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Original Research Article

A Transitivity Analysis of the Clause in SiLozi Language (K21)

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Abstract

The paper uses Systemic Functional Linguistics (henceforth SFL) to conduct a transitivity analysis of the clause in the siLozi language (K21) spoken in Zambia. The paper explores how the experience of the material and non-material world is construed through the grammar of the clause. The paper draws insights from Martin and Rose's (2003) SFL to analyse the clause in siLozi in terms of what kind of clausal activities are undertaken in the siLozi clause's PRTs, PRSes and CIRs; how the PRTs in these PRS-types are described; how they are classified and what they are composed of. The transitivity study of the clause in siLozi reveals that just like in English, the siLozi language expresses its clausal experience through the three major PRS-types namely MaPs, MePs and RePs. The minor PRS-types – VePs, BePs and ExPs – not only exist in siLozi but also construe experience both uniquely and also similar to English. Furthermore, the discourse structures in the process-types are deliberately selected and situated for various reasons. The findings have implications in using SFL transitivity in the teaching of some aspects of grammar such as comprehension in siLozi in schools in Zambia and in other countries like Namibia where siLozi is taught.

Keywords: Clause, process-types, transitivity, SFL, siLozi.

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1. INTRODUCTION

Drawing from Halliday (1966), Halliday (1971), Martin & Rose (2003), Eggins (2004) and Mwinlaaru (2016), the paper uses Systemic Functional Linguistics (henceforth SFL) to conduct a transitivity analysis of the clause in siLozi language. SiLozi is a Bantu language spoken in the western part of Zambia in southern Africa. The study is necessitated by a realisation that although several studies have explored the clause, such studies have mostly looked at the clause in English (e.g. Martin & Rose 2003; Halliday & Webster 2009; O'Donnell 2012) while only a few have looked at SFL concerning indigenous African languages (e.g. Mwinlaaru 2016).

The introduction to the study is sub-divided into two parts. The first part presents the geo-linguistic distribution of the siLozi language. The secondary part deals with the linguistic classification of the siLozi language according to the following linguists; Greenberg, Doke and Guthrie.

1.1 SiLozi Language: Geo-linguistic Distribution

SiLozi is mostly spoken in Zambia, a landlocked country in southern Africa that is slightly below the Equator but above the Tropical of Capricorn. The country spans a total surface area of 752, 612 square kilometres and has a population of about 18 million people distributed across the ten provinces of the country. Zambia's neighbours are Angola, Botswana, Namibia, Mozambique, Zimbabwe, Tanzania, Malawi and the Democratic Republic of Congo (Central Statistics Office 2022). SiLozi is mostly spoken in the Western part of Zambia although the geo-linguistic distribution of the language permeates beyond the province to include other exterior cities such as Livingstone in the Southern Province of Zambia. The map below shows the geo-linguistic distribution of the language in Zambia:

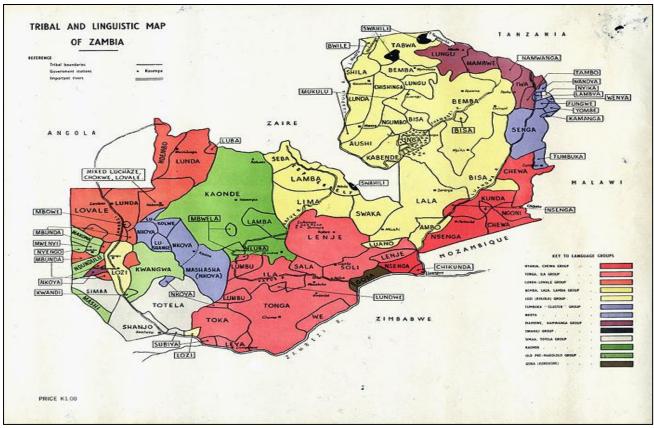


Figure 1: The linguistic map of Zambia (Source: Brelsford 1965: iv)

1.2 SiLozi Language: Linguistic Classification According to Greenberg, Doke and Guthrie

For us to appreciate a transitivity analysis of the grammar of the clause, it is equally important to begin by identifying and classifying siLozi in terms of the language family and language group it belongs to since each language family reflects a certain pattern of linguistic features that make languages belonging to such a family linguistically unique. Being an African language, the linguistic classification of siLozi can be understood in the context of three scholars: Doke, Greenberg and Guthrie who use a linguistic classification of African languages and propose terms that aid in identifying and classifying a language.

Based on Doke, Greenberg and Guthrie's methods of identifying and classifying African languages, the siLozi language can be linguistically identified and described as follows: according to Greenberg, siLozi is a Bantu language that belongs to the Bantoid sub-group of the Benue-Congo Group of the Niger-Congo Branch of the Congo-Kordofanian Family. As for Guthrie, he places siLozi in Zone K which is made up of the following language Groups K10, K20, K30 and K40. Guthrie treats the siLozi language as K21 to mean that it is in Group 20 and is the first language in this group. Doke on the other hand classifies Silozi as 60/2/4.

That is to say, siLozi is classified as belonging to Zone 60 of the Sotho Group of languages and Silozi is the fourth language in this group. Doke argues that Silozi is synonymous with Kololo and Rotse.

A similarity can be drawn between Greenberg, Guthrie and Doke about how they classify siLozi in that they all classify siLozi as a language and not a dialect. However, differences exist between these linguists: while Greenberg classifies siLozi as a Bantu language together with the other Bantu languages, Doke and Guthrie classify siLozi in a more specific manner as K21 and 60/2/4 respectively. Secondly, Guthrie classifies siLozi as a stand-alone language (K21) away from Sotho while Doke classifies siLozi under the Sotho Group and argues that siLozi is synonymous with Kololo and Rotse. This paper harmonises the three positions of Doke, Greenberg and Guthrie's classification of siLozi and operationalises the meaning of siLozi language to mean a stand-alone Bantu language that is similar in vocabulary to other Bantu languages such as Tswana and Sotho (see Guthrie 1948; Greenberg 1967).

The present study is significant because it relates SFL to languages other than English and in so doing presents the culture of the siLozi society by focusing on the key resources by which meaning in that

language is constructed (Mwinlaaru 2016). Secondly, from the pedagogical standpoint, this study is relevant to students and the teaching of language aspects such as those of comprehension in siLozi. Studies conducted in some parts of Africa indicate that students and teachers usually fail to identify and appreciate the art of language embedded in a text because teaching and learning of language in most parts of Africa (including Zambia) are based on thematic analysis.

Therefore, this paper is relevant in that it demonstrates how linguistic choices contribute to a complete understanding of a text. To achieve the above analysis of the transitivity of the siLozi language, the study answers the following questions: What kinds of activities are undertaken in the siLozi clause? How are the participants in these process-types described? What is the classification and composition of participants in process-types? The paper progresses as follows: literature review, theoretical locale, methodological perspectives, results and discussions and conclusion.

2. The Current Study's Expression in the Locale of Previous Studies

2.1 Studies Conducted on the SiLozi Language

Among the earliest written studies on siLozi is that of Stirke & Thomas (1916) who conducted a comparative study of Sikololo as spoken by followers of Sebitwane; Silui (or siLozi) as spoken by the people that Sebitwane conquered in the Barotse plains of Western Province in Zambia; and Simbunda, a language spoken by the Mbunda people in the Western Province of Zambia. The study aimed to establish similarities and differences that exist between Sikololo, Silui (another name for siLozi) and Simbunda to aid in speaking the languages. The findings of the study established that the three languages are similar majorly because they are geographically close to each other, hence heavy borrowing. However, differences exist in that while Sikololo and Silui exhibit similarities in vocabularies due to the history of intermarriages between Sebitwane and the Lozi people, Simbunda is significantly different from the other two.

Unlike Strike and Thomas (1916) who compared the vocabulary of Sikololo, Silui (siLozi) and Simbunda, Jalla (1937) conducted a study on the elementary grammar of the siLozi language. Jalla's (1937) study was amongst the earliest that shifted from mere listing of vocabulary to grammar. The study was conducted to document the grammar of the siLozi language for handy use by other missionaries. Jalla's (1937) study looked at the phonological system of siLozi in terms of vowels and consonants and proceeds to look at syllable formation and grammaticality of words in context.

Another notable study conducted on the silozi language is that of Gluckman (1942) whose study is titled *Prefix Concordance in Lozi as a lingua franca of*

Barotseland. The study explored the nominal class system of siLozi and how the concord nominal prefixes in siLozi relate at various linguistic levels to form grammatically well-formed sentences in siLozi. The study established that nominal classes in siLozi have the semantics of their own. For example, the class 1 prefix Mu-would always refer to a 'person' in the singular form and this prefix can only take specific prefixes in concord to form grammatically correct sentences. This is to mean, for example, that prefixes that denote trees cannot be used to substitute prefixes that denote or are related to humans in sentences.

Lewanika (1949), Kamitondo (1958) and Burger (1960) conducted studies on siLozi by focusing on siLozi vocabulary. They looked at siLozi in terms of wordlists in the language and their equivalency in English. Lewanika's (1949), Kamitondo's (1958) and Burger's (1960) studies on siLozi highlighted faster ways to master siLozi language using vocabulary. Such a focus on lexicon proficiency and appropriacy of lexicon use has permeated the linguistic levels of morphology, syntax and pragmatics, and less of phonology.

Among the most notable works on siLozi is Mwisiya's (1977) study on siLozi titled Introduction to Silozi Grammar. The book is a detailed analysis of siLozi through several linguistic analyses. At the phonological level, Mwisiya (1977) identified the phonemic system of siLozi as that made up of vowels, consonants and the suprasegmental phoneme of tone. Mwisiya (1977) noted that siLozi is made up of five vowel systems (/a, e, i, o, u/) and some consonants. The vowels and consonants are said to be crucial in syllable formation and all syllables in siLozi are unchecked (end in a vowel) and, therefore, are open. Other observations made by Mwisiya (1977) concerning the phonology of Silozi are that: the nucleus of syllables in Silozi are always vowels; Silozi does not have a coda in its syllable structure while the onset may or may not be there; and that there are several phonological and morphophonological rules governing the siLozi phonemes. At the morphology level, Mwisiya (1977) argued that siLozi forms its words using a nominal class system where nominal prefixes are used to form words even though other words are also formed through infixation and suffixation. Syntactically, Mwisiya (1977) observed that the sentence structure in siLozi is predominantly S-V-O (Subject - Verb -Object).

2.2 Studies on SFL and Transitivity

Many studies have employed the transitivity model. Among these studies are Halliday (1971), Kennedy (1982), Adika & Denkabe (1997), Hubbard (2015), Alaei & Saeideh (2016); Muhammad & Banda (2016), and Mwinlaaru (2016). Halliday (1971) examined the stylistic significance of transitivity patterns in Golding's *The Inheritors* from the socio-cognitive perspective using three narrative structures to examine

Golding's use of transitivity patterns. The study identified two major divisions in the narrative of Golding's novel: the first division is the narrative about the world of the Neanderthal people, their view of the world and their tribe; and the second part of the narrative is the ending of *The Inheritors* whose point of view shifts from the perspective of the people to that of the tribe. Between the two narrative divisions of *The Inheritors* lies a third narrative "whose syntactic organisation marks a smooth transition from the first part of the narrative to the second part" (Mwinlaaru 2012:83).

Kennedy (1982) drew on Halliday's (1971) use of the transitivity model in Goldwin's *The Inheritors* to explore characterisation in Conrad's *The Secret Agent*. Kennedy's (1982) study established that Conrad employs two techniques to develop the narrative in his passages: first, he places inanimate entities in the subject position of material clauses and secondly, he uses a lot of agentless passive constructions "so that the Actors of the material processes in the clause could be suppressed" (Mwinlaaru 2012:58).

Adika and Denkabe (1997) conducted a study of AyiKwei Armah's Beautiful Ones Are Not Yet Born by amalgamating the transitivity framework with Grice's (1975) co-operative principle and the concept of referring terms. The study concentrated on the opening scene of the novel which narrates a confrontation between two characters - the bus conductor and the character only identified as 'the man'. The analysis by Adika and Denkabe (1997) involved, firstly, a raw analysis of the transitivity patterns in the passage; followed by organising the participants in the transitivity patterns into definite referring terms (such as noun phrases with the definite article the) and indefinite referring terms (such as quantifiers, numerals and phrases with the indefinite article a) and analysis based on the next mentions in terms of their implicitness or explicitness; and thirdly, interpretation of findings in an integrated manner. The study established that explicitness in the novel focuses on the body parts of characters (e.g. his mouth), discharges from their bodies (e.g. the man's spittle) and their participant roles (e.g. the sleeper). Additionally, the study concluded that Beautiful Ones Are Not Yet Born is peculiar because the writer builds a narrative whose explicitness focuses on the body parts of the characters. Furthermore, the whole of Chapter One of the novel violates the cooperative principle's maxims of quantity and quality, though the maxim of relevance and quality is maintained.

Hubbard (2015) studied the character of Aurora, a female character in Saliman Rushdie's *The Moor's Last Sigh*. The study examined transitivity patterns in selected passages of the novel to show how such lexico-grammatical features are used to emphasise and show that it is Aurora and other women who dominate not only the narrative of the text but also dominate the men. To achieve its objective, the study

appealed to SFL and the system of transitivity. Hubbard's (2015) study used transitivity because "[transitivity] is concerned with a coding of the goings on who does what with whom/what, where, when, how and why ... in terms of process, its participants and the circumstances" (Hassan 1988:63). Hubbard's (2015) revealed that Aurora is represented more in the actions as compared to Abraham who appears in passive ones through passive participant roles of Carrier, Circumstance and particularly Goal. The study further concluded that the women in *The Moor's Last Sigh* are at the centre of the novel while men occupy the Hubbard's (2015)study periphery. Montgomery's (1993:141) argument that "if the character is 'the major totalling force of fiction', then it is important to discover how characters are constructed and based on what kinds of linguistic choices."

In addition, Alaei & Saeideh (2016) studied the ideational metafunction in Joseph Conrad's *Heart of Darkness* to establish how ideology is expressed in *Heart of Darkness*. By examining what kind of lexicogrammatical choices are used in the transitivity system to convey the author's ideological meaning, the study offered a textual demonstration of text analysis. The study concluded that Conrad used foregrounding in transitivity patterns to contrast the imperialistic and racist ideologies being opposed through the frame narration of the first part (which is narrated by Marlow).

Muhammad & Banda (2016) also appealed to SFL's transitivity in their study titled Mandela in the Arabic Media: A Transitivity Analysis of Aliazeera Arabic Website. They used an eclectic approach that combined SFL, Critical Discourse Analysis (CDA) and CL to explore how Mandela as a character has been portrayed in Arabic media. Their study established that the transitivity manipulation of process-types accounts for how Mandela is represented. Muhammad & Banda (2016) further established that material processes in which Mandela is the actor or main agent are frequently used in the transitivity obtained from the Aljazeera Arabic website. Further, the study established that discourse structures appear deliberately selected "not only for the sentimental reasons but also to evoke readers' sympathy regarding his wife's infidelities" (Muhammad & Banda 2016:1). The study concluded that transitivity patterns and varying statistical distribution of these patterns portray Mandela as a focal point for strength in the face of adversities such as political and socio-economic turmoil. Muhammad and Banda's (2016) study is similar to that of Kapau et al., (2019) who used CL and SFL to explore the characterisation of Mathilde in the ideational metafunction of Guy de Maupassant's *The Necklace*.

In the recent past, Mwinlaaru (2016) conducted a study titled *A Systemic Functional Description of Dagaare*. The study was the first of its kind to provide a Systemic Functional Grammar of Dagaare with a general

objective of examining the lexico-grammatical systems that realise interpersonal, textual and ideational meanings at clause rank. Mwinlaaru (2016) used discourse data widely used by speakers in Ghana and Burkina Faso. The data were subjected to analysis and descriptive interpretation by the general theory of language formulated in SFL, typological generalisations and transfer comparisons. The findings revealed that even though SFL can be applied to an African language, the findings can never be the same as in English because languages differ even amidst language universals.

2.3 Relatedness and Differences between the Present and Previous Studies

Like studies conducted on the siLozi language by Stirke & Thomas (1916), Jalla (1937), Gluckman (1942), Lewanika (1949), Kamitondo (1958), Burger (1960), and Mwisiya (1977), this article explored the grammar of the clause in siLozi. However, while studies earlier conducted on siLozi focused on vocabulary (e.g. Stirke & Thomas 1916; Lewanika 1949); grammar (Jalla 1937; Mwisiya 1977); and morphology (e.g. Gluckman 1942 & Mwisiya 1977); this study focuses on the grammar of the clause in siLozi from an angle of SFL and transitivity. To the best knowledge of the researcher, no study has ever been conducted on the siLozi language before. Therefore, such a study of silozi added more knowledge to existing linguistic literature on siLozi.

Similarly, the present study is similar to SFL and transitivity studies conducted by Halliday (1971), Kennedy (1982), Adika & Denkabe (1997), Hubbard (2015), Alaei & Saeideh (2016), Muhammad & Banda (2016), Mwinlaaru (2016), and Kapau *et al.*, (2019). Particularly, this article is much related to that of Mwinlaaru (2016) who conducted an SFL analysis of Dagaare. However, the study is different from all the previous studies on SFL and transitivity because it focuses on the siLozi language which has never been explored before using the lens of SFL and transitivity. Furthermore, unlike Mwinlaaru (2016) who described the entire grammar of the Dagaare language from the lens of SFL, this study focussed on the transitivity of the siLozi clause.

3. Theoretical Confinements

SFL is an approach to the study of language that focuses on translating the communicative form of language into its communicative function. The approach argues that language is a system whose constituents play a significant role in the whole to perform a certain function in context. SFL traces its roots to Malinowski and later Firth but was largely developed by Halliday and his followers in the later years (Halliday 1966; Droga & Humphrey 2002; Halliday & Webster 2009; O'Donnell 2012; Fawcett 2014). Because SFG is concerned with language use, it prioritises (places higher importance) on language function (what language is used for) than on language structure (what language is composed of). For this, SFG also does not address how language is

processed and/or represented in our brains but instead concerns itself with the discourses we produce (whether written or spoken), as well as the contexts governing the production of these texts (Halliday 1966; O'Donnell 2012; Mwinlaaru 2012).

In the theorisation of language as a system meant to perform a function, SFL postulates that language performs three metafunctions in a text at the same time and these metafunctions performed are ideational, interpersonal and textual functions. The ideational metafunction of language interprets, organises and classifies the participants of the discourse by representing how the world is perceived in terms of experiences (O'Donnell 2012); the interpersonal metafunction establishes and maintains social relations: and the textual metafunction provides links between language and the features of the situation in which it is utilised (Halliday 1966; Droga & Humphrey 2002; Halliday & Webster 2009; O'Donnell 2012; Fawcett 2014). Transitivity is part of the ideational function which concerns itself with the transmission of ideas in a clause (Halliday 1966; Halliday & Hasan 1975-1976; Halliday & Matthiessen 2004). Transitivity identifies three components of the grammar of the clause and these are the process (realised by verbs), participants (realised by nouns) and circumstance (realised by adjuncts of the clause such as adverbials). Central to transitivity is the process since it expresses the speaker's experience of the external world or his world (Halliday 1966; Droga & Humphrey 2003). These processes are categorised into six types namely material, mental, relational, verbal, behavioural and existential processes. This paper used SFL transitivity to analyse the clause in siLozi and in so doing, shed more light on the versatility of SFL as a theory and transitivity as an analytical tool for language.

4. Methodological issues

The paper employed a qualitative descriptive approach to collect and analyse the data on the clause of the siLozi language. The descriptive approach to the study of languages is a holistic, non-numerical, inductive, subjective and process-oriented approach which aims at understanding, describing and interpreting phenomena on which subsequent theories may be developed (Burns & Grove 1998). Mutch (2005) has shown that the descriptive approach uses words and sentential expressions which are then analysed for what they are. Siame & Banda (2021) add that the approach deals with explanations of concepts to be documented. Data were elicited from five siLozi native speakers who were also verifiers of the analysed data. The collected primary data were transcribed and translated into the English language for analysis. Secondary data were used to back the primary data through document analysis (Chaleunvong 2009). Clauses were selected and then subjected to a transitivity analysis according to Martin and Rose (2003). The collected data offered a diverse range of grammatical structures to which an SFL transitivity analysis of the clause in siLozi

conducted. Data analysis went hand in hand with data collection (Mugenda & Mugenda, 1999; Siame & Banda, 2024). The paper applied a transitivity analysis of the siLozi clause through the grammatical description of the ideational meta-functional characteristics in the collected primary data. Being a mother tongue speaker of the siLozi language, the lead author used his introspections and intuition to collect and analyse the data based on the researcher's perception and mastery of linguistic experiences (Merriam, 1998). Further, data were analysed thematically using tabular skills.

5. RESULTS AND DISCUSSION

The data collected for the present study reviewed the following trends in the transitivity of the siLozi clause.

5.1 Transitivity constituents of the clause in siLozi

The findings revealed that the siLozi language realises three components in its clausal grammar, namely, the Process, Participants and Circumstance of the clause (henceforth the PRS, PRT and CIR). This is illustrated in Table 1 as follow

Table 1: Transitivity components of the siLozi clause

	Participant	Process	Circumstance
Clause	Mubita	uinzi	mwa ndu
Token specifics	Actor	PRS. MaP	CIR.: Circumstance of Location (<i>Where?</i>)
Class	Cl. 1a	Cl.1 sgl	mwa [mu-a] (locative, Cl. 18),
		-	ndu (Class 9 sgl)
Gloss	Mubita	is seated	in the house

As seen in *Table 1*, the clause in siLozi contains the PRT, PRS and CIR as cardinal components of the clause. It can be further observed from *Table 1* that in siLozi, the PRT, PRS and CIR tokens are realised by nouns and noun-related tokens, verbs and sentential adjuncts, respectively.

The findings further established that the realisation of the CIR in siLozi is one delineated into the CIR of Location, CIR of Place, CIR of Manner, CIR of Accompaniment, CIR of Cause, CIR of Matter, CIR of Role and CIR of Time. This is illustrated below:

Table 2: Realisations of the CIR in the siLozi clause

(a)	PRT	PRS	CIR	CIR type
Clause	Mubita	uinzi	mwa ndu	
Token specifics	Actor	PRS: MaP	CIR Location	
Class	Cl. 1a	u- Cl.1 sgl	mwa [mu-a] (locative, Cl. 18),	CIR of Location
			ndu (Class 9 sgl)	(Where?)
Gloss	Mubita	is seated	in the house	
(b)	PRT	PRS	CIR	CIR type
Clause	Sibeso	uile	kwa Mongu	
Token specifics	Actor	PRS: MaP	CIR Place	
Class	Cl. 1a	u- Cl.1 sgl	Kwa [ku-a] (locative, Cl. 17),	CIR of Place
			Mongu (Class 1a sgl)	(Where from/to?)
Gloss	Sibeso	has gone	to Mongu	
(c)	PRT	PRS	CIR	CIR type
Clause	Inonge	ubonahalanga	hande	
Token specifics	Sensor	PRS: MeP	CIR Manner	CIR of Manner
Class	Cl. 1a	u- Cl.1 sgl	hande (Adjective, with Cl. 1a)	(How? = Means,
Gloss	Inonge	looks	beautiful	Quality, Comparison)
(d)	PRT	PRS	CIR	CIR type
Clause	Baana	baile	ni linja zabona	
Token specifics	Actor	PRS: MaP	CIR Accompaniment	
Class	Cl.2 plr	ba- Cl 2 plr	ni (conjunction), linja (Cl. 8), zabona	CIR of
	_		(possessive)	Accompaniment
Gloss	(The) men	have gone	with their dogs	(With?)
(e)	PRT	PRS	CIR	CIR type
Clause	Baana	abanyali	bakeňisa lukupwe	
Token specifics	Actor	PRS: MaP	CIR Cause	
Class	Cl.2 plr	a- (neg, Cl 2)	bakeňisa (reason), lukupwe (Cl. 9a)	CIR of Cause
	•	ba- Cl 2 plr	, , , , , , , , , , , , , , , , , , , ,	

Gloss	(The) men	are not marrying	because of hunger	(Why? = reason,
			-	Purpose, Behalf)
(f)	PRT	PRS	CIR	CIR type
Clause	Batu	nebakopani	kuamana ni CDF	
Token specifics	Actor	PRS: MaP	CIR Matter	CIR of Matter
Class	Cl 2 plr	ba- Cl.2 plr	-	(About what?)
Gloss	People	Met	regarding CDF	
(g)	PRT	PRS	CIR	CIR type
Clause	Ba	beleka	sina baluti	
Token specifics	Actor	PRS: MaP	CIR Role	CIR of Role
Class	Cl. 2. plr	Cl 2	sina (as what), baluti (Cl. 2 plr)	(As what?)
Gloss	They	are working	as teachers	
				<u>.</u>
(h)	PRT	PRS	CIR	CIR type
Clause	Masole	nebamoboni	ka nako	
Token specifics	Sensor	PRS: MeP	CIR Temporal	CIR of Time
Class	Cl. 2	ba- (Cl 2,plr)	la (on, preposition), Mubulo	(When?)
Gloss	(The) soldiers	saw him/her	on Monday	

As *Table 2* indicates, the findings reviewed that the CIRs of Time, Accompaniment, Place and Location in siLozi tend to be realised as unmarked in post-verbal Prepositional Phrases while the elsewhere rule tend to be realised as marked in siLozi CIRs of Role, Matter, Cause and Manner. Furthermore, in unmarked CIRs headed by prepositions, the entry point in the cline of delicacy in the post-verbal token is that of a preposition (see Mwinlaaru 2012 and Kapau *et al.*, 2019) while entry points in non-preposition-headed CIRs are miscellaneous and CIR type-determined.

5.2 Physical Clausal Experiences of SiLozi Language

The study established that in siLozi the experiences of the physical world are expressed through MaPs. Kapau *et al.*, (2019) define MaPs as PRSs that focus on the 'goings-on' in the physical world. MaPs are made up of an obligatory PRT called the Actor who is the doer of the PRS, and an optional PRT – animate or inanimate – known as the Goal that suffers the actions of the Actor. This is illustrated as follows:

(1)

Mushimbei	ushimbile	mbonyi
PRT: {Actor}	PRS: {MaP}	PRT: {Goal}
'Mushimbei	is carrying	maize

(2)

Nalumino	ulaha	mbola
PRT: {Actor}	PRS: {MaP}	PRT: {Goal}
'Nalumino	is playing	football

In (1) and (2), the PRT is *Mushimbei*, *Nalumino* (proper nouns), and *mbonyi* 'maize' and *mbola* 'ball/football' (common nouns). *Mushimbei* and *Nalumino* are Actors whose actions are directed at *mbonyi* and *mbola* as optional Goals of the action in the physical world.

In addition to the inherent PRT roles of Actor and Goal, the study established MaPs in Silozi are capable of carrying an extra element in the form of the CIR of Location, CIR of Place, CIR of Manner, CIR of Accompaniment, CIR of Cause, CIR of Matter, CIR of Role and CIR of Time as earlier established in *Table 2*. This finding is reiterated demonstratively in (3) and (4) below:

(3)

Mushimbei	uisize	mbonyi	mwandu
PRT: {Actor}	PRS: {MaP}	PRT: {Goal}	CIR of Location
'Mushimbei	has taken	the maize	into the house'

(4)

Ba	beleka	sina baňoli
PRT: {Actor}	PRS: {MaP}	CIR of Role
'They	are working	as writers'

As can be observed, while (3) has a CIR that is preceded by the GOAL PRT, (4) has a CIR that is postverbal. The two are both unmarked clausal patterns of MaPs in Silozi. Examples (3) and (4) further confirm Iwamoto (2008:71) who notes that meaning in the CIR is realised "not in nominal phrases but as either adverbial phrases or prepositional phrases and as such termed as subsidiary in status to the process."

Although (3) and (4) are in the active voice, the findings on siLozi MaPs indicated that is equally possible to passivise the active sentences by reversing the Actor + Goal sequence. In other words, passivization of MaPs happens when we place the Goal at the initial position of the clause and the Actor at the end (see Droga and Humphrey 2002; Eggins 2004). For example:

(5)

Mubonyi	neiisizwe	ki Mushimbei	mwa ndu
PRT: {Goal}	PRS: {MaP}	PRT: {Actor}	CIR of Location
'Maize	was taken	by Mushimbei	into the house'

(6)

Mubonyi	neiisizwe	mwa ndu	ki Mushimbei
PRT: {Goal}	PRS: {MaP}	CIR of Location	PRT: {Actor}
'Maize		into the house	by Mushimbei'

In (5) and (6), it can be observed that while the Subject of the sentence in traditional grammar would occur at the beginning of the sentence that is not the same with SFL transitivity. Examples (5) and (6) demonstrate that in passivised constructions, the Actor can manifest in different positions of the clause while maintaining its functional role while the Subject of the sentence cannot. It can further be observed that in siLozi, the post-verbal CIR and the post-verbal PRT (i.e. either the Goal or the Actor whether in active or passive expressions) can be juxtaposed and still retain the same meaning. These findings are in tandem with studies on English that have established the fluidity and rigidity of passivised forms (see Mwinlaaru 2012; Kapau *et al.*, 2019).

5.3 Mental manifestations of the siLozi clause

Unlike MaPs which are externalised PRSes, MePs are internalised PRSes that focus on PRSes of feeling and thinking (cognition). Halliday (1966), Halliday (1967), and Halliday and Webster (2009) posit that MePs involve two inherent PRTs, notably, the Sensor and the Phenomenon. Although MePs are traditionally sub-classified into PRSes of cognition (thinking), perception (knowing) and affective (feeling), the five senses that characterise the perception PRSes (taste, sight, feeling, hearing and smell) in siLozi are unique in that the word kuutwa (literally translated to me 'to hear') is often used to refer to all the five senses except that of sight even when senses such as that of smell have kulupelela 'to smell' as an alternative lexicon. Only the sense of sight tends to use a different term, namely, kubona 'to see'. This unique manifestation of a polysemous arbitrary symbol is demonstrated below where the siLozi word kuutwa 'to hear' is used to mean 'to taste', 'to feel', 'to hear' and 'to smell'. Context and nature of clausal PRTs are what differentiate the meaning of the sentences in which the lexicon finds expression.

(7)

Ni	utwa	busunso	mwa mupika
PRT: {Sensor}	PRS: {MeP, taste}	PRT: {Phenomenon}	CIR of Location
'I	am *hearing (i.e. tasting)	the relish	in the pot'

(8)

Ni	utwa	muunko	mwa ndu
PRT: {Sensor}	PRS: {MeP, smell}	PRT: {Phenomenon}	CIR of Location
'I	am *hearing (i.e. smelling)	an odour	in the house'

(9)

Ni	utwa	mulumo	wa mota
PRT: {Sensor}	PRS: {MeP, hearing}	PRT: {Phenomenon}	Possessor
'I	am hearing	the sound	of a vehicle'

(10)

Ni	utwa	toho	yaopa
PRT: {Sensor}	PRS: {MeP, feeling}	PRT: {Phenomenon}	PRS: {MeP, feeling}
'I	am *hearing (i.e. feeling)	(that) the head	is paining'

(11)

Ni	bona	mbumbutu ni Munukayumbwa	
PRT: {Sensor}	PRS {MeP, sight}	PRT: {Phenomenon}	CIR of Accompaniment
ʻI	am seeing	(the/a) baby	with Munukayumbwa'

Example (9) is the denotative meaning of *utwa* 'hear' but the same word is used to also refer to other senses, namely, the sense of taste in (7), the sense of smell in (8) and the sense of feeling in (10). Equally noticeable in (9) is that the Phenomenon can also be viewed as the Possessed depending on whether one looks at *mulumo* 'the sound' in relation to the Sensor (a MeP concept) or from the angle of the Possessor (a ReP concept). The binary interpretation of a PRT is known as Double Role (henceforth DR) in SFL and refers to the

situation where a PRT can be interpreted as one PRS-type or the other depending on its relationship with the PRS and/or other PRTs in the clause. As demonstrated in (9), the study established that the notion of DRs is prevalent in all PRSes of the siLozi language.

Apart from MePs of perception, the findings on siLozi also established that PRSes of cognition (i.e. thinking) and feeling equally exist in the language.

(12)

Na	ziba	lipalo ni sikuwa
PRT: {Sensor}	PRS: {MeP, cogntion}	PRT: {Phenomenon}
'I	know	mathematics and English'

(13)

Mubita	unyolezi	hae	kwa Bulozi
PRT: {Sensor}	PRS: {MeP, feeling}	PRT: {Phenomenon}	CIR of Place
'Mubita	longs	for a home	in Barotseland'

The CIR-less clause in (12) involves the Sensor identified as *Na* (I) while the Phenomenon is *lipalo* 'mathematics' and *Sikuwa* 'English, identified based on a cognition-related PRS. However, (13) presents a CIR-reflective clause with a feeling-oriented PRS that labels the PRTSs as Sensor and Phenomenon. The two examples are a confirmation that MePs of cognition and feeling exist in the siLozi language (see Halliday and Matthiessen 2004).

5.4 The relational clausal experiences of the siLozi language

In addition to MaPs and MePs, the siLozi clause also expresses unique PRTs, PRSes and CIRs in RePs. By definition, are PRSes of being and are used to establish relationships between two entities (Eggins 2004). As PRS-type, RePs are divided into three subcategories: intensive, possessive and circumstantial PRSes. An intensive relational process establishes a relationship of 'X IS Y' connection between two elements (e.g. Lewanika [X] KI yomunde [Y] 'Lewanika IS handsome'); a possessive relational process has an 'X

HAS Y' relationship (e.g. Lewanika [X] UNANI lumenyo lolunde [Y] 'Lewanika HAS a nice smile') while a circumstantial relation denotes an 'X IS AT Y' relationship (e.g. Lewanika UINZI FA Manda Hill 'Lewanika [X] IS AT Manda Hill [Y]) (see Halliday and Matthiessen 2004; Simpson 2004; Iwamoto 2008:75; Kapau 2019). The second level of distinction within relational processes is that made within each of the subprocesses of intensive, possessive and circumstantial. The ReP relationship is said to be attributive when the relationship is that of 'X is Y' (e.g. x is beautiful) and said to be identifying if the relationship is that of 'Y is the identity of X' (e.g. X is Zambian). Key PRTs used in RePs are Carrier (Possessor/Identifier) and Attribute (Possessed/Identified). According to Simpson (2004), the Attribute PRT indicates what the Carrier is like, and where the Carrier is or owns.

The findings reviewed that siLozi clauses express the 'X <u>IS</u> Y, 'X <u>HAS</u> Y' and 'X <u>IS AT</u> Y' relationships in PRSes of MeP nature. This is demonstrated below:

'X <u>IS</u> Y' clausal relation<u>ship in siLozi</u>

Sesheke	ki	yende
PRT: {Carrier}	PRS: {ReP, intensive}	PRT: {Attribute}
'Sesheke (District)	is	beautiful'

(15)

'X HAS Y' clausal relationship in siLozi

Lewanika	unani	lumenyo lolunde
PRT: {Possessor}	PRS: {ReP, possessive}	PRT: {Possessed}
'Lewanika	has	a nice smile'

(16)

'X IS AT Y' clausal relationship in siLozi

Mushokabanji	uinzi	fa Manda Hill
PRT: {Possessor}	PRS: {ReP, circumstantial}	CIR of Place, circumstantial
'Mushokabanji	is	at Manda Hill'

Examples (14), (15) and (16) present scenarios in which the Silozi clause expresses itself within the confines of PRSs that are relational. In (14), the relationship being established is that of 'X IS Y' while (15) and (16) present the clausal understandings of 'X HAS Y' and 'X IS AT Y' relationships in siLozi. In (16), notice that the PRS is a ReP and not a MaP because the translation of *uinzi* is not that of 'he/she is sitting' (which is a MaP whose verbal head is 'sitting' and 'is' is auxiliary) but rather that of 'is' (which is relational and the 'is' is in itself the verbal head). In this regard, (16) differs from the example given in *Table 2 (a)* above.

5.5 Manifestations of other PRS-types in SiLozi

Besides PRSes in the external, internal and relational worlds, siLozi also posits three minor PRS-types found at the borderlines of MaPs, MePs and RePs.

These are the PRSes to do with telling and saying (VePs), PRSes to do with behaviour (BePs) and those to do with existence (ExPs). VePs, BePs and ExPs are termed minor PRS-types because they find expression in the major PRS-types (Halliday 1966; Eggins 2004; Halliday & Webster 2009). Each of the minor PRS-type is discussed in the subsequent subsections.

5.5.1 SiLozi PRSes of Saying and Telling

VePs are processes of saying and telling. In a VeP, the PRT directing his speech at someone is called the Sayer while the PRT being addressed is the Target or Recipient. What is said is termed the Verbiage and can be either Quoted Verbiage (if direct) or Reported Verbiage (if reported. As a PRS-type, it was established that VePs in siLozi can project what is said or thought in a separate clause. For example:

(17) VeP projecting direct speech as a separate clause in siLozi

Kamuyongole	abulelela	Njolo	"Nikakubona kamuso."								
PRT: {Sayer}	PRS: verbal	PRT: {Target}	Quoted Verbiage								
			Ni	ka	ku	bona	kamuso				
			PRT:	TM	PRT:	PRS:	CIR of Time				
			Sensor Phenomenon MeP								
*Kamuyongole said to Njolo, "I will you see tomorrow"											
Kamuyongole s	aid to Njolo, "I	will see you tomor	row"				Kamuyongole said to Njolo, "I will see you tomorrow"				

It can be noticed in (17) that VeP is a direct speech with two pre-Quoted Verbiage PRTs namely *Kamuyongole* and *Njolo* who are the Sayer and The Target/Recipient respectively. The PRS is verbal while the Quoted Verbiage is projected and contains the PRT Sensor and PRT Phenomenon, governed by the PRS

MeP of perception. The Quoted Verbiage is further modified by a CIR of Time. Example (17) illustrates that VePs contain a lot of other PRS-types since humans are communicative by nature. VePs can also appear in reported/indirect speech as shown below:

(18)

Tumelo	nabulelezi	Inonge	kuli ukamubona kamuso.					
PRT: {Sayer}	PRS: verbal	PRT: {Target}	Reported Verbiage					
			kuli	u	ka	mu	bona	kamuso
			(that)	PRT:	TM	PRT:	PRS:	CIR of Time
				Sensor		Phenomenon	MeP	
*Tumelo told Inonge that she will her see tomorrow"								
Tumelo told Inc	Tumelo told Inonge that she will see her tomorrow							

Unlike (17) which is Qouted/direct VeP, (18) involves indirect speech and thus contains an instance of Reported Verbiage in siLozi. Like (17), example (18) has a projected clause hose PRS is a MeP and necessitates the Sensor and Phenomenon as PRTs while the CIR indicates the time when the sensing of perception is to take place. These findings on VePs confirm the theorisation of Martin and Rose (2003) who have argued that VePs tend to project their Verbiage.

5.5.2 SiLozi PRSes of Behaving

Halliday (1994:107) theorises that BePs are PRSes of physiological and psychological behaviour and "represent outer manifestations of inner workings, the acting out of processes of consciousness and physiological states." Traditionally, BePs as PRS-type posit only one PRT: the Behaver. However, in moments that another PRT is observed in the clause, he is identified as the Behaviour whether realised in the CIR or not. Usually, the Behaver tend to be a conscious PRT

as in MePs but the PRS is one of doing as in material PRSes. This is illustrated below:

(19)

Tumelo	nabinile	hahulu
PRT: {Behaver}	PRS: {Behaviour}	CIR of Manner (degree)
'Tumelo	danced	very much'

(20)

Batuli	batalimela	bafenyehi
PRT: {Behaver}	PRS: {Behavioural}	Behaved
'The victors	looked	at the defeated'

Examples (19) and (20) present examples of BePs in siLozi. It can be noticed why BePs are minor and are treated as auxiliaries of MaPs and MePs. In both (19) and (20), the PRTs are conscious and the PRSes are material. In the case of (20), an extra PRT is identified as the Behaved, to give more meaning to the PRS of the first PRT, the Behaver.

5.5.3 The SiLozi PRSes of Existing

The last minor PRS-type is that which deals with PRSes' existence and happening. These are called ExPs. In English, ExPs are prototypically marked by the verb *be* while the word *there* tends to be a necessary

Subject although carries no representational function. ExPs typically contain the verb *be* while the word *there* is a necessary Subject although it has no representational function (Iwamoto, 1982). In the case of siLozi, it was established that ExPs are most prevalent in folklore as they contain imaginary existences mostly marked by *ne*to mean 'there', followed by the *be*-verbs in their different forms but usually premarked by *-ku-*. In Silozi, PRTs of ExPs include the Extent (that which is stated as exists), the Existential (which is the *there* + *be* verb) and the CIR as an optional entity. Below are examples of ExPs in siLozi:

(21)

Nekunani Shakame		mwa libala la Bulozi	
PRT: {Existential}	PRT: {Existent}	CIR of Place	
'There was	a hare	in the Barotse Plains'	

(22)

Nekubanga	singilinginja	mwa mishitu ya Kaoma
PRT: {Existential}	PRT: {Existent}	CIR of Place

In the above, the Existential takes different shapes with the continued presence of -ku–, followed by verbs of being to form the existential. The Existent is identified as the thing that exists or existed while the two PRTs can be further modified by CIRs of different natures.

6. CONCLUSION

The paper has explored how the experience of the material and non-material world is construed through the grammar of the siLozi clause. Using the SFL analysis of a text, the article has presented transitivity and the clause in siLozi in terms of what kind of PRS activities are undertaken in the siLozi clause; how the PRTs in these PRS-types are described; how they are classified and what they are composed of. The study concludes that some studies have explored the clause in English such as (Martin & Rose 2003; Halliday & Webster 2009; O'Donnell 2012) while only a few works have looked at SFL concerning indigenous African languages (cf. Mwinlaaru 2016). Based on the selected texts used for a transitivity study of the clause in siLozi, the paper

concludes that the siLozi language expresses its clausal experience through the three major PRS-types namely MaPs, MePs and RePs. The article has further outlined the minor PRS-types as VePs, BePs and ExPs. Furthermore, the paper establishes that the discourse structures in the PRS-types are deliberately selected and situated for various reasons. From the perspective of theory, the findings of the study confirm not only the elasticity of SFL theory when applied to an African language but also the extent to which the ideational metafunction of a Bantu language can be mapped using SFL theory. Among the key observations made was that PRT-roles in active and passive constructions remain unchanged despite passivization and activation of sentences as we make horizontal and vertical choices in the system network of transitivity. These findings confirm key SFL theorists' postulations about the theoretical locale of SFL in general and transitivity in particular (e.g. Halliday 1966; Droga & Humphrey 2002; Halliday & Webster 2009; Fawcett 2014). Furthermore, the outcome of this study has shown that although SFL is versatile, its realisation is language specific. For example, while differentiation of the lexicon is observable in PRSes of the internal world of perception in English (sight, hearing, touch, feeling, taste), siLozi tends to use only one-word *kuutwa* 'to hear' as the unmarked lexicon for PRSes related to touch, feeling, taster and hearing even when corresponding alternative lexicon exist. The findings on SFL transitivity are insightful in the teaching of some aspects of grammar such as comprehension in Lozi in schools in Zambia and other regions like the Zambezi region in Namibia where siLozi is taught. The study also contributes to the body of knowledge on SFL and the transitivity model.

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