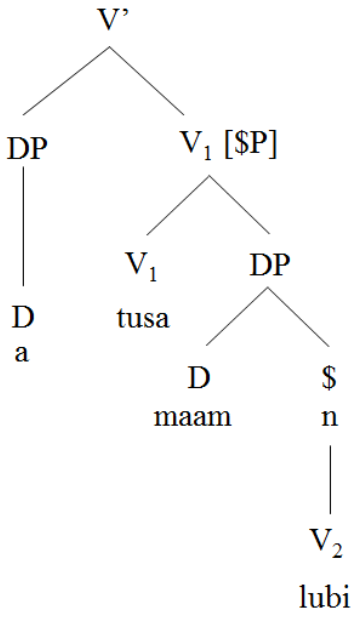
As already discussed in chapter 2.2.2, Cormack and Smith (1994:77) propose the following structure for serial verb constructions:

(28)



Below we see the representation of an SVC in Mooré at c-structure for the sentence *A tusa maam n lubi (S/he pushed me down).* While it is commonly assumed in LFG that "[e]ach note of the constituent structure is related to its corresponding functional structure by a functional correspondence (…)" (Dalrymple 1999b:465), my analysis slightly modifies this approach. Since *n* is a serialising connector, it is a constituent and therefore present as *$* in the c-structure, tough not connected to any functional description simply because there is none; the connector is empty at f-structure.

(29) *c-structure*:



3.3.2 A-Structure

The argument structure for the example sentence *A tusa maam n lubi (S/he pushed me down)* is the one of a complex predicate*, tusa – lubi*, which is the result of the merging process of identical arguments (see Bodomo 1996, section 5.2.1). Thus the a-structure is as depicted below:

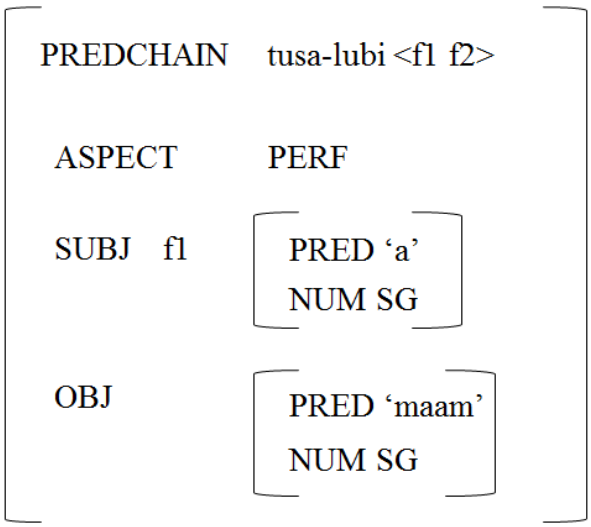
(30) *a-structure:*

tusa – lubi <Ag Pt>
[-o] [-r]
| |
S O

3.3.3 F-Structure

Bodomo already stated in 1996 that „[s]erial verb constructions (SVCs) represent an interesting case of mismatch between syntax and semantics“ (1996:1) and proposes a model of complex predicates for SVCs. While his case revolves around Dagaare, which differs from Mooré in the sense that Dagaare SVCs, as most others, do not show a connector, I assume the underlying representation for the two closely related languages to be the same at f-structure.

(31) *f-structure:*



We see that at c-structure, there are two heads which are assigned to only one f-structure head. *A* is the subject at both structures; *maam* is the object at both structures.

3.3.4 P-Structure and S-Structure

P- and s-structure have been described in chapter 3.2. In the case of SVCs in Mooré, a meaning representation for *n* is non-existent; therefore, no information can be passed on.

(32) *Lexical entry:*

s-form	a	tusa	maam
f-descrip	D (↑PRED)='a'	V_1 (↑PRED)='tusa'	D (↑PRED)='maam'
p-form	/a/	/tusa/	/mã:m/

PREDCHAIN

s-form	$	lubi
f-descrip		V_2 (↑PRED)='lubi'
p-form	/n/	/lubi/

3.4 Summary

In this chapter I have answered my last research question (How can serial verb constructions in Mooré be represented within a current linguistic framework?) by presenting the analysis where I summarised important principles of the lexical functional framework to provide an explanation the the serialising connector in Mooré. Due to the level-based approach of the framework, mismatches between the structures can be accounted for, thus making it possible for *n* to be realised on the s(yntactic)- and p(honological)-structure but not present on the f(unctional)- and s(emantic)-structure. A description of Dalrymple & Mycock's model of the syntax-phonology-semantics interface (2011) has made clear how the different structures interact with each other and how information is processed. These principles have been applied to an SVC in Mooré in the last part of the chapter, where I provided a subordinated c-structure, f- and a-structure as complex predicates and a lexical entry for the SVC including the p-structure.

4 Conclusion

The aim of this thesis was to discuss the existence of serial verb constructions in Mooré and provide an analysis within a theoretical framework. At the beginning, three research questions were posed which have been answered in the course of my thesis:

1. What is the status of multi-verbal constructions in Mooré?
2. Which theoretical analysis can explain the presence of the *n* connector in serial verb constructions in Mooré?
3. How can serial verb constructions in Mooré be represented within a current linguistic framework?

Mooré has various multi-verbal structures in which the connector *n* is always present. For this reason, clarifying their status to see if any of them qualify as serial verb constructions constituted the first step. For this, I started by outlining definitions and constraints, as repeated below, to narrow the discussion to its essentials.

Serial verb construction: a definition

> A serial verb construction is a monoclausal construction consisting of multiple independent verbs with no element linking them and with no predicate-argument role between the verbs.
>
> key components of the definition
> a. construction
> b.monoclausal
> c. independent verbs
> d. no linking element
> e. no predicate-argument relation between the verbs (Haspelmath 2015:29)

Constraints on serialization:

i. **The subject sameness constraint:** All the verbs in an SVC share a single structural or functional subject.

ii. **The TAP constraint:** In an SVC there is only a single TAP (tense, aspect and polarity) node.

iii. **The connector constraint:** There is an absence of conjunctions or complementizers within the string of verbs.

iv. **The object sharing constraint:** All the verbs in the series share referentially identical direct objects.

v. **The predicate constraint:** Finite verbs expressing different parts of the same event occur together [single eventhood].

(Bodomo 2002:33)

The connector *n* in Mooré seemed to pose a problem since it is not in accordance with the definition and constraints I set above. However, I decided not to opt for Haspelmath's suggestion where languages which fulfil most but not all criteria should be classified as some sort of "light" SVC languages having "seriational constructions". Instead, I went for a language-specific approach where constraints may vary from one language to the other. This view was supported by the fact that the majority of Mabia (Gur) languages, four selected ones shown in 1.3, exhibit SVCs as frequent constructions. Dagaare, Kusaal, Gurene and Dagbane/Mampruli are not only geographically but also linguistically close to Mooré, thus making it probable for Mooré to have them as well. However, the distribution of the phenomenon in related languages alone cannot account for their existence in Mooré. Consequently, an examination of existing literature and data was conducted. In chapter 2, I have listed a vast amount of data previously published in favour of SVCs in Mooré, identifying eleven types of SVCs in the language, repeated below:

1. Instrumental
2. Benefactive
3. Goal
4. Comitative
5. Locative
6. Deictic
7. Causative
8. Circumstantial verb – main verb
9. Multi-verbal constructions where V_2 is a complimentary predicate
10. Multi-verbal constructions with composed verbs
11. Multi-verbal constructions with reduplication

Applying the criteria set out in chapter 1.2, a distinction between different multi-verbal structures and serial verb constructions was drawn in line with the majority of literature on the topic (Kouraogo 1976, Nikièma 2003, Zongo 2014) which proposed SVCs as existing in Mooré, with Kouraogo also providing a grammar framework for it. However, the framework of transformational grammar is not commonly in use anymore, hence my attempt to present

the phenomenon within a more current framework to answer questions such as: Why does no other Mabia (Gur) language show a linking element in SVCs? The absence of a linking element constitutes a key criterion for SVCs; it is a major factor to distinguish them from other multi-verbal structures. Analysing the data, it is clear that *n* behaves differently depending on the kind of construction it is found in. Example (1) below is a consecutive construction which, in many ways, resembles an SVC. The verbs have to be in a logical sequence and are connected by *n*.

(1)	Pògyáangã	tuu	yẽgn(a)	n	dʊg	n
	old-woman-the	dig-up-PERF-AFF	roots	n	boil-PERF	n

sò
bathe-PERF

"The old woman dug up some roots, boiled them, and bathed (with the hot water)"

(Kouraogo 1976:56)

An analysis for *n* in this context does not pose a problem; as seen in section 2.2.1.1, there are semantic differences between connectors in Mooré. In the case of consecutive and other multi-verbal constructions, *n* is a regular connector. However, the multi-verbal constructions in 2.1.2 all violate at least one constraint for SVCs, such as allowing verbs to be negated independently, as in the consecutive construction in (2):

(2)	pògyáangã	tuu	yegn(a)	n	dʊg	n
	old-woman-the	dig up-PERF-AFF	roots	n	boil-PERF	n

pa	so	ye
NEG	bathe	NEG

"The old woman dug up some roots, boiled them, (and/but) did not bathe (with the hot water)"

(Kouraogo 1976:58)

Thus, *n* has two functions; one as a regular connector, although with fine semantic and syntactic differences as seen in chapter 2.2, and one as a "serialising connector" as in the SVC in (3). Unlike example (1) above, the the verbs in the structure cannot, amongst other constraints, be negated independently.

(3)	A	zoee	be	n	wa	wob	tɪɪgã	biis
	3s	runPERF	there	n	comePERF	pickPERF	tree	children

ka
here

S/he ran here (and) collected berries.

To provide a theoretical base for the occurrence of *n* in SVCs, I adapted Cormack and Smith's model (1994) who propose SVCs to be subordinate structures possessing a connector *$* which is mostly covert, and concluded that in the case of Mooré it is overt, albeit still semantically empty. With this analysis, I have addressed my second research question: Which theoretical analysis can explain the presence of the *n* connector in serial verb constructions in Mooré? However, Bodomo (2002) convincingly suggests SVCs to be complex predicates which at first does not seem to conform with the assumption of subordinates. Furthermore, this analysis for *n* still leaves us without a grammar model which can account for the mismatches on different grammatical levels.

A framework allowing for this is Lexical Functional Grammar which consists of different structures who are connected through mapping processes but independent from each other, thus making it possible for *n* to be represented on some levels but absent on others. The result is the lexical entry below:

Lexical entry: A tusa maam n lubi

s-form	a	tusa	maam
f-descrip	D (↑PRED)='a'	V_1 (↑PRED)='tusa'	D (↑PRED)='maam'
p-form	/a/	/tusa/	/mã:m/

PREDCHAIN

s-form	$	lubi
f-descrip		V_2 (↑PRED)='lubi'
p-form	/n/	/lubi/

The serialising connector *n* is represented as *$* in the s-structure while its p-form is */n/*. In the f-structure, *n* is not present since it is semantically empty and the SVC still shows the

properties of a complex predicate with *tusa* and *lubi* forming PREDCHAIN. This formalisation successfully provides an account for serial verb constructions in Mooré within the framework of Lexical Functional Grammar and answers my last research question: How can serial verb constructions in Mooré be represented within a current linguistic framework? At this point I want to stress the limitations of this study. By no means does my thesis claim to be a complete analysis of the phenomenon nor does it attempt to undermine any of the valuable work previously done in this subject area. Rather, it aims to provide an attempt of representing serial verb constructions in Mooré in a current grammar model. I am, however, aware, that previous analyses in different frameworks exist, as well as the possibility of analyses within other grammar frameworks which I have not considered in my thesis. Furthermore, rather than a serialising connector, *n* might be a different grammatical element; an interesting suggestion by Prof. Adams Bodomo is the possibility of *n* being a consequential marker. Further analyses on this thought, and also with the remaining types of SVCs in the language would go beyond the scope of my thesis and will be left to future research.

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Appendix

Benefactive:

1.	A	tomame	n	kõ	maam	
	3s	workPERF	n	givePERF	me	

S/he worked for me.

Causative (or action – causation):

2.	A	tusa	maam	n	lubi
	3s	pushPERF	me	n	CAUS-fallPERF

S/he pushed me down.

3.	A	tusa	maam	n	luı
	3s	pushPERF	me	n	fallPERF

S/he pushed me and fell.

Inceptive take-serialisation:

4.	A	rıka	seba/sebr	n	kõ	maam
	3s	takePERF	book	n	givePERF	me

S/he gave me the book.

5.	A	tomame	n	sa
	3s	workPERF	n	finishPERF

She stopped working.

Instrumental take-serialisation:

6.	A	rıka	sʊʊg	n	wãag	nemdã	n	wãabe
	3s	takePERF	knife	n	cutPERF	meat	n	chew

S/he cut the meat with a knife and ate it.

Deictic:

7.	A	zoeeme	n	wa	ka
	3s	runPERF	n	comePERF	here

S/he ran here / s/he came by running.

Subjecthood constraint:

8.	A	zoeeme	n	wa	n	dık	sʊʊga	n
	3s	runPERF	n	comePERF	n	takePERF	knife	n

kõ	maam
givePERF	me

S/he ran here and took the knife for me.

The TAP constraint:

9.	A	zoee	be	n	wa	wob	tııgã	biis
	3s	runPERF	there	n	comePERF	pickPERF	tree	children

ka
here

S/he ran here (and) collected berries.

Connector constraint:

10.	A	segla	riibã	n	dı
	3s	cookPERF	food	n	eatPERF

S/he made food and ate it.

Predicate constraint / reduplication:

11.	A	wukame	n	wuk	n	wuk	taamã
	3s	pickPERF	n	pickPERF	n	pick	sheafruits

S/he picked sheafruits (many times/a lot).

12.	A	riime	n	diPERF	n	diPERF	taamã	
	3s	eatPERF	n	eat	n	eat	sheafruits	

S/he ate sheafruits (many times/a lot).

13.	A	miimame	n	miim	taamã	n	di	n
	3s	collectPERF	n	collectPERF	sheafruits	n	eatPERF	n

di
eatPERF

S/he collected and ate sheafruits (many times/a lot).

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Abstract of Master's Thesis

The Serialising Connector in Mooré

Serial verb constructions (SVCs) have attracted the interest of linguists for decades; they are a frequent phenomenon in Mabia (Gur) languages but have been the topic of debate in the Mabia language Mooré, since its multi-verb constructions show a linking element which most common definitions of SVCs do not allow. This thesis discusses multiple definitions and constraints of SVCs and provides an overview of previous and my own research on SVCs in Mooré to analyse the status of multi-verbal constructions in the language. On this fundament, it develops a theoretical analysis of a serialising connector in Mooré and subsequently presents an account of this theory within the framework of Lexical Functional Grammar (LFG).

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Abstract der Masterarbeit

Der Serielle Konnektor in Mooré

Serielle Verbkonstruktionen sind seit Jahrzehnten von großem Interesse für LinguistInnen. Sie treten häufig in Mabiasprachen (Gursprachen) auf, wurden allerdings in der Mabiasprache Mooré debattiert, da diese ein verbindendes Element in multiverbalen Konstruktionen aufweist. Dies ist laut den gängisten Definitionen von seriellen Verbkonstruktionen nicht zugelassen. Diese Arbeit bietet eine Diskussion mehrerer Definitionsansätze zu seriellen Verbkonstruktionen und gibt einen Überblick über die bisherige und meine eigenständig durchgeführte Forschung. Anhand der besprochenen Daten wird der Status von multiverbalen Konstruktionen in Mooré dargelegt. Darauf aufbauend folgt die Entwicklung einer theoretischen Analyse des seriellen Konnektors in Mooré und dessen Repräsentation im Rahmen der Lexikalisch-Funktionalen Grammatik (LFG).