

**AN OPTIMALITY THEORETIC ACCOUNT AND SYSTEMIC FUNCTIONAL
LINGUISTICS ANALYSIS OF THE ACQUISITION OF CICEWA IDIOM
INTERPRETATION BY CICEWA SPEAKING CHILDREN IN MALAWI**

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An Optimality Theoretic Account and Systemic Functional Linguistics Analysis of the Acquisition of Cicewa Idiom Interpretation by Cicewa Speaking Children in Malawi

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Key terms

Cicewa

Malawi

Acquisition

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Interpretation

Cicewa speaking children

Sociocultural context

Constraint ranking

Optimality Theory

Systemic Functional Linguistics



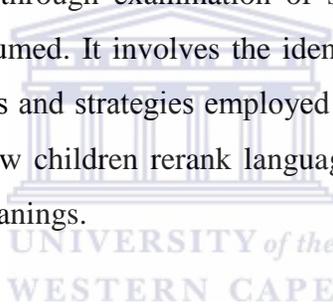
Abstract

An Optimality Theoretic Account and Systemic Functional Linguistics Analysis of the Acquisition of Cicewa Idiom Interpretation by Cicewa Speaking Children in Malawi

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This research is in the area of child language acquisition, especially, acquisition of figurative language. It investigates how native Cicewa speaking children learn to interpret Cicewa idioms. This is done through examination of sociocultural contexts in which idioms are produced and consumed. It involves the identification of factors influencing children's acquisition of idioms and strategies employed by children to interpret idioms. The study also investigates how children rerank language constraints in the process of acquiring Cicewa idiomatic meanings.



The study is informed by two theories: Systemic Functional Linguistics (SFL) and Optimality Theory (OT). SFL is used to explore the sociocultural contexts within which Cicewa idioms are acquired, produced and consumed. It also helps to explain the social cultural factors influencing children's choices of meaning options and idiom acquisition strategies. OT is used to establish how children rerank language constraints in the process of acquiring idioms in Cicewa with an aim to identify the developmental stages in idiomatic meaning acquisition.

The study adopted cross-sectional and experimental designs. Experiments were conducted on 20 typically developing native Cicewa speaking children with ages 4, 6, 9, 12 and 14 drawn from Mpalume Village, in Chinamawali Township, Zomba Malawi. Deliberately developed stories, sentences containing idioms and idiom lists were used to

collect data in five experiments. The data were analysed both qualitatively and quantitatively. Qualitative analysis involved identification of types of responses given by children, strategies employed by children to interpret idioms and factors that influence children's interpretation and acquisition of idioms. Quantitative analysis was done using Statistical Package for Social Sciences (SPSS) to determine how often a response was given, differences in the responses given by children of different age groups and to establish if there was a relationship between idiom interpretation and the tested factors.

The research finds that children produce more idiomatic interpretations when the idioms are presented in stories than when the idioms are presented in sentences and out of context. It also finds that idiom acquisition starts with idiom recognition at around 4 years and interpretation starts at around 6 years with a child interpreting idiomatic expressions involving daily activities of human experience. It also finds that 14 years is the age at which the child's idiomatic knowledge starts to resemble adult's knowledge although at this age acquisition of idiomatic meaning is still taking place. In addition, it identifies a number of strategies that children employ to interpret and acquire idiomatic expressions. Among the identified strategies 'inferring from sociocultural context' is the only successful strategy.

Additionally, the thesis establishes that children learn first idioms that involve daily activities of human experience then idioms with clear cultural frames reference and finally idioms with obsolete cultural frames of reference. It also establishes that knowledge of the sociocultural context in which idioms are consumed is critical in idiomatic meaning acquisition. A child can have skills to use the contextual cues and have knowledge of the grammar but if s/he lacks the sociocultural knowledge cannot correctly interpret an idiom nor acquire it. It also establishes that the language constraints *Full Interpretation* and *CONSISTENT* are highly ranked dominating *Relevance Principle* at the initial stage in idiomatic meaning acquisition and that the two constraints are demoted as the child acquires idiomatic meaning. The thesis also identifies five developmental stages that children go through in idiom acquisition. These are Stage 1: 4 – 5 years, an initial stage in which a child is able to recognize an idiomatic expression as an instance of use; Stage 2: 6 – 8 years, a stage in which a child is able to interpret idioms

of daily activities involving human experience when presented in supportive context; Stage 3: 9 – 11 years, a transitional stage in the development of idiomatic meaning in which a child is able to interpret idioms involving daily activities of human experience when presented without supportive context; Stage 4: 12 – 13 years, a stage in which a child is able to interpret idioms with clear cultural frames of reference when presented without supportive context and Stage 5: 14 years and above, a stage in which the child's idiomatic knowledge is close to adults' knowledge and a child is able to interpret idioms with absolute cultural frames of reference when presented without supportive context.

The study makes a contribution to the idiom acquisition debate by pointing out that sociocultural knowledge is crucial in the acquisition of idioms thereby clarifying what goes on in the process of idiom acquisition. It has also identified and described developmental stages in idiom acquisition. The study is the first not only to use SFL, but more so in conjunction with OT to account for idiomatic meaning acquisition and interpretation. This eclectic mix of theoretical frameworks is novel and thus offers a new perspective of theorizing never done before. Thus, the thesis contributes to the development of linguistic theory, from both SFL and OT perspectives.

Overall, the thesis concludes that children come to know an idiomatic expression as a text before they even understand the sociocultural context in which it is consumed. It argues that idioms are acquired as texts and they are acquired together with the sociocultural context in which they are acquired, consumed and produced, and therefore the sociocultural context forms part of the idioms.

Declaration

I declare that *An Optimality Theoretic Account and Systemic Functional Linguistics Analysis of the Acquisition of Cicewa Idiom Interpretation by Cicewa Speaking Children in Malawi* is my own work, that it has not been submitted before for any degree or examination in any other university, and that the sources I have used or quoted have been indicated and acknowledged as complete references.

Name: Mervis Kamanga

Date: November, 2014

Signed:



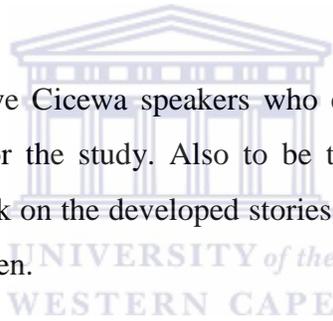
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Chapter One

General overview of the study

1.0 Introduction

This research is in the area of child language acquisition, especially, acquisition of figurative language. Figurative language emphasizes meaning by bringing ‘an unclear concept alive’ (Karuppali & Bhat, 2013:1), thereby, making communication effective. Among the common forms of figurative language are idioms. Idioms are commonly used in daily human communications such that speakers do not realize that they use idiomatic expressions to express thoughts and feelings. Although idioms are such common, learning idioms has always been difficult (Irujo, 1986). This has generated strong research interest in how children learn meanings of idiomatic expressions. This, therefore, is the interest of the current study. The study adopts Systemic Functional Linguistics and Optimality Theoretic approaches to establish how native Cicewa speaking children learn to interpret Cicewa idioms. In this light, this chapter presents idioms as a source of problems in language explanation in preliminary remarks. The chapter also provides background to Cicewa language in Malawi. It states the problem being investigated and provides an operational definition of idiom in the study. It also outlines aims of the study, specific objectives, assumptions and research questions. The chapter also justifies why it is important to carry out the study and explains the relevance of the study. It also explains the scope and limits of the study. The chapter also defines key terms used in the study. Finally, the chapter explains how the thesis has been organized.

1.1 Preliminary remarks

Idioms are viewed as a source of problems in language explanation because they exhibit different behaviors. Idioms behave like lexical items and in other cases like syntactic elements. This property makes idioms defy concepts of syntax and semantic analysis thereby creating problems for both performance and linguistic models. Because of this,

idioms have been used to challenge syntactic and semantic claims about language. The debate on the interpretation of idioms is still going on. Some scholars argue that idioms are interpreted holistically while others argue that they are not. The other interesting thing about idioms is the argument that Fillmore and O'connor (1997:6) put forward that 'an idiomatic expression or construction is something a language user could fail to know while knowing everything else in the language'. Along the same line of thought, Nida (1975:116) argues that 'knowledge of the etymology of an expression is never a prerequisite for its use or understanding'. This makes the interpretation of idioms a challenge to adults and even more challenging to children. Although Vicker (2002) states that idioms are the first component of figurative language that is understood and used by children as they mature, research findings indicate that many children have problems in interpreting idioms and that children below the age of seven interpret idioms literally (Levorato & Cacciari, 1992, 1995; Ackerman, 1982). This is the case because children's ability to comprehend and use idioms develops during their school years when they are already competent speakers despite the fact that idiomatic expressions are common in both oral and written language (Levorato, Roch & Nesi, 2007). Children acquire idioms as part of the linguistic repertoire (Levorato et al., 2007). Typically children acquire one idiom at a time (Vicker, 2002). This means idiom acquisition is a long lasting and complex process. It is for this reason that the study of the processes underlying idiom acquisition in children is still a subject which arouses interest (Levorato et al., 2007). Therefore, this study aimed at finding out how native Cicewa speaking children learn to interpret Cicewa idioms. This was achieved through examination of sociocultural contexts in which idioms are consumed and identification of factors that influence children's acquisition of idioms and strategies employed by children to interpret idioms.

1.2 Background to Cicewa Language in Malawi

Cicewa, also known as Cinyanja, is a Bantu language in the Benue-Congo branch of the Niger-Kordofania language family (Mchombo, 2004). Guthrie's (1967 – 1971) classification of Bantu languages places Cicewa in Zone N unit N31. Cicewa is spoken in Malawi, Zambia, Mozambique and Zimbabwe. Speakers of Cicewa originated from

Congo in the 16th Century. Most speakers of Cicewa in Malawi are found in the southern and central parts. According to Timpunza Mvula (1995), 70% of Malawians understand and speak Cicewa. Cicewa has been used as a national language since 1968 when Malawi Congress Party (MCP), at its annual convention, resolved to adopt Cinyanja as the sole national language of Malawi and changed its name to Cicewa, the name for Cinyanja dialect spoken by Dr. Kamuzu Banda and the Cewa of central Malawi (Kamwendo, 2002, 2006). MCP also made English as official language in Malawi and banned Citumbuka on the radio which was already used on a minor scale during colonial time (Kayambazinthu, 1998). In addition, Cicewa Board was set up in 1972 to prescribe correct usage of Cicewa (Kamwendo, 2006, 2010). After its inception the board revisited and revised the Cicewa orthography in 1980 and 1990 (Kamwendo, 2002). This made it difficult for Malawi to share literature and teaching and learning materials with other bordering countries like Zambia and Mozambique because the change brought confusion to the previously shared orthographic convention. For instance, in the Malawi orthography the spelling for the aspirated palatal affricate sound was changed from <ch> to <tch>.

Since 1968 Cicewa is the only indigenous language that has been used as a medium of instruction in schools apart the official language, English. Cicewa has been used as a medium of instruction for the first four years of primary school. It is also taught as a compulsory subject in all classes in government primary and secondary schools. It is an obligatory subject at primary school teacher training colleges. Cicewa is the only local language taught at university level. Furthermore, Cicewa was the only local language used in print media and broadcasted on the national broadcasting station, Malawi Broadcasting Corporation (MBC), from 1968 to 1994 when Citumbuka was reinstated as an official language and introduced on the national broadcasting station. After which other languages; Citonga, Ciyao, Cilomwe and Cisená were elevated to official languages and introduced on the national broadcasting station although they are limited to advertisements and news bulletins that are basically translations of English newscasts (Matiki, 2001). The area understudy is one of the areas that mostly use Cicewa.

1.3 Statement of the Problem

Although idioms are plentiful in every day human communication, it is not clear how people learn and understand idioms (Fazly, Cook & Stevenson, 2009). Research findings on idiom acquisition are conflicting in many aspects. There are conflicting views and research findings regarding the age at which idiom acquisition starts. Some scholars like (Prinz, 1983; Vulchanova, Vulchanov & Stankova, 2011) propose that idiom acquisition starts between 6 and 7 years of age while others are proposing between 7 and 11 years of age (Levorato & Cacciari, 1992, 1995). Research findings by Laval (2003); Hsieh and Hsu (2010) indicate that at 6 years children are able to interpret idiomatic expressions. Vicker (2002) states that children below 6 can understand and use transparent idioms. This is in line with research findings by Gibbs (1987, 1991); Strand and Fraser (1979) who found that as young as 5 years old children can understand idioms. Schnell (2007) found that at around age of 4 pragmatic competence emerges in children hence they are able to handle non-literal expressions such as idioms. There are also conflicting findings regarding the age at which children's knowledge of idiomatic expressions starts resembling that of adults. Some studies propose that age 10 is a turning point in idiom acquisition and the age at which children's idiomatic knowledge starts resembling the adult's knowledge (Vicker, 2002; Vulchanova, Vulchanov & Stankova, 2011; Ackerman, 1982). Kempler, Lancker, Marchman and Bates (1999) provide evidence that children's idiomatic knowledge increases after the age 11 and it resembles the adult's knowledge. This means the 11 year olds only interpret idioms figuratively. However, some research findings are not in support of this. The findings by Karuppali and Bhat (2013) showed that literal interpretation of idioms was dominant in 11 years old children and that even 14 years old children could not achieve 100%. Furthermore, Lodge and Leach (1975) found that although 12 years old children understood some idioms mastery of idioms can be achieved at twenty years of age. All these conflicting views indicate that there is a problem in the way idiom acquisition has been approached. Little attention has been paid to the social cultural context in which idioms are consumed yet idioms are social semiotic. Idioms are rooted in a particular culture and carry rich cultural elements

(Chunke, 2011) as such idiomatic expressions can only be interpreted and acquired in the cultural context in which they are produced. Therefore, idiom acquisition research should take into account the cultural frames of reference guiding the use of idiomatic expressions. In this light, it was important for the current study to take into consideration the sociocultural context in which Cicewa idioms are consumed as it investigated how native Cicewa speaking children acquire the interpretation of Cicewa idioms. It was hoped that this would help to resolve the existing contradictions regarding idiom acquisition.

1.4 Definition of an idiom

Idioms play a crucial role in daily communications as they give ‘life and richness to the language by taking the existing words, combining them in a new sense, and creating new meanings’ (Lennon, 1998). No wonder Bulut and Çelik-Yazici (2004) refer to them as the ‘colourful side of languages’. Although this is the case, idioms are a source of problems in language studies because they behave like lexical items and in other cases like syntactic elements. This creates problems for linguists as they find it a challenge to identify what is and what is not an idiom. They find it difficult to describe the structure of idioms and explain how they are acquired and interpreted as such debates on the structure, acquisition and interpretation of idioms are still going on. Since it is not easy to describe the structure of idioms nor identify what is and what is not an idiom, linguists find it difficult to define an idiom. Actually, Nunberg, Sag and Wasow (1994) point out that no precise definition of an idiom is possible as such the category is defined in different ways for diverse purposes as a result a variety of definitions of an idiom exist. Compositionality has been used to define idioms. Those linguists who view idioms as non-compositional define idioms as such. For instance, Nida (1975:113) defines idioms as a ‘combination of words which have both a literal and nonliteral semantic structures, but the connection between the two cannot be described as representing an additive process’. Di Scullo and Williams (1987:5) consider idioms as listed syntactic objects whose meaning cannot be compositionally computed. An expression is non-compositional if its meaning cannot be predicted from the sum of the individual elements. Non-compositionality as a criterion for defining an idiom is the most controversial among

scholars. Some scholars such as Gibbs, Nayak and Cutting (1989); Nunberg et al. (1994); Titone and Connine (1999) have pointed out that not all idioms are equally non-compositional. Idioms appear to exist on 'a continuum of analyzability or decomposability with some phrases being highly analyzable (e.g. pop the question) while others appear to be far less decomposable or non-decomposable (e.g. kick the bucket)' (Hamblin & Gibbs, 1999: 26). Along the line of this argument, some scholars have defined idioms as 'phrasal units whose meaning is not necessarily derived from that of the constituent parts, although in some cases the semantic contribution of the word meaning is still perceived by the listener and facilitates comprehension of the idiom' (Cacciari, Padovani & Corradini, 2007:419). Nunberg et al. (1994) define an idiom as a phrase whose meaning cannot be predicted on the basis of its independent constituents and their isolated definitions, but rather on their non-literal meaning as triggered by their appearance together in a certain syntactic combination. With these varied definitions, it is important to have a working definition for the term 'idiom' in this thesis and the definition provided by Riehemann (2001) has been adopted. Riehemann (2001:2) defines an idiom as 'an expression made up out of two or more words, at least one of which does not have any of the meanings it can have outside of the expression'. Riehemann gives '*spill the beans*' as a typical example of an idiom in which '*beans*' never means '*secret*' in the absence of the word '*spill*'. These words are associated with the figurative meaning only as part of the whole idiom. Riehemann's definition has been adopted because it considers idioms as phrasal units and at the same time it does not explicitly define idioms as compositional or non-compositional as such it is an inclusive definition. It takes in all types of idioms.

1.5 Aims of the study

The general objective of this study was to find out how native Cicewa speaking children learn to interpret Cicewa idioms. Idioms present problems to both first and second language learners and an insight into the developmental aspects of figurative language such as idioms helps us understand higher level language skills (Karuppali & Bhat, 2013:7). To understand developmental aspects of idioms, strategies employed by children

to learn idioms, idioms learnt at a particular stage and effects of syntactic structure on idiom interpretation were investigated. The developmental stages that children go through in the acquisition of idioms were identified.

1.5.1 Specific Objectives

The specific objectives of this study were:

- To identify the age at which idiom acquisition starts.
- To identify the age at which child's idiomatic knowledge resembles adult's knowledge.
- To identify and describe the stages that children go through when they are learning to interpret Cicewa idioms.
- To describe the nature of the idioms learnt at a particular stage.
- To identify strategies that children employ to learn the interpretation of Cicewa idioms.
- To investigate factors that affect children's learning of idiomatic meaning.
- To establish how children rerank language constraints in the acquisition of idiomatic meaning

1.6 Assumptions and Research Questions

The study answers the following research questions regarding idiom acquisition by children:

- How do Cicewa speaking children learn to interpret Cicewa idioms?
- At what age do children become aware of idiomatic expressions as a category?
- At what age does idiom acquisition start?
- What are the developmental stages that children go through in the acquisition of idiom interpretation?
- What learning strategies do children employ to learn the interpretation of the idioms?

- What is the nature of the idioms learnt at a particular stage of idiom acquisition?
- Does syntactic structure of an idiom affect how its interpretation is learnt?
- Does modification of an idiom affect how it is learnt?
- To what extent does context facilitate for the learning of idiomatic meaning?
- To what extent does semantic analyzability affect the learning of idiomatic meaning?
- What are the social cultural contexts within which idioms are used?

The research questions outlined above were based on the following research assumptions:

- The acquisition of idioms takes place in systematic developmental stages.
- Children employ different strategies to learn how to interpret idioms figuratively.
- Idiom acquisition starts with simple transparent idioms and progresses to complicated non-transparent idioms.
- Idioms with simple structure are acquired first than idioms with complicated structure.
- Modified idioms are difficult to acquire compared to non-modified.

1.7 Justification and Significance of the study

This study provides information on how Cicewa speaking children acquire the interpretation of Cicewa idiomatic expressions. It provides insight into how children process idiomatic expressions since its approach is different from previous studies. There is a lot of conflicting research findings concerning how idioms are acquired. The current study gives some light regarding idiom acquisition age, developmental stages in idiom acquisition, knowledge of sociocultural contexts guiding idiom acquisition and how children use the available resources to interpret idioms. In this respect, the study makes a positive contribution to the idiom acquisition debate.

The study also adds freshness to the existing literature on idioms since most of the studies that have tried to account for idiom interpretation and acquisition have been done in the West and mainly have studied the acquisition of English. No study as far as it can be ascertained, has been conducted on the acquisition of the interpretation of Cicewa idioms by children. Although Kamanga (2007, 2007/8, 2012) did a study on idiom interpretation by adult native speakers of Cicewa, the study is silent on how idiom interpretation is acquired by Cicewa speaking children. Furthermore, all these studies used either Chomskyian linguistics or structural linguistics which do not treat language as a semiotic system. Idioms are social semiotic which need to be interpreted and acquired within the social and cultural context in which they are produced. The current study uses Systemic Functional Linguistics which treats language as a social semiotic system thereby making idioms social semiotic in the meaning-making process. Systemic Functional Linguistics helps us uncover the sociocultural contexts in which Cicewa idioms are consumed. This aspect is crucial in any attempt to account for idiom interpretation and acquisition.

The present study also provides the starting point to those who might want to further investigate how idioms and other non-literal expressions are acquired and interpreted in Cicewa and probably other Malawian languages.

Furthermore, the study contributes to the development of linguistic theory as it integrates Optimality Theory (OT) with Systemic Functional Linguistics (SFL) in its attempt to account for the acquisition of the interpretation of idioms. SFL helps us to identify the sociocultural contexts in which Cicewa idioms are acquired and used while OT provides the necessary tools to combine different pieces of information from linguistic context, sociocultural context, world knowledge, lexicon, syntax et cetera in a precisely defined way thus helping us to explain how these pieces of information integrate to enable children to acquire idiomatic meaning. OT also enables us to identify and explain the developmental stages that children go through in the idiomatic meaning acquisition process. This is a new perspective of theorizing which has never been done before.

1.8 Scope and Limits

The study of idiom acquisition is concerned with both production and interpretation. However, the current study limited itself to the acquisition of interpretation of idioms. It investigated the strategies that children use to acquire idioms. It also focussed on developmental stages that children go through in the acquisition of idioms. Finally, the study looked at the nature of idioms acquired at a particular stage of idiom interpretation. The study did not investigate how children produce idiomatic expressions.

1.9 Definition of key terms used

Learning – in this study the term learning will be used synonymously with the term acquisition. The term learning will be used because idioms are considered to be part of non-core grammar (they are part of the peripheral) which makes the learning of idioms to be specialized. In this case the word learning is more appropriate because of this peripheral kind of activity.

Interpretation – the term interpretation will also be used synonymously with the term comprehension because it is not possible to interpret an expression without comprehending what is being said.

1.10 Organization of the thesis

This introductory chapter has presented idioms as a vexed question in the study of language. It has provided a definition of an idiom and other key terms used in the study. It has stated the objectives of the study as well as the problem the study is trying to resolve. In addition, the chapter has presented the research questions the study is trying to answer. The significance of the study has also been stated in this chapter. The chapter has also provided the background to Cicewa language in Malawi.

Chapter two presents the debates on the nature of idioms, idiom interpretation and acquisition. It discusses the properties of idioms in relation to syntactic and semantic

operations. It also provides a brief discussion of the different models of idiom interpretation and acquisition. Finally, the chapter discusses the factors that affect idiom interpretation and acquisition.

Chapter three gives an overview of Optimality Theory (OT), a theory of Universal Grammar, developed by Prince and Smolensky (1991, 1993, 2004). It describes the core components of OT grammar: GEN, EVAL, CON and explains how these components relate. The chapter also explains how OT accounts for language acquisition through reranking of critical constraints. It points out that reranking of constraints is critical to the current study as it would help to explain how idiom interpretation develops in Cicewa speaking children and reveal the developmental stages that Cicewa speaking children go through as they learn to interpret idioms.

Chapter four describes Systemic Functional Linguistics (SFL), a theory about language as a semiotic system, developed by Halliday (1985) and Halliday and Matthiessen (2004). It describes the major aspects of the theory such as social context, metafunctions and grammatical metaphor. It explains how the analysis of social context, metafunctions and grammatical metaphor can help us understand and explain how Cicewa speaking children learn the Cicewa idiomatic meaning.

Chapter five describes the method used in the study. It explains the research design followed in the study. The chapter describes the participants and provides their demographic information. It describes the materials used and the procedure followed to collect the data. It also explains how the data was coded and analysed. The chapter also highlights the challenges faced and the ethical considerations followed in the study.

Chapter six discusses the sociocultural contexts and factors that influence children's meaning choices in idiom interpretation and acquisition. It demonstrates that knowledge of linguistic context is not enough for children to interpret Cicewa idioms figuratively. It also demonstrates that children's interpretation and acquisition of idioms is not really dependent on analyzability and internal structure of the idioms although these affect

interpretation and acquisition to some extent. The chapter also demonstrates that idiom modification does not affect children's interpretation of idioms as children are able to figuratively interpret both modified and non-modified idioms. Finally, the chapter argues that sociocultural contexts within which the idioms are produced is central to the interpretation of the idioms.

Chapter seven presents findings on children's recognition of idiomatic expressions, strategies children employed to acquire the figurative meanings of Cicewa idioms and the kinds of idiomatic expressions that children are able to acquire at a specific age. The chapter establishes the age at which Cicewa speaking children are able to recognize some idiomatic expressions as instances of use. It also presents the strategies that Cicewa speaking children use to interpret idioms. It argues that inference from the sociocultural knowledge is the only strategy that is successful in idiom interpretation and that children resort to other strategies when they realize that their knowledge of the cultural frames of reference is limited. The chapter also identifies which idioms are acquired at a specific age. It establishes that idiom acquisition starts with idioms involving daily activities of human experience progressing to idioms with obsolete cultural frames of reference.

Chapter eight demonstrates how Cicewa speaking children rerank constraints in the acquisition of Cicewa idiomatic meanings. It proposes the ranking of constraints at the initial state of idiomatic meaning acquisition. It also establishes which constraint is demoted first and which constraint is demoted last in the process of acquiring idiomatic meanings. The chapter also clarifies on the conflicting findings regarding the developmental patterns in idiomatic meaning acquisition in children. It establishes the age at which children are able to recognize idiomatic expressions as texts. It also establishes the age at which idiomatic meaning acquisition starts in children and also establishes the age at which children's knowledge of idiomatic expressions starts to resemble that of adults. Lastly, the chapter proposes and describes developmental stages that children go through in idiomatic meaning acquisition.

Chapter nine provides a summary of the findings of the study and highlights the conclusions drawn in this thesis. It also points out the contribution that the study has made in the field of figurative language acquisition and the development of linguistic theory. Finally, it suggests areas that need further investigation.



Chapter Two

Theories of Idioms

2.0 Introduction

Idioms, the ‘colourful side of languages’ (Bulut & Çelik-Yazici, 2004:105), have held a special position within the general class of figurative language due to their nature. Idioms exhibit different behaviours hence scholars from different fields hold different views about them. Idioms have been viewed as the most difficult to learn by language educationists. Linguists have seen idioms as a source of problems in language explanation. Due to this, there are existing debates regarding the nature of idioms, idiom interpretation and acquisition. This chapter, therefore, presents the debates on the nature of idioms, idiom interpretation and acquisition. The chapter discusses the nature and conflicting behaviour of idioms. It touches on both semantic as well as syntactic properties of idioms and shows how compositionality, a semantic property of idioms, has led to the developed of different models of idiom interpretation and acquisition. The chapter also discusses the factors that affect idiom interpretation and acquisition.

2.1 The nature of idioms

Idioms are pervasive in all languages of the world, used to communicate one’s thoughts and feelings in daily lives. As already pointed out, much as idioms play a crucial role in daily communications, they are a source of problems in language analysis. They act as ordinary language but they are different in many ways. Idioms exhibit a wide range of conflicting behaviour. For each of the properties asserted to define the main features and qualities of idioms, there is an idiom that sits at each end of the spectrum (Ettliger, 2002). Because of the nature of idioms, Ifill (2002) refers to them as ‘odd ducks’. However, Nunberg et al. (1994) have identified the following properties that characterize idioms: *conventionality*, *inflexibility*, *figuration*, *proverbiality*, *informality* and *affect*. *Conventionality* states that the meaning of idioms cannot be predicted from knowledge of

the independent conventions that determine the use of their constituents when they appear in isolation from one another (Nunberg et al., 1994:492); *Inflexibility* refers to idioms as typically appearing only in a limited number of syntactic frames or constructions, unlike freely composed expressions (e.g. *the breeze was shot, *the breeze is hard to shoot, etc) (Nunberg et al., 1994:492); *Figuration* refers to the fact that idioms typically involve metaphors (take the bull by the horn), metonymies (lend a hand, count heads), hyperboles (not worth the paper it's printed on) (Nunberg et al., 1994:492). Sometimes it is hard to know the precise figure involved (e.g. as in kick the bucket); *Proverbiality* is when idioms are typically used to describe a recurrent situation of particular social interest (becoming restless, talking informally, divulging a secret, or whatever) in virtue of its resemblance or relation to a scenario involving homey, concrete things and relations (climbing walls, chewing fat, spilling beans) (Nunberg et al., 1994:493); *Informality* refers to the fact that idioms, like proverbs, are associated with informal or colloquial registers and with popular speech and oral cultures (Nunberg et al., 1994:493); *Affect* refers to the fact that idioms are typically used to imply a certain evaluation or affective stance toward the thing they denote (Nunberg et al., 1994:493). Although Nunberg et al. list these properties as describing the behaviour of idioms, they mention that only conventionality applies obligatorily. Ettliger (2002) supports the ideas raised by Nunberg et al. on the behaviour of idioms. However, Ettliger argues for only three properties of idioms which he calls 'distinct': *opacity*, *paradigmatic combinatoriality* and *syntactic flexibility*. *Opacity* is the degree to which the words in an idiom can be taken literally; *Paradigmatic combinatoriality* refers to what lexical items are needed to be combined to obtain the desired meaning; *Syntactic flexibility* refers to the fact that across the variety of idioms, there are distinct varying degrees to which they can be acted upon by certain syntactic functions. Ettliger further argues that these three properties contribute, even determine the degree of compositionality. The discussion on properties of idioms has classified the properties into syntactic properties and semantic properties. These will be discussed in the coming sections.

2.1.1 Syntactic properties

This section discusses the syntactic properties that define idioms. By syntactic properties we refer to the structure of idioms and how they relate to some syntactic processes. First, we will look at the structural characteristics of idioms. Although there are varied views on whether idiom meanings are derived from the meanings of the words that form the idioms, all linguists view idioms as having syntactic form of non-idiomatic expressions. Thus, idioms syntactically could be categorized into three main types: phrase idioms, clause idioms and sentence idioms. Basing on this understanding, Cowie, Mackin & McCaig (1983) claim that English idioms could be categorized into phrase idioms, clause idioms and sentence idioms and that sentence idioms are said to have simple and complex patterns. For example:

1. a. One swallow does not make a summer.
b. Give somebody an inch and he will take a mile.

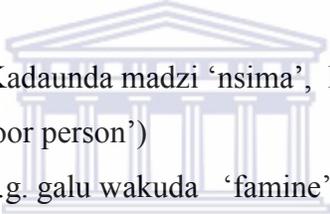
They have identified these patterns of English phrase idioms:

2. Noun Phrase e.g. *a crashing bore*
Adjective Phrase e.g. *free with one's money*
Prepositional Phrase e.g. *in the nick of time*
Adverbial Phrase e.g. *as often as not*

On the other hand, they have identified the following common patterns of English clause idioms:

3. Verb + preposition e.g. take in, take out
Verb + particle e.g. make up, come to
Verb + complement e.g. go berserk
Verb + direct object e.g. ease one's conscience/mind
Verb + direct object + complement e.g. paint the town red
Verb + direct object + indirect object e.g. do one credit
Verb + direct object + adjunct e.g. take something amiss

It is also important for us to know the structures of Cicewa idioms as they will help us to determine whether idiom structure affects children's interpretation and acquisition of idioms. Along the lines of Cowie, Mackin and McCaig's classification of English idioms Kamanga (2007) has classified Cicewa idioms as having two categories only: phrase idioms and sentence idioms. She states that phrase idioms are mainly of three types in Cicewa: noun phrase idioms, verb phrase idioms and adjective phrase idioms and that these phrase idioms function the same way as non-idiomatic phrases do. Kamanga describes noun phrase idioms as comprising of a head noun and another element (its complement). She observes that noun phrase idioms are not common in Cicewa. She subcategorized noun phrase idioms into five subcategories depending on the nature of the elements that the noun phrase idiom consists of (i.e. according to the complements the head nouns takes).

- 
4. Noun + Noun (e.g. *Kadaunda madzi* 'nsima', *Mphemvu mdyelakumthiko* 'a poor person')
 - Noun + Adjective (e.g. *galu wakuda* 'famine', *mvula zakale* 'olden days')
 - Noun + Adjective phrase (e.g. *Malo oduka mphepo* 'secluded place')
 - Noun + Prepositional phrase (e.g. *Citsime cha aliyense* 'a prostitute')
 - Noun + Ideophone (e.g. *Manja lende* 'a lazy person')

She also observes that idioms in category Noun + Noun do not have literal meanings where as those in the category Noun + Adjective except Noun + Adjective (prefix + adverb stem) have very clear literal meanings to the extent that one finds it very difficult to recognize their idiomatic meanings. Idioms with structure Noun + Adjective (prefix + adverb stem) do not have a literal meaning.

Kamanga describes the second category of phrasal idioms, adjective phrase idioms, as comprising a head adjective and its complement. She observes that the idioms in this category are the scarcest idiom types in Cicewa. These are of two types: Adjective + Noun (e.g. *wamtali dzanja* 'a thief', *zoda mutu* 'problems') and Adjective + Adjectival Phrase (e.g. *womva zayekha* 'troublesome person'). She observes that the

last category of phrasal idioms, verb phrase idioms, is the most common idiom type in Cicewa. She classified these into five subcategories depending on the nature of the elements that the head verb takes as its complements.

5. Verb + Noun (e.g. *taya madzi* ‘pass urine’, *onela pakhosi* ‘be seriously ill’)
- Verb + Noun + Prepositional Phrase (e.g. *gwilitisa fuwa la moto* ‘cheat someone’)
- Verb + Noun + Noun (e.g. *pala moto kudambwe* ‘invite trouble’)
- Verb + Noun + Adjective (e.g. *gona tulo tosadzuka* ‘die’)
- Verb + Prepositional Phrase (e.g. *nena za m’maluwa* ‘tell lies’)
- Verb + Adjective (e.g. *simba lokoma* ‘be happy/enjoy’)
- Verb + Adverb (e.g. *vala zilimbe* ‘be courageous’)

Kamanga subcategorized idioms with the structure Verb + Noun into two; Verb + Noun (base) for example *khala maso* (be alert), *bwila dothi* (die) and Verb + Noun (Locative Prefix + Noun) for example *gona pamphepo* (be unmarried), *yeletsa m’maso* (cheat someone). She observes that some of the verb phrase idioms have both literal as well as idiomatic meanings while others have idiomatic meaning only because their literal meanings contradict the world knowledge.

The second major category of Cihewa idioms, sentence idioms, are those idioms which are considered full sentences. The sentence idioms are subcategorized as simple sentence idioms and complex sentence idioms according to the structure of the sentences. Simple sentence idioms have one verb and are made up of a subject plus verb or subject plus verb plus object. Examples of simple sentence idioms are *mtima suvala sanza* (everyone wants good things) and *dzuwa likuswa mtengo* (broad daylight). The complex sentence idioms are those that have more than one verb. For instance, *ali ndi mwana, agwilitse* (be extremely careful’). Just like the verb phrase idioms, some sentence idioms have literal as well as idiomatic meanings while others have idiomatic meanings only.

Although Kamanga did not classify Cicewa idioms as well-formed and non-well-formed like Kiango (2003) did with Kiswahili verbal idioms, she has observed that in Cicewa there are also some idioms that are ungrammatical and these idioms lack literal interpretation. She also claims that the syntactic structures of the idioms play a crucial role when it comes to interpreting idioms. The idioms classified as noun phrases are idiomatically interpreted as nouns while some are interpreted as infinitivals since infinitivals have dual nature (they are both nominal and verbal). Those categorized as verb phrases are idiomatically interpreted as activity or action. She observes that the case is different when it comes to sentence idioms. Some are interpreted as nouns and others as activity or action. However, it is important to note that linguistic knowledge of an idiom's structure or knowledge of Cicewa grammar cannot help someone to figuratively interpret an idiom although Kamanga claims that syntactic structure of idioms play a crucial role in idiom interpretation. Idioms are social semiotic in the meaning-making process as such one needs sociocultural capital in order to correctly interpret idioms as it will be demonstrated in this thesis.

Having looked at the structural properties of idioms, it is important that we now look at how the idioms relate to some syntactic processes (transformations). A typical characteristic of idioms is their resistance to undergo transformations that similar non-idiomatic constructions can readily undergo, without losing their idiomatic interpretation. One of such transformations is passivization. Erbach (1992) claims that most idioms headed by a verb can undergo passivization and he gives the following examples:

6. a. i. John took the proposal into account.
ii. The proposal was taken into account.

- b. i. The FBI kept tabs on Jane Fonda.
ii. Tabs were kept on Jane Fonda.

- c. i. I spilled the beans
ii. The beans were spilled (by me).

In (6.a.ii), (6.b.ii) and (6.c.ii) we still have idiomatic meaning though the idioms are passivized. However, it has been demonstrated that although some idioms can undergo passivization others cannot. For instance:

7. a. i. John kicked the bucket.
 - ii. # The bucket was kicked by John.

- b. i. They have had their ups and downs.
 - ii. *Ups and downs were had by them.

(The # sign means the string does not have an idiomatic meaning and * means the string is ungrammatical).

Ifill (2002) explains this by arguing that those idioms that closely resemble their non-idiomatic counterparts syntactically are the ones that undergo passivization. To add, Riehemann (2001) argues that most non-decomposable idioms cannot be passivized. However, this is not the case with Cicewa idioms. Kamanga (2007) has demonstrated that almost all Cicewa idioms headed by the verb cannot be passivized regardless of whether they are decomposable or not. If passivized they cease to be idiomatic and in some cases anomalies occur. This forms the basis of her claim that passivization can be used as a diagnostic test for idioms in Cicewa (i.e. passivisation can be used to distinguish idiomatic expressions from non-idiomatic).

Apart from passivization, internal modification has also been used to describe idioms. For instance:

8. a. i. The FBI kept tabs on Jane Fonda.
 - ii. The FBI kept *close* tabs on Jane Fonda.

- b. i. They shot holes in my argument.
 - ii. They shot *huge* holes in my argument.

In (8.a.ii) and (8.b.ii) we still have idiomatic reading though they are modified. If we try to do the same with

9. a. i. John kicked the bucket.
ii. #John kicked the *green* bucket.

- b. i. John took the proposal into account.
ii. #John took the proposal into *several* accounts.

We note that (9.a.ii.) and (9.b.ii) cease to be idiomatic. Thus these idioms cannot be modified. The examples above show that some English idioms can be modified and still have idiomatic meaning while other idioms lose idiomatic meaning if modified. This property is also evident in Cicewa (Kamanga, 2007). Some Cicewa idioms can be modified and still have idiomatic meaning while other idioms lose their idiomatic meanings if modified and in some cases anomalies occur. Apart from modification, Kamanga (2007) found that the head verb of some idioms can be reduplicated in Cicewa and the idioms can still give idiomatic meanings since reduplication only indicates frequency of an act or event. For instance:

10. a. iphyaiphya mtima ‘become angry frequently’
b. pitapita pachabe ‘miscarry frequently’
c. tengatenga pakati ‘conceive frequently’
d. tayataya madzi ‘urinate frequently’

The syntactic properties of idioms discussed above show that the behavior of idioms is unpredictable.

2.1.2 Semantic properties

There are different approaches to semantic classification of idioms. Some scholars have classified idioms according to whether they are restricted or unrestricted, compositional or non-compositional, synonym accommodating or not, according to their reference etc. For instance, Chafe (1970) classified idioms as restricted or unrestricted. A restricted idiom is that idiom that is limited to very narrow context. He gives *red hair* and *make a bed* as examples of restricted idioms. He considers an unrestricted idiom as unlimited contextually and characterized by the fact that its literalization is not a semantic unit of the same kind as the idiom itself but a more complex post-semantic configuration. He gives *off base* as an example of unrestricted idiom and explains that ‘Mike is off base’ carry both the concrete baseball meaning and the abstract meaning *off-base* that is something like egregiously wrong. On the other hand, Cowie, et al. (1983) classified idioms as pure, figurative, restricted collocations and open collocations. Pure idioms are those idioms that have been established through constant re-use and undergo figurative extension and finally fossilize. Examples of pure idioms are *blow the gaff* and *kick the bucket*. Cicewa examples of such idioms are *dzala chinangwa* ‘die’ and *galu wakuda* ‘famine’. Figurative idioms have both figurative meanings and literal meanings. Examples include *catch fire* and *close ranks* (English), *taya madzi* ‘urinate’, *tsuka m’kamwa* ‘eat meat’ and *iba mphasa* ‘die’ (Cicewa). Restricted collocations are sometimes referred to as *semi-idioms*. Two-word idioms have one word with a figurative sense restricted in a limited context while the other word has normal literal sense. Examples of such idioms are *jog one’s memory* and *blind alley* (English) and *tenga cinja* ‘become pregnant’ (Cicewa). Open collocations are idioms whose component parts of verb and object or adjective and noun could be freely recombined in addition to being used in a common literal sense. Examples of such idioms are *fill the sink* and *a broken window* where in *fill the sink* the verb *fill* can be recombined with object *basin* or *bucket* as in *fill the basin* and be recombined with the verb *empty* or *drain* as in *empty the sink* and *drain the sink*. Although component parts of some idioms can be recombined freely, idioms cannot accommodate interchangeable synonyms. Ifill (2002) states that it has been noted that individual words in an idiom cannot be replaced by synonyms and still retain the idiomatic interpretation of the phrase. For instance:

11. a. John kicked the bucket.
 b. #John kicked the pail

In (11.b) the word ‘bucket’ has been replaced by a synonym ‘pail’ and the generated sentence ‘John kicked the pail’ gives non-idiomatic meaning only. However, Ifill notes that there are some idioms that can accommodate interchangeable synonyms although they do not tolerate unlimited interchangeability. This is also true with Cicewa idioms in that some idioms can use interchangeable synonyms. However, Kamanga (2007) noted that apart from using interchangeable synonyms, a small number of Cicewa idioms can also substitute a lexical item with another lexical item (with unrelated meaning) and still derive idiomatic meaning. She gives the following as examples of lexical substitution:

12. a. *Gonela/tsamila dzanja* ‘die’
 b. *Dula/idya mutu wazizwa* ‘be surprised’
 c. *Ponda/susula pacilonda* ‘arouse anger’
 d. *Namwali kande/veke* ‘a pig’

In these examples only ‘*gonela*’ and ‘*tsamila*’ in (12.a) are semantically related in that they both entail leaning against something but the other words in (12.b – d) have unrelated meanings yet the expressions are still idiomatic with the same idiomatic meaning. However, as already stated above knowledge of semantic behavior of idioms does not help someone to correctly interpret idioms if the person lacks sociocultural knowledge.

Some scholars have classified idioms according to their compositionality. Compositionality refers to the degree to which an idiom’s meaning can be figured out from the individual words in the idiom. Scholars such as van der Linden and Kraaij (1990); Erbach (1992); Hillert and Swinney (2001) and Ifill (2002) view idioms as non-compositional whereas scholars such as Pulman (1993); Nunberg et al. (1994); Levorato and Cacciari (1999); Vega-Moreno (2001a); McGinnis (2002); Ettliger (2002) and

Mateu and Espinal (2004) view idioms as compositional. Those scholars that view idioms as non-compositional look at idioms as holistic lexical units and that the meaning of an idiom is a property of the whole expression. They believe that the meaning of an idiom is in no way recovered from the meanings of its individual constituents. Spector (2005) gives *face the music* and *have a soft spot* as examples of non-compositional idioms in English. Kamanga (2007: 42- 3) gives a list of Cicewa idioms that are non-compositional and these idioms have both literal and idiomatic meanings. Those that view idioms as compositional hold the view that the relation between the idiomatic meaning and the linguistic form of most idiomatic expressions is not completely arbitrary. Vega-Moreno (2001b) states that the individual meanings of the constituents in the idiomatic string are often a clue to infer the meaning of the whole string. Idioms are placed on a continuum of compositionality and if the individual constituents in the string contribute literally or metaphorically to the figurative interpretation, the idiom is said to be decomposable. Spector (2005) gives *seeing is believing* and *my lips are sealed* as examples of compositional (decomposable) idioms. Kamanga (2007: 41- 2) gives a list of Cicewa compositional idioms and notes that some compositional idioms do not have literal meanings just because their literal meanings contradict our world knowledge. However, such idioms are classified as compositional because the meanings of the single words in the idiom contribute to their idiomatic meaning and do not contradict our world knowledge. The presence of both compositional and non-compositional idioms demonstrates that compositionality cannot be used as a test for idioms in Cicewa.

Another way of semantically classifying idioms is to use their reference. Idioms refer to many things that surround human beings. Some refer to human experiences while others refer to human nature itself. In this respect, Kamanga (2007) classified Cicewa idioms as referring to death, reproduction, social problems, time, illness, food, animal, family and marriage, determination, mind, joy and misfortunes, cheating and exploitation, apologies, anger, poverty and riches, education, the world and its places, human nature/behavior/character, excretion, famine, desires, warnings, advice, welcome, nakedness, evil plot, commenting, and surprise. Kamanga observes that this reference classification shows how peoples' understanding of nature helps them explain certain

experiences they go through and how cultural values influence people's understanding of certain things. This is a good observation as it suggests that idioms are social semiotic and cannot be separated from the social context in which they were produced.

The syntactic and semantic properties of idioms discussed above show that idioms exhibit varied behavior as such they are a fuzzy category. Idioms behave like lexical items and in other cases they behave like syntactic elements. Thus it is difficult to identify what is and what is not an idiom since they defy concepts of syntax and semantic analysis due to unpredicted restrictions.

2.2 Idiom comprehension/interpretation and acquisition

Idioms, as explained above, exhibit varied behavior as a result they cause a lot of problems in linguistic explanations not only in relation to syntax and semantics but also language acquisition. The findings on idiom acquisition in children are conflicting and the debate on the interpretation of idioms is still going on. Some scholars argue that idioms are interpreted holistically while others argue that they are not. This has led to the development of different models of idiom interpretation. The proposed models of idiom interpretation have an effect on the acquisition of idiom interpretation. This section presents a brief discussion of these models and shows how they have influenced the studies on idiom interpretation and acquisition. The section also discusses factors that affect idiom interpretation and acquisition.

2.2.1 Models of idiom comprehension and interpretation

Many theories have been developed to account for idiom interpretation. The theories are based on two main opposing views: the non-compositional view and the compositional view. In the non-compositional view, idioms are hypothesized to be represented as holistic lexical units (van der Linden & Kraaij, 1990; Erbach, 1992; Hillert & Swinney, 2001; Ifill, 2002). In this view, it is assumed that the meaning of an idiom is a property of the whole expression and that the semantic characteristics of an idiom's word components do not influence or direct the way an idiom is interpreted (Titone & Connine,

1999). In contrast, the compositional view claims that the meaning of an idiom is derived from the meaning of its parts and the way these parts are syntactically linked (Pulman, 1993; Nunberg et al., 1994; Levorato & Cacciari, 1999; Vega-Moreno, 2001a; Ettliger, 2002; McGinnis, 2002 and Mateu & Espinal, 2004). Therefore, the literal meaning of an idiom's word components are critical in the idiom's interpretation. These proposed theories of idiom interpretation have influenced studies on idiom acquisition and interpretation. A brief discussion of the proposed theories on each view has been presented in the following sections.

2.2.1.1 The non-compositional view

The non-compositional view is also known as the 'Traditional view'. It looks at idioms as lexical items that are listed in the lexicon and that their meaning is retrieved as chunks and it is never influenced by the semantic characteristics of word components of an idiom (Titone & Connine, 1999). The models of idiom interpretation that adopt the non-compositional approach have been classified as 'direct look-up' by Glucksberg (1993) because they all share the assumption that figurative meanings are comprehended by direct memory retrieval. However, the models differ in terms of how and when idiomatic meaning is retrieved. There are three models in 'direct look-up': Idiom List Hypothesis, Lexical Representation Hypothesis and Direct Access Hypothesis. Idiom List Hypothesis/Literal First Hypothesis (Bobrow & Bell, 1973) assumes that there is a special list of idiomatic expressions stored in the lexicon and that this lexicon is different from our normal mental lexicon. It posits that idioms are stored as whole chunks. This approach asserts a form of two-stage serial access/processing in which the idiomatic interpretation is achieved only in the second stage (Hillert & Swinney, 2001). That is, the hearer must first process the literal meaning via the literal processing mode and if this is rejected then the hearer checks the idiom lexicon via the 'idiom processing mode' and the figurative meaning is retrieved from the idiom list. However, this model was later rejected by the findings that idioms are understood as quickly as literal expressions. This led to the development of Lexical Representation Hypothesis/Simultaneous Processing Hypothesis by Swinney and Cutler (1979). Swinney and Cutler argue against the priority

of literal interpretation and hold that idiomatic expressions are stored and retrieved from the lexicon similar to lengthy words and that there is no special idiom processing mode. This model asserts that idiomatic and literal meanings of words and word compounds are simultaneously activated upon encountering the first word of an idiom. The idiom is recognized before the literal meaning becomes available since the literal computation takes longer than the retrieval process (Vulchanova, Vulchanov & Stankova, 2011). Because of this, Cooper (1999) calls this event a ‘horse race’ between the two meanings in order to find the more fitting interpretation. On the contrary, the Direct Access Hypothesis/Figurative First Hypothesis (Gibbs, 1980) considers idioms as lexical items whose idiomatic meaning is retrieved directly from the mental lexicon as soon as the string starts to be heard. Gibbs argues that people do not engage in linguistic analysis at all and that the literal meaning is not prior to the idiomatic one. They can entirely bypass the literal meaning, directly accessing the figurative interpretation of the idiom string (Papagno & Caporali, 2007).

The non-compositional view has been criticized for being unable to account for idiom flexibility and also undermining idiom processing. It looks at idiom processing as merely retrieving idiomatic meaning yet there is a lot of reasoning and decision-making taking place in idiom processing. Gibbs (1995) argues that people’s metaphorical understanding plays a significant role in how they interpret idiomatic discourse, therefore, it is inaccurate to call idioms non-compositional. Apart from the raised criticisms, these models are also weak in that they are all based on linguistic structure and that they do not take into account the social cultural context in which the idioms are consumed. It will be demonstrated in this thesis that outside the social context in which idioms were produced, no one can correctly interpret them.

2.2.1.2 The Compositional view

The compositional view is also known as the ‘Current view’. It was first proposed by Gibbs, Nayak and Cutting (1989) who discovered that subjects needed less time to process decomposable idioms than to process non-decomposable idioms in a series of

reading-time experiments. This view holds that idioms are mentally represented as configurations of lexical items without any separate representations in the lexicon (Cacciari, Padovani & Corradini, 2007) and that idioms are processed like any phrase or sentence (i.e. the meaning of an idiom is derived from the meaning of its parts and the way these parts are syntactically linked). When speakers encounter an idiomatic phrase, a semantic analysis is undertaken on the basis of the grammatical structure and the meaning of the lexical items of the phrase. Thus, the relation between the idiomatic meaning and the linguistic form of most idiomatic expressions is not completely arbitrary. Vega-Moreno (2001b) states that the individual meanings of the constituents in the idiomatic string are often a clue to infer the meaning of the whole string. In this view, idioms are placed on a continuum of compositionality and this idea is known as decompositional hypothesis. If the individual constituents in the string contribute literally or metaphorically to the figurative interpretation, the idiom is said to be decomposable. Several models have been developed following this line of thought. Some of the models are the Conceptual Metaphor Hypothesis, the Configuration Hypothesis, Path of Least Effort Hypothesis and Optimality theoretic account. The Conceptual Metaphor Hypothesis (Gibbs, 1994; Gibbs et al., 1997) assumes that language use is constrained and motivated by pre-existing metaphorical schemas in our mind, which are grounded in our bodily experience (Vega-Moreno, 2001a). As such, understanding an idiom is partly a matter of mapping the metaphors that motivate it. This means that literal meaning does not play a vital role in understanding an idiom. On the contrary, The Configuration Hypothesis (Cacciari & Tabossi, 1988) proposes that idioms are processed literally until, at some point of the string, the configuration emerges and the idiomatic meaning is activated. Thus understanding an idiom is a matter of selecting the appropriate sense of each of constituent words on-line so that the string can be recognized as a configuration. In contrast with the Configuration Hypothesis, the Path of Least Effort Hypothesis/Relevance-Theoretic Account (Vega-Moreno, 2001a) views idioms as conceptual units that encode conceptual representations that have no equivalent in any non-idiomatic linguistic string and cannot be paraphrased without loss. This model proposes that idioms are mentally represented and processed as structured phrasal concepts hence idioms are processed in the same way as other non-idiomatic sequences

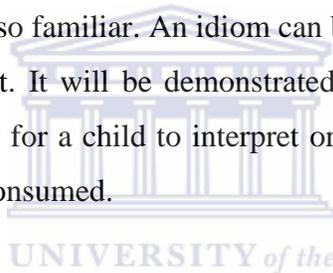
of words. In the same line as Relevance theoretic model, Optimality Theoretic Account (Kamanga, 2007, 2007/8) also proposes that idioms are processed like any other literal expression. This means that idioms are not processed in any other special way. However, Optimality Theoretic model differs from Relevance theoretic model in that Optimality theoretic model assumes that both literal and idiomatic meanings are processed at the same time using information from different sources and that these meanings exist at the same time but in different contexts. This model proposes that literal and idiomatic meanings compete and that the winning candidate is preferred. Just like the non-compositional models these models are also weak in that they are all based on linguistic structure and that they do not consider the cultural context in which the idioms are consumed. Outside the sociocultural context in which idioms were produced, idioms cannot be interpreted. Therefore, as it will be explained in the next section, the current study integrates Optimality Theoretic model with Systemic Functional Linguistics theory in its attempt to account for children's acquisition of idiomatic meaning.

2.2.2 Models of idiom acquisition

Based on the two main views on idiom interpretation; non-compositionality and compositionality, two main theories of idiom acquisition have been developed. The first theory is that of 'giant lexical units'. This theory states that idiomatic phrases are learnt the same way as single lexical items (Ackerman, 1982). The second theory is a mixture, the metasemantic theories (Ballas, 2008). The metasemantic theories state that idiomatic phrases are learnt through understanding their constituent parts (Nippold & Taylor, 1995). This means idioms are not learnt as big chunks. There are several views in the metasemantic theories as such there are several models which emphasize on different aspects as being crucial in idiom acquisition. Below are some of the models within the metasemantic theories.

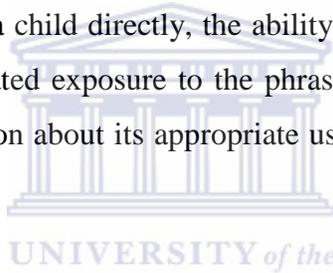
The first model to be discussed is the 'language experience' hypothesis of figurative development (Nippold & Taylor, 1995). This hypothesis views familiarity of idioms as more crucial in idiom acquisition. This hypothesis proposes that more familiar idioms

are easier to understand than less familiar ones. Studies by Schweigert (1986); Cacciari (1993); Nippold and Rudzinski (1993); Nippold, Moran and Schwarz (2001); Nippold and Taylor (2002) show that the more exposure the child has to idiomatic phrases, the easier it is to understand the figurative meaning. This hypothesis posits that children learn the meanings of idioms when they encounter them in written and spoken contexts (Nippold & Taylor, 2002). Some scholars have argued that exposure to idiomatic expressions alone is insufficient to explain developmental improvement. Research in which the transparency of the idioms and presence of context have been manipulated sheds light on the language processing mechanisms that might underlie familiarity effects (Cain, Oakhill & Lemmon, 2005). This weakness led to the development of the second model, the Global Elaboration by Levorato and Cacciari (1995, 1999). Another weakness of this model is that it assumes that if an idiom is familiar then the cultural frames of reference for its meaning are also familiar. An idiom can be familiar and children can still fail to idiomatically interpret it. It will be demonstrated in this thesis that it is not the idiom that needs to be familiar for a child to interpret or acquire it but the sociocultural context in which the idiom is consumed.



The Global Elaboration Model proposes that the ability to use contextual information is one of the crucial skills in children's acquisition of idiomatic meaning (and other forms of figurative languages). Levorato and Cacciari (1999:63) argue that 'the ability to process figurative language is greatly influenced by contextual information and becomes increasingly sensitive to the structure and internal semantics of idiom string'. In support of this Ackerman (1982); Cacciari and Levorato (1989); Gibbs (1987, 1991); Levorato and Cacciari (1995) and Nippold and Martin (1989) argue that idioms that are presented in supportive narrative contexts are easier to understand than are those presented in isolation. Cain et al. (2005:67) explain that 'context might facilitate the interpretation of figurative language by providing the necessary semantic information from which the reader (or listener) can extract or infer the appropriate sense of the expression'. This model proposes that there are two text processing strategies that can aid in the interpretation of unfamiliar idiom. These processing strategies are semantic analysis (if the idiom is transparent) and inference from context (if present). The transparency of

idioms facilitates idiom comprehension between 5 and 17 years of age since idioms are easier to understand when there is close relation between their literal and figurative senses (Gibbs, 1987, 1991; Levorato & Cacciari, 1999; Nippold & Taylor, 1995, 2002). Cain et al. (2005:67) explain that ‘as children move from a piece-by-piece style of processing language and begin to strive for coherence in sequences of text and discourse, their developing comprehension skills enable them to appreciate that a literal interpretation of an idiom is inconsistent with the context within which it occurs. Children’s developing inferential skills enable them to derive the meanings of idioms from the context in which they are presented’. According to this model children are challenged with idioms because their language processing is not global in nature. This means this model views the acquisition of idiomatic meaning as a constructive process (Cain et al., 2005). Furthermore, Levorato (1993) argues that even if the meaning of an expression has been taught to a child directly, the ability to fully understand and use the expression might require repeated exposure to the phrase in considerate and supportive contexts from which information about its appropriate use and precise interpretation can be extracted.



This model puts emphasis on the linguistic context as being crucial in acquisition of idiomatic meaning. Much as linguistic context plays a role in acquisition of idiomatic meaning it cannot enable a child to acquire idiomatic meaning. A child can have the ability to use contextual information and still fail to acquire the meaning of an idiom because idioms are social semiotic and need to be interpreted in the sociocultural context in which they were produced. Thus, it will be demonstrated in this thesis that the sociocultural context within which the idioms are produced is central to the acquisition of idiomatic meaning. Furthermore, the model does not state how children use the meanings of individual words and context to acquire idiomatic meanings. It also fails to explain the developmental stages that children go through in the acquisition of idiomatic meaning. These suggest that something is lacking in this model. To address these problems the present study integrates Optimality Theory (OT) with Systemic Functional Linguistics theory to bring out the sociocultural contexts playing crucial role in the acquisition of idiomatic meaning of Cicewa idioms and to explain the developmental stages that

children go through in the acquisition of idiomatic meaning. Systemic Functional Linguistics theory helps us to identify the sociocultural contexts in which Cicewa idioms are used and Optimality Theory provides the necessary tools to combine different pieces of information from linguistic context, sociocultural context, world knowledge, lexicon, syntax et cetera in a precisely defined way thus helping us to explain how these pieces of information integrate to enable children to acquire idiomatic meaning. OT also enables us to identify and explain the developmental stages that children go through in the idiomatic meaning acquisition process.

2.2.3 Factors affecting idiom interpretation and acquisition

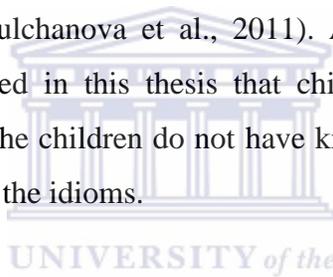
Idiom comprehension and interpretation has been said to have been affected by several factors such as ‘familiarity of the idiom’, ‘linguistic context’, ‘transparency (semantic analyzability/decomposability/compositionality) of the idiom’. Research has shown that the most familiar idioms are easier to understand than less familiar idioms (Schweigert & Cronk, 1992/93; Titone & Connine, 1994; Janyan & Andonova, 2000; Titone, Holzman & Levy, 2002; Cain, Oakhill & Lemmon, 2005; Kamanga, 2007; Libben & Titone, 2008). Titone and Connine (1994) define familiarity as a rate at which a listener or reader encounters a word in its written or spoken form and the extent to which the meaning of a word is well known. In these research speakers had no problems interpreting idioms rated familiar but had problems interpreting idioms rated unfamiliar. For instance, in the study of Cicewa idiom interpretation, Kamanga (2007) found that familiarity influenced the way Cicewa speakers interpreted Cicewa idioms. When idioms in both written and oral forms were presented to Cicewa speakers, speakers correctly interpreted all the idioms they rated ‘often’ and ‘more often’ (i.e. familiar idioms). Most speakers had problems to interpret idioms which they rated ‘rarely’ and ‘never’ (i.e. unfamiliar idioms). Most of these idioms were wrongly interpreted while others were not interpreted at all. As it has been pointed out already an idiom can be familiar and someone can still fail to correctly interpret the idiom if the sociocultural context in which the idiom is consumed is not familiar as idioms are social semiotic in the meaning-making process.

Apart from familiarity, idiom interpretation is also affected by context in which the idiom occurs. It is usually impossible to infer the meaning of a phrase until it is seen in its immediate context (Bílková, 2000). Studies have shown that idioms are easier to understand when they occur in linguistically supportive contexts compared to non-supportive or absent contexts (Ackerman, 1982; Kemper, 1986; Cacciari & Levorato, 1989; Nippold & Martin, 1989; Gibbs, 1987, 1991; Levorato & Cacciari, 1995, 1999; Liontas, 2001; Laval, 2003; Bulut & Çelik-Yazici, 2004; Cain, Oakhill & Lemmon, 2005; Kamanga, 2007). In her study, Kamanga (2007) found that Cicewa speakers could not interpret unfamiliar idioms when presented out of context but the same unfamiliar idioms were correctly interpreted when they were presented in context. This suggests that context plays a very crucial role when it comes to the interpretation of unfamiliar idioms because as Cain et al. (2005) and Lacroix, Aguert, Dardier, Stojanovik & Laval (2010) suggest, context facilitates the interpretation of idioms by providing the necessary semantic information from which the reader (or listener) can extract or infer the appropriate sense of the expression. However, Linguistic context alone is not enough to enable someone to idiomatically interpret an idiom as already pointed out. One needs sociocultural capital to correctly interpret idioms.

Transparency (semantic analyzability/decomposability/compositionality) of the idiom has also been identified as affecting idiom interpretation (Levorato & Cacciari, 1999; Titone, Holzman & Levy, 2002; Cain, Oakhill & Lemmon, 2005). Transparency (semantic analyzability/decomposability/compositionality) is the degree to which the literal and the nonliteral meanings of an idiom agree or compare (Cain et al., 2005; Lacroix et al., 2010). Idioms are regarded as transparent when the literal and non-literal meanings compare closely but when the meanings are not related, idioms are regarded as opaque. Some scholars such as Titone and Connine (1999), Levorato and Cacciari (1999), Titone et al. (2002) and Cain et al. (2005) have argued that transparency (semantic analyzability/decomposability) of idioms influences how the idioms are processed. They argue that idioms are easier to understand when there is a close relation between their literal and figurative senses. Nevertheless, this seems to be not the case with Cicewa idioms. Kamanga (2007) found that Cicewa speakers interpreted semantically analyzable

and non-analyzable idioms equally when these were presented to them. Speakers were able to give meanings of semantically analyzable (compositional) as well as semantically non-analyzable (non-compositional) idioms without having any problems. This finding suggests that it is not transparency/decomposability of idioms that is critical here but possibly the speakers had knowledge of the sociocultural context in which Cicewa idioms are consumed as it will be demonstrated in this thesis.

The factors affecting idiom interpretation discussed above (familiarity, context, transparency/semantic analyzability/compositionality of an idiom) have also been found to affect idiom acquisition by children. Research has shown that children easily acquire the idiomatic meaning of familiar idioms than of less familiar idioms (Levorato & Cacciari, 1992; Nippold & Rudzinski, 1993; Titone & Connine, 1994; Nippold & Taylor 1995; Hsieh & Hsu, 2010; Vulchanova et al., 2011). Although there is this research finding, it will be demonstrated in this thesis that children fail to acquire idiomatic meaning of familiar idioms if the children do not have knowledge of the cultural frames of reference for the meaning of the idioms.



It has also been found that linguistic context plays a very crucial role in idiom acquisition (Levorato & Cacciari, 1995, 1999; Laval, 2003; Hsieh & Hsu, 2010; Leung, 2011). It has been stated that context helps young children to infer the figurative meaning of an idiom and learn the meaning (Huber-Okrainee, Blaser & Dennis, 2005). Levorato and Cacciari (1999) in their study of idiom interpretation in children found that children were able to give idiomatic answers to semantically non-analysable idioms when these idioms were presented in context unlike when the idioms were presented out of context. This implies that it is the context that helped the children to give idiomatic interpretation for the non-analyzable idioms. Although this is the case, this thesis will demonstrate that linguistic context alone is not enough for a child to acquire idiomatic meaning. Children still fail to figuratively interpret and acquire idiomatic meaning even if idioms are presented in supportive context if the children lack sociocultural knowledge.

Furthermore, it has also been established that children understand analyzable idioms more readily than non-analysable idioms (Gibbs, 1987; Gibbs & Nayak, 1989; Nippold & Taylor, 1995; Cacciari & Levorato, 1998; Leung, 2011; Fadlon, Horvath, Siloni & Wexler, 2013). It has also been established that the internal structure of the idioms affect how children interpret and acquire the idioms (Crutchley, 2007; Leung, 2011; Vulchanova, Vulchanov & Stankova, 2011). Leung (2011) and Vulchanova, Vulchanov and Stankova (2011) observed that idioms with unusual structures were difficult for children to process and acquire. However, it is not always the case that children will find it easier to interpret idioms with well-formed structures. In this thesis it will be demonstrated that children find it difficult to interpret and acquire well-formed idioms as well as ill-formed idioms if the children lack knowledge of the sociocultural context in which the idioms are used. It has also been established that age affects idiom acquisition. Research findings show that children abandon non-idiomatic interpretation of idioms when they grow up (Prinz, 1983; Levorato, 1993; Laval, 2003; Levorato, Nesi & Cacciari, 2004; Hsieh & Hsu, 2010; Vulchanova et al., 2011; Karuppali & Bhat, 2013).

2.3 Chapter Summary

This chapter has discussed the nature of idioms from both syntactic as well as semantic perspectives. It has shown that idioms exhibit varied behaviour hence they are a fuzzy category. The chapter has also discussed different models of idiom interpretation. It has summarised models of interpretation from both compositional and non-compositional views. It has also pointed out the weaknesses of these models as they fail to fully account for idiom interpretation. Models of idiom acquisition have also been discussed in this chapter. The chapter points out that the existing models of idiom acquisition are wanting as they fail to fully account for what goes on in idiom acquisition. Finally, the chapter has discussed the factors that have been identified as affecting idiom interpretation and acquisition. The next chapter describes Optimality Theory, one of the theories adopted in this study.

Chapter Three

Optimality Theory (OT)

3.0 Introduction

This chapter gives an overview of Optimality Theory (OT), a theory of Universal Grammar, developed by Prince and Smolensky (1991, 2004). It presents the general architecture of OT. It describes the core components of OT grammar: GEN, EVAL, CON and explains how these components relate. It discusses how OT (Semantics/Pragmatics) accounts for language interpretation. It describes two versions of OT Semantics: Unidirectional OT and Bidirectional OT. It also presents different forms of Bidirectional OT and the chapter explains how these forms relate to language interpretation. The chapter also explains how OT accounts for language acquisition through reranking of critical constraints. It points out that reranking of constraints is critical to the current study as it would help to explain how idiom interpretation develops in Cicewa speaking children. It would also reveal the developmental stages that Cicewa speaking children go through as they learn to interpret idioms.

3.1 The General Architecture of Optimality Theory

Optimality Theory (OT) has its sources in connectionism where computations are performed by a network of artificial neurons modelled after the human brain (Hoeks & Hendriks, 2011:116). In connectionism, the neural network maps a specific input pattern to a specific output pattern. Central to the mapping are the concepts: harmony (a measure of the degree of conformity to the connections between the units in the network (Hoeks & Hendriks, 2011:116)) and optimization (harmony maximization). The connections embody various conflicting constraints. A pattern of activation that optimally balances the demands of the constraints in a network maximizes harmony. Basing on these ideas, the Theory of Harmonic Grammar was developed. Harmonic Grammar views a grammar as a set of violable and conflicting constraints. A structure that optimally satisfies the

total set of constraints is considered grammatical. Like in artificial neural networks, constraints are weighted and through a process of summation, the effect of the total set of constraints can be determined (Hoeks & Hendriks, 2011). Hoeks and Hendriks (2011:117) describe Optimality Theory as ‘a kind of ‘restricted’ Harmonic Grammar’ in that it does not formalize the weight of constraints by numerical strengths but solely by a strict priority ranking.

Optimality Theory is a theory of Universal Grammar (UG) in that it defines UG as a set of universal constraints that are violable. The constraints spell out universal properties of language (Archangeli, 1997). OT fundamentally differs from classical rule-based generative theory which defines UG as a set of inviolable principles and parameters in that it defines UG as a set of violable universal constraints and a basic alphabet of linguistic representational categories (Kager, 2004). OT is limited to constraint ranking as a device in its interactions hence it is a theory of how constraints interact with one another. ‘It isn’t a theory of what the constraints are nor is it a theory of representations’ (McCarthy, 2008:15). In Optimality Theory, a grammar consists of a set of well-formedness constraints which apply simultaneously to representations of structures and which are soft. Central to OT is the idea that language, and in fact every grammar, is a system of conflicting forces and that ‘these forces are embodied by constraints, each of which makes a requirement about some aspects of grammatical output forms’ (Kager, 2004:4). Thus, UG includes a component of constraint CON that contains the entire repertoire of constraints.

In OT, a grammar is the ranking of universal constraints. Each language has its own ranking for these constraints. The ranking in a particular language is the total ordering of a set of universal constraints. Hence the grammars of specific languages are the language particular rankings of these constraints. Differences in constraints ranking give rise to systemic variation between languages. Constraint ranking is the only systemic difference between languages (McCarthy, 2008). Therefore, language specific ranking is the ‘only method in OT for explaining how and why languages differ from one another’ (McCarthy, 2002:6).

Optimality Theory is comparative (McCarthy, 2002, 2008). For a given input, the Gen (for Generator) generates a potentially infinite set of output candidates (the candidate set) which consists of alternative structural realizations of that input (Legendre, 2001). The output candidates are then subjected to Eval (for Evaluator) where they are compared by applying a hierarchy of violable constraints to determine the optimal member of the output candidates since ‘no candidate is good or bad in itself; it’s only good or bad in relation to other candidates from the same input’ (McCarthy, 2008:21). The constraints assess the form of a candidate and its relationship to the input. The actual output is the optimal member of a set of output candidates; the one that is more harmonic in all its pairwise competitions with other candidates. It performs better on the highest-ranking constraint.

3.2 The Components of the OT grammar

The OT grammar is an input-output mechanism that pairs an output form to an input form. The grammar accomplishes this through two functions, GEN(erate) and EVAL(uate). In the function Generate the GENERATOR (GEN) maps the input onto an infinite set of candidate output forms and in the function EVAL(uate) the EVALUATOR (EVAL) has the task of evaluating the candidate output forms by a set of ranked constraints, selecting the optimal output (Kager, 2004). When the function GEN is applied to some input it produces a set of candidates which are logically possible analyses of the input at hand and then it submits these to EVAL. When EVAL, the set of ranked constraints, is applied to this set of candidates produces an output; the optimal analysis of the input.

Apart from the two functions GEN and EVAL an OT grammar also contains a LEXICON. The LEXICON stores all lexical forms that are input to GEN (Kager, 2004). The LEXICON contains ‘all contrastive properties of morphemes (roots, stems and affixes) of a language, including phonological, morphological, syntactic and semantic properties’ thus it provides the specifications of the input and submits to GEN (Kager,

2004:19). The LEXICON is the level at which no specific properties are stated because at this level we have underlying forms as such interactions of constraints are expressed at the level of the output and never at the input level. In line with this, Kager (2004: 19) states that ‘no constraints hold at the level of underlying forms’. This is called Richness of the Base.

3.2.1 The GENerator (GEN)

The GEN(erator) is the function in OT grammar that relates the input to a set of candidate representations, any one of which can become the optimal output form for a specific input. GEN receives an input and creates a set of output candidates that are intimately connected to the input in that the output candidates represent alternative structural realizations of that input (Legendre, 2001). The input determines what should compete. Archangeli (1997:13) defines an input as ‘linguistically well-formed objects in the sense that the input does not contain nonlinguistic objects’. A list of possible outputs created by GEN for a given input is called a *candidate set*. The output of GEN is not the final output of the grammar because the grammar as a whole does not over generate.

A part from constructing candidate output forms, GEN specifies a relation between the candidate output forms and the input which is crucial in evaluating the FAITHFULNESS constraints (Archangeli, 1997; McCarthy, 2002). GEN defines the range of competitors for a given input that includes all of the ways in which the input could be realized in any possible human language (Prince & Smolensky, 2004; McCarthy, 2008). The output candidates can have any conceivable structure (syntactic, phonological, semantic) and can in principle even be non-linguistic (Hoeks & Hendriks, 2011). The candidate forms generated by GEN for a given input are the same in every language since GEN is universal. Because GEN is universal supplies candidates varied enough to fit all of the ways in which languages can differ. Furthermore, the number of output candidates generated by GEN is infinite as GEN can add, delete and rearrange things without restriction. This property of GEN has been called *inclusivity* or *freedom of analysis* (McCarthy, 2002:8). Kager (2004:20) defines Freedom of Analysis as ‘any amount of

structure may be posited'. The only restriction on GEN is that it can only generate output candidates made up of licit elements from the universal vocabularies of linguistic representation (Archangeli, 1997; Kager, 2004). Within these limits 'anything goes', the OT grammar needs no rewrite rules to map input onto output (Kager, 2004). The relationship among the input, GEN and the output forms (candidate set) can be diagrammatically represented as follows:

$$/input/ \rightarrow GEN \rightarrow \{Cand1, Cand2, \dots\} \text{ (McCarthy, 2008:16)}$$

The input feeds into GEN, which creates candidates. The candidates are considered by EVAL, which selects the optimal candidate from the set.

3.2.2 The EVALuator (EVAL)

EVALuator) is the mechanism which selects the optimal candidate set created by GEN. It is the central component of OT grammar because it has the responsibility of accounting for all observable regularities of surface forms. EVAL is organised as a language-specific hierarchy of universal constraints plus devices for evaluation. The constraint hierarchy contains all universal constraints (CON) which are ranked in a language-specific way. A language-specific hierarchy of universal constraints includes the means to assess violation marks on candidate output for every constraint and the means to rank an infinite set of candidate output for harmony (Kager, 2004). EVAL finds the optimal candidate by applying language-particular constraint hierarchy to the set of candidates. The optimal output, the one that is selected by EVAL, is the one at the top of the harmonic order on the candidate set, the one that best satisfies the constraint system (Prince & Smolensky, 2004).

Evaluation of candidate outputs relies on a set of hierarchically ranked constraints of CON: $C_1 \gg C_2 \gg \dots C_x$ as such it is based on strict domination. Each candidate is evaluated by all constraints at once in parallel (Barlow & Gierut, 1999) and the candidate that violates the fewest high ranked constraints is chosen as optimal. Violation of the

more important (high-ranked) constraints is serious than violation of less important (lower-ranked) constraints such that satisfaction of lower-ranked constraints cannot compensate for the violation of a single high-ranked constraint (Kager, 2004). Furthermore, constraint violations are never added for different constraints so addition of constraint violations of two lower-ranked constraints cannot cancel out a single violation of a higher-ranked constraint. Lower-ranked constraints cannot ‘team up’ against a higher-ranked constraint. Thus, optimality does not ‘involve any kind of compromise between constraints of different ranks’ (Kager, 2004:22).

As it has been noted above, candidates with fewer violation marks are more favoured to candidates with more violation marks. Although this is the case, McCarthy (2008:20) observes that ‘EVAL never looks for candidates that obey a constraint; it only asks for candidates that are most favored by a constraint’. He further notes that being favored by a constraint is not the same as obeying it. Candidate(s) may be favored by a given constraint but it can happen that it is not obeying the constraint. This means violation of a constraint is an insufficient ground for ungrammaticality. In OT a candidate’s ungrammaticality is a consequence of its inferiority to other candidates rather than violating an inviolable constraint (McCarthy, 2008).

EVAL gives out a winner whenever a set of output candidates is handed to EVAL. EVAL achieves this through a reduction process where it starts with the constraint that is ranked highest going down the hierarchy until the set is reduced to one candidate (McCarthy, 2008). EVAL extracts the subset of {Cands} that is most favored by high ranking CONST1 which is then passed along to the next constraint in the ranking, CONST2, which does the same thing: it locates the subset of candidates that it most favors and discards the rest. This process goes on until there is only one winner remaining. However, it is not always the case that EVAL will give one optimal candidate. Sometimes EVAL may fail to give one optimal candidate. For instance, if there is a tie in that two candidates have the same number of violation-marks from all the constraints and EVAL has run out of constraints to reduce the candidate set to a single candidate, then both candidates will be optimal. This kind of a tie has been used to account for within-

language variation (McCarthy, 2002, 2008). Despite this, this kind of a tie is unwelcome and requires an additional constraint.

3.3 The Universal Constraint Set (CON)

The Universal Constraint Set (CON) is universal in that every constraint in CON is in the grammar of every language. That is, every language has access to exactly the same set of constraints. A constraint has been defined as ‘a structural requirement that may be either satisfied or violated by an output form’ (Kager, 2004:9). The constraints are part of our innate knowledge of language hence UG incorporates a constraint component CON. Different languages are different rankings of CON and constraint ranking is the only way that languages differ (McCarthy, 2008). A constraint assigns violation marks to candidates. A constraint can assign any number of violation marks from zero upwards depending on how the constraint is defined and what the candidate is (McCarthy, 2008). A constraint favors a candidate if a constraint assigned n violation marks to it over other candidates to which it assigned more than n marks.

Constraints have two properties: universality and violability. As already alluded to, constraints are universal. All constraints are part of Universal Grammar. This means all constraints are universally present in the grammar of all natural languages even if a language may seem to completely ignore some constraint C , C remains in the language’s constraint hierarchy but it is inactive because other constraints dominate it and not because it has been removed from the language’s grammar (McCarthy, 2008). McCarthy (2002) observes that constraints can only be universal if some constraints are obeyed in some languages but violated in others since languages differ in systemic ways. Due to these differences not every constraint will be active in all languages. A constraint that is never violated in one language may be violated but still be active in a second language, but totally inactive in yet a third language (Kager, 2004). Even within a language a constraint might be active sometimes and inactive other times when different candidate sets from different inputs are considered (McCarthy, 2002). Whether a constraint is

visibly active depends on the constraints that dominate it and the candidates that it evaluates.

The second property of constraints; violability or softness implies that any constraint may end up being violated in some language. The potential for being violated is a result of the position of a constraint in a particular language's hierarchy, rather than a property of the constraint itself (Archangeli, 1997). Kager (2004:12) defines violability as 'constraints are violable, but violation must be minimal'. A constraint can only be violated if the reason is to avoid violating a higher-ranked constraint. However, violation must be kept to a minimum. 'Everything else being equal, forms with 'lesser' violations are more harmonic than forms with 'greater' violations' (Kager, 2004:12). Because constraints are violable in OT it often happens that all viable candidates violate some constraint (McCarthy, 2008). 'Violability of constraints is an essential property of OT, representing a radical break away from derivational models, as well as from constraint-based theories ... which assume that constraints are 'hard' or inviolable' (Kager, 2004:12).

There are two basic types of constraints distinguished in OT: MARKEDNESS and FAITHFULNESS. These two constraints are central to OT. Each individual constraint evaluates one specific aspect of output markedness or faithfulness (Kager, 2004). MARKEDNESS constraints also called WELL-FORMEDNESS or STRUCTURAL constraints refer to 'any constraint that assigns violation-marks to a candidate based solely on its output structure, without regard to its similarity to the input' (McCarthy, 2002:14). MARKEDNESS constraints evaluate output forms favoring certain structural configurations. Markedness refers to the complexity of a given structure relative to another structure (Barlow & Gierut, 1999). MARKEDNESS constraints require that output forms be unmarked in structure. Marked structures are avoided by all languages and some languages completely ban them. A marked linguistic structure is not ill-formed but is avoided because it is not the most basic compared to other linguistic elements. In OT, markedness is represented by constraint violation whereas constraint satisfaction corresponds to unmarked properties. FAITHFULNESS constraints require identity between the input and the output candidate under evaluation, using the record of

input/output disparity supplied by GEN (McCarthy, 2002). Thus, they limit how far candidate outputs may differ from the input. When FAITHFULNESS constraints are violated differences between input and output arise.

In every grammar there is a fundamental conflict between MARKEDNESS and FAITHFULNESS constraints. MARKEDNESS constraints may be violated in order to satisfy higher-ranking FAITHFULNESS constraint thereby allowing typologically more marked forms to occur in certain circumstances and FAITHFULNESS constraints may be violated in order to satisfy higher-ranking MARKEDNESS constraints leading to differences between input and output forms (Barlow & Gierut, 1999). The interaction between FAITHFULNESS and MARKEDNESS constraints is a key element of any OT analysis (McCarthy, 2002).

3.3.1 Constraints Violation and Ranking

In OT, every grammar is a system of conflicting forces embodied by constraints. Constraints are naturally conflicting when satisfying one entails violating the other. However, violation must always be compelled by some higher-ranking conflicting constraints. The conflict is resolved by hierarchically ranking the constraints through a conflict-regulating mechanism consisting of a RANKING of universal constraints (Kager, 2004). Languages essentially differ in their ranking of constraints although constraints are universal and this is the source of cross-linguistic variation. ‘Strict domination’ is assumed to hold over the rankings. This means that any higher-ranked constraint takes absolute priority over any lower-ranked constraint. Although violation of a constraint is avoided, the violation of higher-ranked constraints is avoided ‘more forcefully’ than the violation of lower-ranked constraints (Kager, 2004). As such a single violation of a higher – ranked constraint is always worse than any number of violations of lower-ranked constraints (Legendre, 2001). All constraints in OT have the same strict veto power over lower constraints whether violated or not (Prince & Smolensky, 2004). The constraints and rankings that are crucial in selecting a candidate as optimal are usually shown in a tableau. In a tableau, an optimal candidate is compared with one or

more of its competitors with respect to their performance on two or more constraints. In (1) below is an example of a tableau showing the interaction of constraints in a hypothetical language 1. In the tableau, constraints are ranked across the top, going from highest ranked on the left to lowest ranked on the right. Candidates show up in the leftmost column, with the optimal candidate indicated by the symbol ‘☞’. Violations of constraints are indicated by asterisk (*) in individual cells.

(1) A Ranking Argument

	C1	C2
a. ☞ Cand A		*
b. Cand B	*	

In (1) C1 and C2 conflict in their evaluation of Cand A and Cand B. C1 prefers Cand A but C2 prefers the competitor Cand B. However, Cand A is the preferred output form hence the conflict is resolved by ranking C1 above C2. The conflict is a necessary relation between constraints that it can serve as a basis for a valid ranking argument (McCarthy, 2002) in that it provides proof that C1 dominates C2 in the hierarchy. The domination relationship is written as follows:

$$C1 \gg C2$$

(The symbol \gg connecting constraints has to be read dominates)

3.3.2 Optimality and Dominance

In OT, grammaticality is defined by optimality among competitors. Optimality is the status of being most harmonic in relation to a set of conflicting constraints. Kager (2004:12) defines optimality as ‘an output is ‘optimal’ when it incurs the least serious violations of a set of constraints, taking into account their hierarchical ranking’. On the other hand Prince (2002) states that a form is optimal ... in each of its pairwise competitions, if it better-satisfies the highest-ranking constraint which distinguishes it from its competitor. This means optimality is not about being objectively perfect but it is about being the best among a choice of options (McCarthy, 2002) as every output form will violate at least some constraint. As a matter of fact, the optimal candidate may

actually perform worse than its competitor on some constraint(s) ranked below the decisive one (McCarthy, 2002). No output form is possible that satisfies all constraints (Kager, 2004). Optimality is built on (strict) domination of constraints in a hierarchy. Kager (2004:13) defines domination as ‘the higher-ranked of a pair of conflicting constraints takes precedence over the lower-ranked one’. The ranking of constraints can be demonstrated by a tableau in (2) showing constraints domination in a hypothetical language 2. In the tableau, constraints are ranked across the top, going from highest ranked on the left to lowest ranked on the right, each constraint dominating the ones on its right. Candidates show up in the leftmost column, with the optimal candidate indicated by the symbol ‘☞’. Violations of constraints are indicated by asterisk (*) in individual cells and an exclamation mark highlights each ‘fatal’ violation, i.e. the violation that eliminates a candidate completely.

(2) Dominance

	C1	C2	C3
a. ☞ Cand M		*	*
b. Cand X		**!	
c. Cand Z	*!		

In the tableau, C1 is ranked above C2 and C3 (that is C1 dominates C2 and C3). C1 prefers candidate Cand M but it is ruled out by C2 and C3. Despite not being favored by C2 and C3, Cand M still comes out a winner (i.e. it is the optimal candidate) because it satisfies the high-ranking constraint C1. C2 prefers candidate Cand Z. Cand Z satisfies C2 and C3 but violates C1 a high-ranking constraint, therefore, it is ruled out by C1. The fact that C1 dominates C2 is apparent from the fact that candidate Cand Z is less harmonic than Cand M even though it has no violations of C2 and C3 because violation of higher-ranked constraints cannot be compensated for by satisfaction of lower-ranked constraints (Legendre, 2001). But C2 is still active as it dominates C3. This shows that optimality does not involve compromise nor suppression of constraints. This is called strictness of strict domination (McCarthy, 2002). Strict domination hierarchy of the constraints in question can be represented as follows: [C1 >> C2 >> C3].

As the tableau shows in (b), a constraint may assign more than one violation-mark to a candidate. This can happen when the constraint is violated at several different spots in the candidate under evaluation or the constraint is violated gradually, distinguishing noncompliant candidates by extent of violation (McCarthy, 2002). These multiple violations are lumped together in the pile of violation-marks assigned to a candidate and the candidates are not compared in any special way. If a tableau compares two candidates only, violation-marks that the two candidates share can be ignored or cancelled as they contribute nothing to the comparison. However, if the tableau is comparing more than two candidates mark cancellation cannot be done.

3.4 Optimality Theory and Language Interpretation

The form of OT used in semantics/pragmatics is different from the form of OT used in phonology, morphology and syntax. In the latter case OT takes the point of view of the speaker (production) whereas in the former case the point of view of the hearer is taken (comprehension perspective) (Blutner, 2000). In production the speaker selects the optimal form for expressing a given meaning. On the other hand, in comprehension perspective the hearer selects the optimal interpretation for a given form. In OT Semantics the input is an overt sample of acoustic material that a hearer receives from a speaker (Hoek & Hendriks, 2011). This input can be a complete sentence or a sentence fragment. There are two versions of OT applied to interpretation (semantics/pragmatics): unidirectional OT and bidirectional OT.

3.4.1 Unidirectional OT

Unidirectional OT captures a relation between meaning and form (a set of meaning-form pairs). There are two approaches in unidirectional OT. The first unidirectional approach, termed Naive OT production by Beaver and Lee (2003; 2004), starts with some representation of meaning as input. It is the approach seen in most OT syntax. In this approach a set of outputs (syntactic structures) is provided by Generator (GEN). Then a set of linearly ranked constraints is used to select between candidate surface forms. Naive

OT production characterizes a language as the set of pairs of meanings and forms such that for the given meaning, the form is optimal (Beaver & Lee, 2004: 113). The second unidirectional approach is termed *OT semantics* by Hendriks and de Hoop (2001) but termed naive OT comprehension by Beaver and Lee (2003; 2004). It takes the point of view of a hearer, who hears (or reads) an utterance with a certain syntactic structure and wants to interpret this structure correctly and optimally. In OT Semantics, the input is a well-formed syntactic structure (i.e. surface form), which is associated with an infinite number of interpretations. These candidate interpretations are tested against a set of ranked constraints in a parallel fashion. Hendriks and de Hoop (2001) call this *Free Interpretation Hypothesis*. OT semantics tries to answer the question ‘given a syntactic input, what is its optimal interpretation?’ In this way naïve OT comprehension characterizes a language as the set of pairs of meanings and forms such that for the given form, the meaning is optimal (Beaver & Lee, 2004: 113).

3.4.2 Bidirectional OT

The bidirectional OT (two-dimensional optimal interpretation), takes into account the speaker direction as well as the hearer direction (i.e. production and interpretation). It recognizes that hearers do not only consider their own hearer’s perspective but also take into account the speaker’s perspective. In the same way speakers do not only proceed from their own speaker’s perspective but also take into account the hearer’s perspective. This means forms and meanings are not considered separately. So what we have is a pair consisting of a form and a content (meaning). It is this form-meaning pair that has to be optimal. Thus, the hearer must consider the alternative expressions the speaker could have used to express the meaning/interpretation for the hearer to determine what the optimal interpretation of a given form is. Similarly, the speaker, too, is required to express the meaning s/he wants to communicate using the optimal form. Consequently, what is optimal, in bidirectional OT, is the form-meaning pair (input-output pair). van Rooy (2003: 2) states that in bidirectional OT ‘the form-meaning pair $\langle f,m \rangle$ is optimal iff it satisfies both the S principle (i.e. is optimal for the speaker) and the H principle (i.e. is optimal for the hearer)’. Just like in unidirectional OT, in bidirectional OT there are also

several versions: Strong Bidirectional Optimization, Weak Bidirectional Optimization, Medium Bidirectional Optimization and Asymmetric Bidirectional Optimization.

3.4.2.1 Strong Bidirectional Optimization (BiOT (Strong))

Strong Bidirectional Optimization combines production based and interpretation based optimization conjunctively. In this approach, a form-meaning pair $\langle f, m \rangle$ is grammatical if it is optimal in both directions of optimization. In other words, ‘a form-meaning pair is strong OT optimal iff the form produces the meaning in Interpretation OT and the meaning produces the form in Production OT’ (Beaver & Lee, 2004:121). This leads Beaver & Lee (2004) to define bidirectional optimality as follows:

(The connective ‘>’ is read as ‘more harmonic than’ or ‘more economical than’ and the symbol ‘ \in ’ means ‘is a member of or is included in the set’):

3. $\langle f, m \rangle$ is strong OT optimal iff
 - a. $\langle f, m \rangle \in \text{GEN}$
 - b. there is no $\langle f', m \rangle \in \text{GEN}$ such that $\langle f', m \rangle > \langle f, m \rangle$ and
 - c. there is no $\langle f, m' \rangle \in \text{GEN}$ such that $\langle f, m' \rangle > \langle f, m \rangle$

(The notations mean that a form-meaning pair $\langle f, m \rangle$ is called strong OT optimal if and only if there is no other strong OT optimal pair $\langle f', m \rangle$ such that $\langle f', m \rangle$ is ‘more harmonic’ or ‘more economical’ or ‘more optimal’ than $\langle f, m \rangle$ and there is no other strong OT optimal pair $\langle f, m' \rangle$ such that $\langle f, m' \rangle$ is more harmonic or ‘more economical’ or ‘more optimal’ than $\langle f, m \rangle$).

In Strong Bidirectional OT, form-meaning pairs that are only optimal under one direction are removed. Fewer form-meaning pairs are produced in Strong OT than would be in naive production or interpretation OT with the same constraint ranking (i.e. the set of Strong OT meaning-form pairs is a subset of those provided by naive interpretation for a given constraint set). ‘Strong OT picks out a set of form-meaning pairs such that none of them is beaten by any form-meaning pair in GEN in either direction of optimization’ (Beaver & Lee, 2004: 126). Strong Bidirectional OT has been found lacking because it

cannot account for synonymy and ambiguity although it accounts for ineffability and unintelligibility. Blutner and Strigin (2011) point out that in BiOT (Strong) if there are any differences in the complexities of the different meaning, then no form can be ambiguous since only one meaning can be selected as the optimal interpretation and if there are any differences in the complexities of different forms, then synonymy cannot exist since each meaning can be expressed by maximally one optimal form.

3.4.2.2 Weak Bidirectional Optimization

Weak Bidirectional Optimization is an iterated variant of Strong OT. Unlike Strong OT, Weak OT picks out a larger set of form-meaning pairs such that no member of that set beats any other member of the set in either direction of optimization' (Beaver & Lee, 2004: 126). This means that other pairs in GEN can beat some of the Weak OT optimal pairs thereby giving us a chance to find additional super-optimal solutions. Thus, Weak Bidirectional allows marked expressions to have an optimal interpretation, although both the expression and the situations they describe have a more efficient counterpart (Blutner & Zeevat, 2004). Beaver and Lee (2004) state that the formal definition of optimality in Weak OT runs along similar lines to the Strong OT definition, but is recursive:

4. $\langle f, m \rangle$ is Weak OT optimal iff
 - a. $\langle f, m \rangle \in \text{GEN}$
 - b. there is no Weak OT optimal $\langle f', m \rangle \in \text{GEN}$ such that $\langle f', m \rangle > \langle f, m \rangle$
and
 - c. there is no Weak OT optimal $\langle f, m' \rangle \in \text{GEN}$ such that $\langle f, m' \rangle > \langle f, m \rangle$.

(The notations mean that a form-meaning pair $\langle f, m \rangle$ is called Weak OT optimal if and only if there is no other weak OT optimal pair $\langle f', m \rangle$ such that $\langle f', m \rangle$ is 'more harmonic' or 'more economical' or 'more optimal' than $\langle f, m \rangle$ and there is no other weak OT optimal pair $\langle f, m' \rangle$ such that $\langle f, m' \rangle$ is 'more harmonic' or 'more economical' or 'more optimal' than $\langle f, m \rangle$).

Through repeated pruning and grafting of links between forms and meanings, Weak Bidirectional OT is able to make an ineffable meaning expressible and give meaning to an uninterpretable form. Just like Strong Bidirectional OT, Weak Bidirectional OT has been found wanting as well in that it does not help with ambiguity and optionality.

3.4.2.3 Medium Strength OT

Medium Strength OT is a variant of Weak OT. The Medium Strength OT performs only one iteration of the Weak OT process, pruning once and grafting once. This allows it to maintain some of the properties of Weak OT, but lacks Weak OT's 'everyone's a winner' profligacy (Beaver & Lee, 2004).

3.4.2.4 Asymmetric Bidirectional Optimization

Asymmetric Bidirectional Optimization is in two versions. The first version, Asymmetric OT (I(nterpretation) P(roduction)) considers interpretation as preceding production. The idea of Asymmetric OT (IP) is as follows:

3. i. Interpretation: Given any form-meaning pair $\langle f, m \rangle$ find the most harmonic semantic interpretation of F .
- ii. Production: Given input meaning m , take as candidate outputs the set of forms F such that $\langle f, m \rangle$ is optimal in stage one, and perform standard OT production optimization with his restricted candidate set' (Beaver & Lee, 2003:5).

In production, the set of optimal form-meaning pairs is a subset of the optimal form-meaning pairs Interpretation. The set of meanings in some optimal pair is the same in interpretation and production despite having smaller number of forms for constraint sets of interest.

The second version of Asymmetric Bidirectional optimization is Asymmetric OT (PI). It assumes that production uses a standard OT syntax of constraints termed PROD by Beaver and Lee (2004). In this approach, comprehension involves both PROD and an additional set of constraints, termed PRAG by Beaver and Lee (2004), to select between alternative meanings. There are two stages of processing in Asymmetric OT (PI). The first stage of comprehension of form F consists in determining the set M of meaning inputs which give F as output using the constraint PROD. The second stage consists in using a standard OT semantics form-to-meaning optimization with the form F as input, except that rather than using GEN to give candidate outputs, the set M is used (Beaver & Lee, 2004). As such, the set of form-meaning pairs in comprehension is a subset of those in production.

Optimality Theory has successfully resolved many interpretive issues. For instance, Dekker and van Rooy (2000), Beaver (2004) and Blutner (2000), among others, employ OT to resolve binding issues. Beaver and Lee (2004) and van Deemter (2004) have used OT to interpret ambiguity. Jäger (2002) has used OT to interpret measure phrases, van Rooy (2003) numerals, Aissen (2003) agreement of Takelma –khwa and Agent Focus verb in Tzotzil, Vikner (2001) object shift and Zwart, Hendriks and de Hoop (2005) have used OT to interpret reflexive comparatives, Kamanga (2007, 2007/8) has used OT to interpret Cicewa idioms. This has been possible because OT provides the necessary tools to combine different pieces of information (from context, world knowledge, lexicon, syntax) in a precisely defined way. This means the information provided by the meaning of the lexical items or the syntactic structure can interact or even compete with information given by the context. This characteristic would enable OT to give a better account of how Cicewa speaking children use this information to learn to interpret Cicewa idioms. The present study is based on Bidirectional Optimality Theory because it is able to distinguish the speaker perspective from the hearer perspective while at the same time recognizing that these roles are obviously related and make use of the same knowledge (Hendriks & Spender, 2005/2006). It is the three parameter (form, meaning and context) optimization, proposed by Blutner (2000), that the study will use to account for children's interpretation of idioms and how they learn to interpret such language

structures since it is designed to interpret many more different form-meaning pairs as it uses constraints that are generally of the form: ‘if there is..., use it, unless....’.

3.5 Language Acquisition in OT

OT assumes that the knowledge of the universal constraints is innate and that a set of constraints is present in the initial state as this is the only place where linguistic knowledge resides (Hoeks & Hendriks, 2011). Thus children are born with this set of constraints only that it needs to be reranked. In this case, the primary duty of the language learner is to determine the dominance ranking of these constraints which is particular to the target language (Tesar & Smolensky, 1993). That is, in OT, acquiring grammar means acquiring the critical language-specific ranking of constraints. In the initial ranking MARKEDNESS constraints dominate FAITHFULNESS constraints (Boersma & Levelt, 2003; Davidson, Jusczyk & Smolensky, 2004). This makes children to always produce unmarked forms in the initial state. However, with the passage of time, a child’s system changes and approximates the target language. This involves reranking of constraints by taking into account positive evidence which comes through exposure to marked structures in the target language. Reranking is only allowed if there is positive evidence (Kager, 2004). In this way language acquisition is viewed as error-driven in that rankings are altered only when the input data conflict with the current ranking hypothesis (Boersma & Hayes, 2001). Reranking involves demotion of constraint rather than promotion of constraint. This entails demotion of higher ranked MARKEDNESS constraints below certain FAITHFULNESS constraints. MARKEDNESS constraints are demoted below a competing faithfulness constraint one by one. For instance, when the learner detects the difference between the output of his grammar and the output of the target adult grammar, he lowers the rankings of the MARKEDNESS constraints that favor his own output in favor of the FAITHFULNESS constraints that favor the output of the target adult grammar one constraint at a time. The child’s language inventory of allowable structures increases gradually, as MARKEDNESS constraints are demoted below antagonistic FAITHFULNESS constraints, approximating the adult system (McCarthy, 2008). Reranking stops when the outputs of the developing grammar and

those of the target adult grammar are identical. The reranking of constraints is a very important aspect when it comes to explaining language development. Studies have shown that developmental stages can indeed be captured by positing successive grammars in which the relative rankings of markedness and faithfulness constraints change from $M \gg F$ to, eventually, $F \gg M$ (Boersma & Levelt, 2003). This aspect will help to explain how idiom interpretation develops in Cicewa speaking children. The developmental stages, that children go through when learning to interpret Cicewa idioms, will also be identified.

The constraints are not child specific although the specific constraint rankings of developing grammars may be child-specific. The developing grammars and mature adult grammars are made out of the same items i.e. CON, GEN and EVAL. This means there is continuity between child grammars and adult grammars. The developing grammars in one child and among different children acquiring the same language differ from each other at different times of development. These grammars also differ in children acquiring different languages just like the way adult grammars of different languages differ (McCarthy, 2008). The developing grammars correspond to sub-grammars of attested adult grammars and can be described using the same primitives and principles used for adult grammars. The demoted constraints, in the process of language learning, remain present in the grammar and still play a role in the mature grammar.

In OT, the language learning process has been decomposed into three components by Tesar and Smolensky. These components are: (i) Robust Interpretative Parsing (RIP) which is a device that enables the learner to interpret an incoming form and assign it a structure (Tesar & Smolensky, 1996; 1998; 2000; Tesar 1997), (ii) Constraint Demotion (CD) which is a device for changing the grammar (Tesar, 1995) and (iii) Lexicon Optimization which is a device for deriving forms for the lexicon (Prince & Smolensky, 1993; Itô, Mester & Padgett, 1995). In relation to this, several general learning algorithms have been devised for finding an appropriate constraint ranking where the input and output are known.

3.6 Summary of chapter

The chapter has presented the general architecture of OT. It has described the major components of OT grammar and explained how children acquire this grammar by reranking the constraints. It has pointed out how the reranking of constraints would help to explain how Cicewa speaking children learn to interpret Cicewa idioms and how it would lead to identification of developmental stages that Cicewa speaking children go through. The application of this theory is done in chapter eight of this thesis where it is demonstrated how Cicewa speaking children rank and rerank constraints in Cicewa in the process of idiom interpretation and acquisition. The theory described in this chapter will work hand in hand with Systemic Functional Grammar Theory (SFL). Thus, it is important that the coming chapter should describe the SFL Theory.



Chapter Four

Systemic Functional Linguistics (SFL)

4.0 Introduction

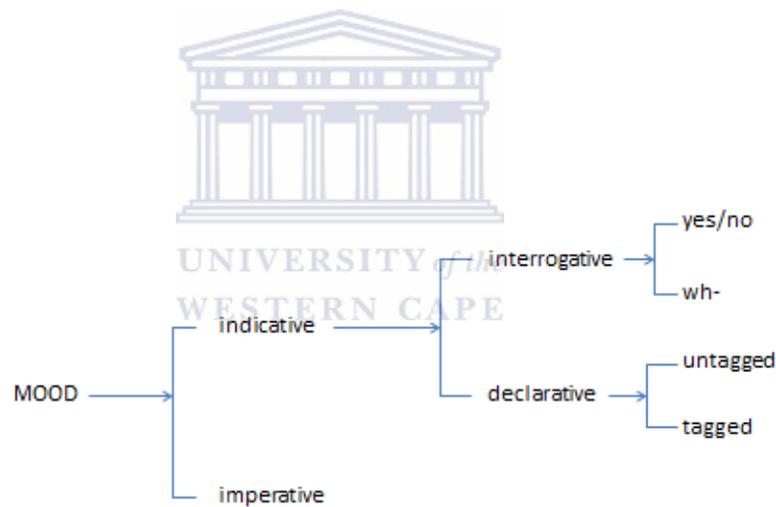
This chapter describes Systemic Functional Linguistics (SFL), a theory about language as a semiotic system, developed by Halliday (1985) and Halliday and Matthiessen (2004). It explains the major aspects of the theory such as social context, metafunctions and grammatical metaphor which are crucial to the understanding of how Cicewa speaking children learn the Cicewa idiomatic meaning. It highlights how certain aspects of SFL will help to explain the social cultural factors influencing children's choices of meaning options and idiom acquisition strategies employed by children as they learn Cicewa idiomatic meanings. It also explains how language acquisition/development is viewed in SFL and how this relates to the acquisition of idiomatic meaning in Cicewa.

4.1 General Overview of Systemic Functional Linguistics (SFL)

Systemic Functional Linguistics (SFL) is a descriptive and interpretative framework that views language as a resource for meaning-making in social and cultural context (Eggins, 2004). It views language as a resource that speakers draw upon to accomplish their purposes by expressing meaning in context. 'Particular aspects of a given context define the meanings likely to be expressed and the language likely to be used to express those meanings' (Wattles & Radić-Bojanić, 2007:47). This is achieved through the 'system' and 'system network'. A system is 'a set of features which stand in contrast with each other in a specified environment – of which one will be chosen whenever the environmental conditions obtain' (Halliday, 2009a: 66). Choice is the basic organising concept of the system as each system in a system network represents a point at which a choice has to be made (Eggins, 2004) hence a system is a point of choice (Matthiessen & Halliday, 1997). A system allows for the encoding of paradigmatic relations in a language thereby realizing language as potential and language use as choice (Teich,

1999). However, language as a semiotic system is never described by one system only. In a language, there are associated interrelated systems describing features of a language at the same time. These associated interrelated systems together form a ‘system network’. The system network is the grammar which offers a variety of options that, once chosen, involves other particular structured and lexical choices (Gallardo, 2006). Teich (1999:12) considers a system network as ‘a declarative representation of all the conceivable restrictions on co-occurrence of a particular set of terms or features which characterize the domain for which they apply – be this domain semantic, grammatical or lexical’. An example of a system is given in Figure 4.1 adapted from Matthiessen and Halliday (1997):

Figure 4.1 A partial grammatical system of MOOD



The representation of mood in the MOOD system in Figure 4.1 gives choice between [indicative] and [imperative] mood. If it is [indicative] we have a choice between [interrogative] and [declarative].

In a system, choices can lead to other choices linked by delicacy levels. Delicacy is the cline from general to specific and in a system network it corresponds to the ordering of systems from left to right by means of entry conditions (Matthiessen, Teruya & Lam, 2010). Thus, a term (a simple feature of a feature complex) in the extreme right of the network system is the *most delicate*. For instance, in the example of a system in Figure 4.1 above the choice between [declarative] and [untagged] is ordered in delicacy and the choice of [untagged] is the most delicate.

The system that we have looked at in Figure 4.1 constitute the type ‘either x or y’ indicated by a square bracket in a system network ‘[’]. Choices can also be expressed by simultaneous systems indicated by a curled bracket ‘{’. Here, one has to choose from both ‘set x and set y’ if a condition of an entry applies.

As discussed above, the notion of ‘system’ is central to SFL hence a defining aspect of SFL. The term ‘systemic’ in Systemic Functional Linguistics implies that SFL as a theory of language pays attention to the systemic relations and their possibilities in a system network of paradigmatic relations. Systemic Functional Linguistics is ‘functional’ because it is designed to explain how language is used (Lirola, 2005) and it interprets the linguistic system functionally (Eggins, 2004). ‘Linguistics’ in Systemic Functional Linguistics implies that the theory derives from the discipline of linguistics as such it investigates language phenomena.

SFL is underpinned by the following four key tenets outlined by Coffin and Donohue (2012: 68):

1. Context and the language choices made by speakers/writers are interrelated;
2. Language is a resource for making meaning;
3. Every utterance/text simultaneously makes three types of meaning – ideational, interpersonal and textual;
4. Language can be viewed and investigated as a total system or as a particular text (or somewhere along that continuum).

4.2 The Social Context

As alluded to in section 4.1 above, SFL views language as a resource for meaning-making that people use to accomplish their communicative goals in different social contexts. This means any description of a ‘text’ must relate to the description of a social context because according to Eggins (2004:7) ‘context is in a text: text carries with it, as a part of it, aspects of context in which it was produced and, presumably, within which it would be considered appropriate’. The term ‘text’ refers to ‘an instance of language in use’ (Fawcett, 2008: 6) whether written or spoken. In other words, a text is ‘a semantic unit’ (Eggins, 2004: 125). In this sense, Cicewa idioms are texts which need to be interpreted in the context within which they are used. In the absence of context, it is not possible to interpret Cicewa idioms as they become ambiguous. One cannot determine which dimensions of reality are being talked about or determine relationships between participants (Eggins, 2004) as such cannot acquire the meaning of a Cicewa idiom. Furthermore, some Cicewa idioms can only be interpreted in ‘marked’ contexts, otherwise they would be anomalous. Therefore, it is important to analyse context in which Cicewa idioms are used if we are to understand and explain how Cicewa speaking children acquire the meaning of Cicewa idioms.

The Social Context is the total environment in which a text is created. It is a bridge between a text and the situation in which texts actually occur (Halliday & Hasan, 1989). In SFL, social context is the highest stratum and it is language external (Hasan, 2009). Context, in SFL, is divided into context of situation (register), context of culture (genre) and ideology with context of situation (register) and context of culture (genre) being the most discussed (Eggins, 2004). These have been described in detail below.

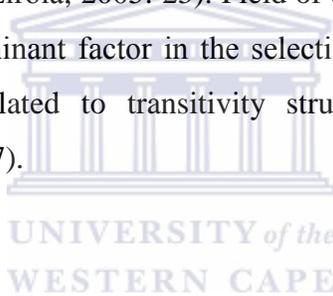
4.2.1 Context of situation (Register)

Context of situation are all extra-linguistic factors that are present in the text. It is an environment within which a text is performed and interpreted (Halliday, 2009b: 1). A context of situation is described with respect to field of discourse, tenor of discourse and mode of discourse. Context of situation is a tripartite entity as each of these components

is always active in the production of a text (Hasan, 2004). The variables field of discourse, tenor of discourse and mode of discourse constitute the context for a variety of language called 'register'. A register is 'the semantic variety of which a text may be regarded as an instance' (Lirola, 2005:27).

4.2.1.1 Field of discourse

Field of discourse refers to a social action which language expresses. It is 'what is being done by way of using language' (Hasan, 2004:21), in other words, what is taking place. Field of discourse 'concentrates on the physical aspects of communication: the place and the moment in which discourse takes place ('setting'), the topic of the linguistic interchange ('subject-matter'), the objective of the message ('purpose') and the speaker's intention and attitude ('key') (Lirola, 2005: 25). Field of discourse is related to ideational meaning in that it is 'a determinant factor in the selection of options from experiential system, including choices related to transitivity structure, or process, participant, circumstance' (Webster, 2009:7).



4.2.1.2 Tenor of discourse

Tenor looks at language as interaction. It is concerned with who is taking part, social relations being enacted between participants and the roles participants adopt. The social relations between participants affect the level of formality in a context. They determine the acceptability and appropriateness of words, phrases and actions in different situations (Al. Hamdany, 2012:181). Tenor also relates to interpersonal meaning in that it determines the selection of interpersonal options such as those from the systems of Mood and Modality (Webster, 2009:7). For instance, if a student talks to a lecturer about football may use informal language but when he is presenting a query about his missing grade may use formal and more polite language.

4.2.1.3 Mode of discourse

Mode is concerned with ‘semiotic distance, as this is affected by the various channels of communication through which we undertake activity (field) and simultaneously enact social relations’ (tenor) (Martin, 2009:159). Mode is the channel or wavelength selected (Lirola, 2005:27), the function that the language is playing as expected by the participants in the total structure of the situation. It is the symbolic organization of the text, the status assigned to it, its function in context including the medium (spoken or written or a combination of the two) and also the rhetorical aspect (i.e. what the text achieves in terms of being persuasive, informative and so on). Mode relates to the textual meaning as it is ‘involved in the selection of options in textual systems which relate to the overall texture of the text, including choices involving cohesion and thematic and information structures (Webster, 2009:7).

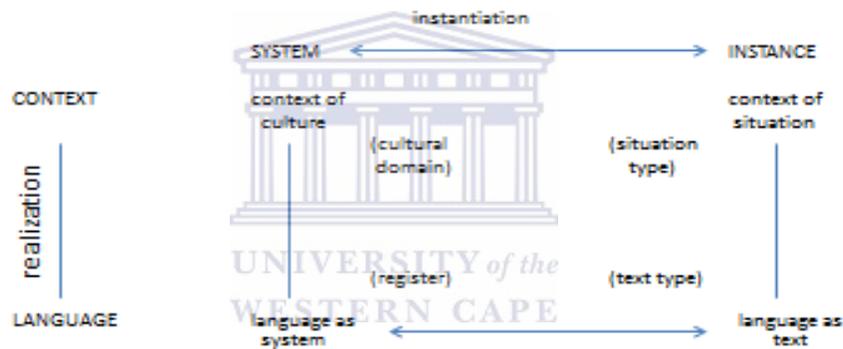
4.2.2 Context of culture (Genre)

Context of culture refers to staged structured way (Eggins, 2004) in which people use language to achieve culturally appropriate goals. It is the way in which people organise texts through language choices with an aim to achieve a social purpose. According to Martin (2009:159) it is ‘the system of staged goal-oriented social processes through which social subjects in a given culture live their lives’. Examples of the staged goal-oriented activities are booking an appointment, inviting someone to a wedding, giving a lecture etc. These staged goal-oriented activities, the different types of texts that enact various types of social contexts, are termed ‘genres’. The typical genres of our culture are recognised and distinguished by children by attending to consistent patterns of meaning as we interact with others in various situations (Martin & Rose, 2003), therefore, it is inevitable to analyse genre to understand how children come to know how to interpret Cicewa idioms as these idioms are staged goal-oriented social processes.

The context of culture (genre) is related to the context of situation (register) by instantiation. The relationship between the context of culture (genre) and the context of situation (register) is that context of situation is an instance of context of culture,

potential (system) (Halliday, 2009a). The context of situation is the immediate environment experienced, a pattern of linguistic choices and the context of culture is a pattern of register choices, a pattern of a pattern of texture (Martin, 2009). The relationship between context (the context of culture (genre) and the context of situation (register)) and language has been represented in Figure 4.2 below adapted from Hasan (2009:169).

Figure 4.2 Language and context: system and instance



Note: Culture is instantiated in situation, as system instantiated in text.
 Culture realized in/construed by language; same relation as that holding between linguistic strata (semantic: lexicogrammar: phonology: phonetics).
 Cultural domain and register are ‘sub-system’: likeness viewed from ‘system’ end.
 Situation type and text type are ‘instance types’: likeness viewed from ‘instance’ end.
 (Hasan, 2009:169)

4.2.3 Ideology

Ideology is a higher level of context. Ideology refers to the beliefs, values and point of views of the world we hold whether consciously or unconsciously. It is how language constructs, presents and encodes our view of the world. Hence, ‘to use language at all is to use it to encode particular positions and values’ (Eggins, 2004:11). No matter what register of the situation is or the genre we are in, our ideological positions will influence the way we use language. Just like no text is free from genre and register, no text is free from ideology (Eggins, 2004). Ideology greatly contribute to the meaning of a text to the extent that ‘understanding a text can depend not simply on knowledge of word or clause meaning but also, crucially, on cultural frames of reference and meanings’ (Lirola, 2005:19).

4.3 The Lexico-grammar

Lexico-grammar is the grammatical level of language where grammar and lexis are presented as joined in a cline on a single stratum. As Halliday (2009a:74) notes, it is ‘a unified region where meaning is fashioned and organized’ located between semantics and phonology in the stratification dimension. Thus, Lexico-grammar is the ‘organizational space’ for the construal of experience and an enactment of the social process. It provides speakers with means to make more different meanings and to mean several things at a time (Eggins, 2004) as it allows the constituents of a clause to play more than one function at a time. Consequently, we can simultaneously make three kinds of meanings in one clause.

4.4 The Metafunctions

Systemic Functional Linguistics views language as stratified. It recognises three levels: lexico-grammar, semantics and context. The first two strata (lexico-grammar and semantics) are ‘content plane of language’ and the third stratum (context) is called the ‘expression plane of language’. SFL recognises three modes of meaning (three metafunctions) in the ‘content plane of language’. These modes of meaning are ideational, interpersonal and textual reflected in a huge system network of meaning

potential (Haratyan, 2011:260). All these three metafunctions are of equal status and none is more important than the other (Teich, 1999). These metafunctions exist simultaneously in every clause hence; every clause expresses different strands of meaning. These different strands of meaning are interconnected making up a single entity (Fawcett, 2008). Thus, every clause is ‘multifunctional’ as it includes different layers of meaning. The metafunctions have been thoroughly discussed in the sections that follow. An analysis of the metafunctions: ideational, interpersonal and textual of Cicewa idioms can reveal the discourse systems (Martin & Rose, 2003) considered by Cicewa speaking children to select meanings from the provided meaning options in the process of learning Cicewa idiomatic meanings. It can also reveal the strategies employed by children in trying to learn the idiomatic meanings.

4.4.1 Ideational metafunction

Ideational metafunction is concerned with human experience of the real world. It is the means for construing our experience of reality (both internal and external experiences) or ‘going-on’ of the world, that is, ‘what kind of activities are undertaken, how participants in these activities are described, how they are classified and what they are composed of’ (Martin & Rose, 2003:66). Ideational metafunction has two aspects; logical and experiential in the construal of experience as meaning (Lavid, Arús & Zamorano-Mansilla, 2010). Experiential Metafunction is concerned with meaning in the clause and Logical Metafunction is concerned with meaning between clauses in clause complexes (Eggins, 2004). These two aspects of Ideational Metafunction have been described in detail below.

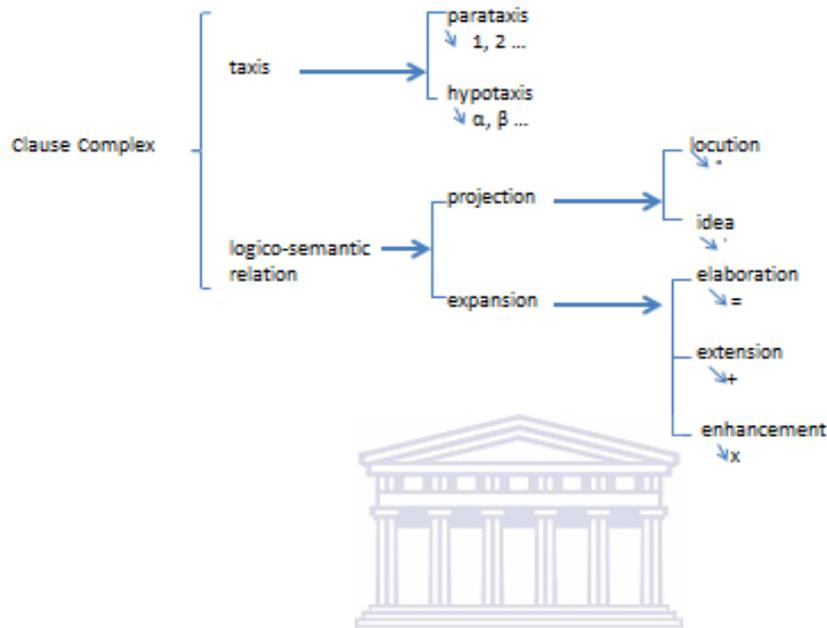
4.4.1.1 The Logical Metafunction

The logical metafunction, as a subcomponent of the ideational metafunction, refers to the grammatical resources for building up grammatical units into complexes, that is, combining two or more clauses in certain systematic and meaningful ways to form a clause complex. Logical metafunction represents experience in an indirect way (Lirola, 2005) through certain fundamental abstract logical relations in natural language. The

logical function is expressed by recursive structures which are defined by TAXIS and LOGICO-SEMANTIC TYPE. The TAXIS is 'how two or more adjacent clauses are linked to each other through relations of dependency or interdependency' (Eggins, 2004: 255). There are two options in the TAXIS namely parataxis and hypotaxis. In Parataxis, clauses are linked together as equals and each clause is an independent entity in that it can stand alone as a complete clause. In a hypotaxis, clauses relate to each other in dependency relationship; one clause (the secondary clause) is dependent on the independent clause (the primary clause).

The system of LOGICO-SEMANTIC relations, on the other hand, 'describe[s] the semantic relations, the way in which clauses that are either independent or dependent build on the experiential meanings of the clauses they relate to' (Eggins, 2004:270). Just like in TAXIS, in the system of LOGICO-SEMANTIC relations there are also two options; projection and expansion. Projection involves quoting and reporting speech or thought. Projection offers two options; locution and idea. In locution, what is projected is speech whereas in idea, what is projected is thought. Hence, projection is a means for 'attributing words and ideas to their sources' (Eggins, 2004:271). Projection cross-selects for taxis, as a result, we have paratactic projection or hypotactic projection (Eggins, 2004). On the other hand, in Expansion, one clause develops or extends on the meaning of another by means of elaboration (relations of restatement or equivalence), extension (relations of addition) and enhancement (relations of development) (Eggins, 2004:259). In elaboration, a clause elaborates on the meaning of another clause by exposition (the secondary clause restates the core meanings of the primary clause); exemplification (the secondary clause develops the meaning of the primary clause by giving an actual example) and clarification (the secondary clause clarifies the primary clause through explanation) (Eggins, 2004:280). In these elaborations the secondary clause does not introduce a new element of meaning. Just like Projection, Expansion also cross-selects with taxis and we can have paratactic elaboration or hypotactic elaboration (Eggins, 2004). Presented in Figure 4.3 below is the system for clause complex adapted from Eggins, 2004:259).

Figure 4.3 System of the Clause Complex



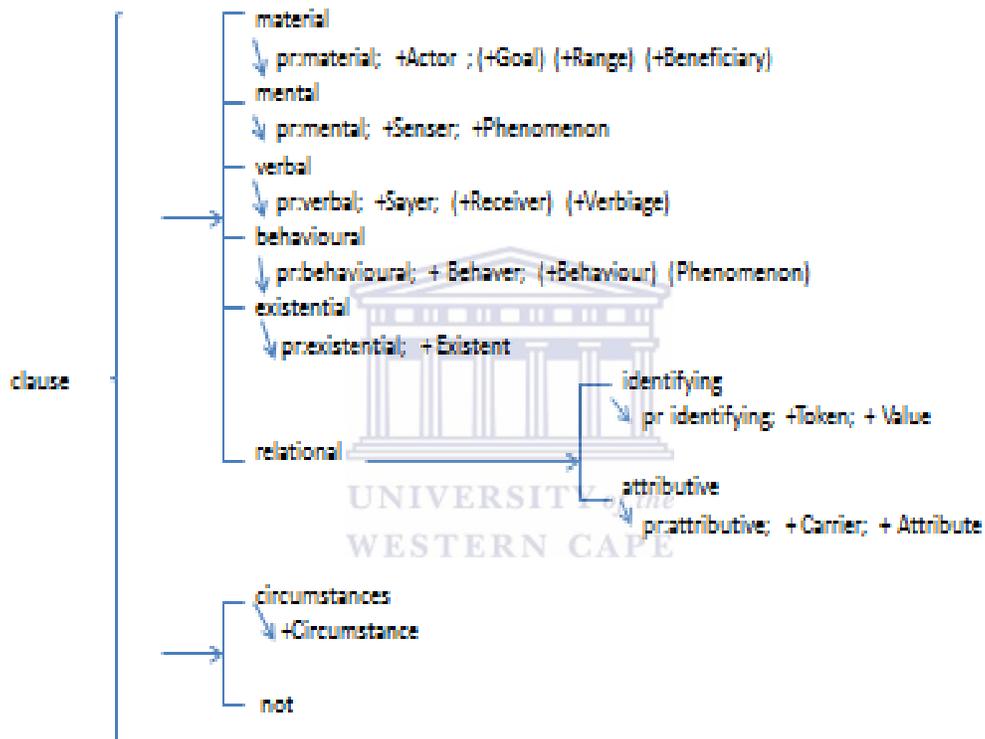
Language users construe logical connections between experiential events through structural resources provided by clause complex (Egins, 2004) hence understanding how clause complexes are formed can help us understand the basic complexing in Cicewa idioms, thereby, understanding how and why Cicewa speaking children go for certain options in Cicewa idiom interpretation in the process of idiom acquisition and development.

4.4.1.2 The Experiential Metafunction

The experiential metafunction deals with the representation of experience ‘directly’. Experiential metafunction refers ‘to propositional content encoded as processes, events, the participants therein and the accompanying circumstances, the types of objects referred to and other qualities’ (Teich, 1999:15). It is called experiential because it represents the ‘experience’ that is being talked about. The experiential meaning is expressed through the system of TRANSITIVITY or process type. TRANSITIVITY is the system network of

meanings that represent the encoding of reality. Filho (2004:217) posits that ‘the presentation of reality is achieved by means of a set of processes, along with their participants and the circumstances in which they unfold’. There are six process types; material, mental, verbal, behavioural, existential and relational. These have been described in Section 4.4.1.2.1 below. The circumstantial system ‘augment’ the configuration of Process plus Participants involved in it through the logico-semantic relations of Projection and Expansion’ (Matthiessen, Teruya & Lam, 2010:69 - 70). Circumstances are realized as adjuncts by adverbial groups or prepositional phrases. Circumstances are of different types: extent (how long? or how far?), location (when? or where?), manner (how? or with what?), cause (why? or what for? or who for?), accompaniment (with whom?), matter (what about?), role (what is?). This means there are two systems; Process type (major system) and Circumstantial (minor system) (Eggins, 2004). Thus, analysis of transitivity structure in a clause involves the description of the process choice, the selection of participants and the selection of circumstances. Transitivity analysis of Cicewa idioms can help us identify the strategies used by and understand how Cicewa speaking children select certain options in the process of learning Cicewa idiomatic meanings as Transitivity analysis offers a description of the structural strands of clauses (Eggins, 2004) in Cicewa idioms. The system of TRANSITIVITY has been presented in Figure 4.4 below adapted from Eggins (2004:214):

Figure 4.4 The system of TRANSITIVITY



As the realization statements show, the choice of process involves a particular configuration of participant roles.

Each process is associated with different participant roles, occurring in different configurations. (Eggins, 2004:214)

4.4.1.2.1 The Process Types

As it has been already stated above, there are six process types realized in transitivity namely; material, mental, verbal, behavioural, existential and relational. These process types have been described below.

4.4.1.2.1.1 Material process

Material processes construe doings and happenings. In material processes some entity does something or undertakes some action (Eggins, 2004). It realizes changes in material world that can be perceived. Doings or actions involve participants who are realized through nominal groups. Processes with one participant only are called middle or intransitive. In these clauses ‘someone does something’ and the probing question is ‘*what did x do?*’. Processes which involve two or more participants are called effective or transitive. In these processes ‘someone does something and the doing involves another entity’. These are probed by ‘*what did x do to y?*’. Transitive processes involving three obligatory participants are probed by the question; ‘*what did x do to y to z?*’ (Eggins, 2004). Transitive processes can be active or passive.

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Actor and Goal are the most common participants in material process clauses. ‘The Actor is the constituent of the clause who does the deed or performs the action’ and ‘Goal is that participant at whom the process is directed, to whom the action is extended’ (Eggins, 2004:216). Related to participant Goal is Range. A Range is either ‘a restatement or continuation of the process itself’ or ‘it expresses the extent or ‘range’ of the process’ (Eggins, 2004:218). Another participant that can be involved in material process is Beneficiary. Beneficiary is a participant that benefits from the process. A Beneficiary can be a Recipient – one to whom something is given or a Client – one for whom something is done (Eggins, 2004).

4.4.1.2.1.2 Mental Processes

Mental processes encode meanings of thinking or feeling. Mental processes are probed by asking ‘*what do you think/feel/know about x?*’. Mental processes are classified into categories of perception (seeing, listening, feeling etc.), affection (liking, fearing, scaring etc.) and cognition (thinking, knowing, understanding etc.) (Eggins, 2004). Mental processes have two participants: Senser and Phenomenon. Senser is the conscious participant who feels, thinks or perceives and must either be human or an anthropomorphized non-human (Eggins, 2004). Phenomenon is that which may be sensed, felt, thought or seen by the conscious Senser.

4.4.1.2.1.3 Behavioural Processes

Behavioural processes are processes of physiological and psychological behaviour like breathing, laughing, smiling, dreaming, chatting etc. ‘They are in part about action, but it is action that has to be experienced by a conscious being’ (Eggins, 2004:233). There is only one participant involved in Behavioural processes. In these processes a form of doing does not extend to another participant. The participant in Behavioural processes is called Behavior. This participant is a conscious being like Senser but the process functions more like one of ‘doing’ than one of ‘thinking/feeling’ (Eggins, 2004:234).

4.4.1.2.1.4 Verbal Process

Verbal processes are processes of saying. These do not only include different modes of saying (commanding, requesting, asking etc.) but also include semiotic processes that are not verbal (indicating, showing etc.). Verbal processes involve three participants; Sayer, Receiver and Verbiage. The Sayer is the participant responsible for the verbal process. This participant does not need to be conscious. It can be anything capable of producing a signal. The Receiver is the participant to whom the verbal process is directed; the one benefiting from a verbal message. The Verbiage is a nominal expressing some kind of verbal behaviour (e.g. command, request, statement, question etc) (Eggins, 2004).

4.4.1.2.1.5 Existential Process

Existential processes are processes that represent that something exists or occurs. There is only one participant in Existential process, the Existent. The Existent may be ‘an entity existing in concrete or abstract space or an event occurring in time’ (Matthiessen, Teruya & Lam, 2010:9).

4.4.1.2.1.6 Relational Process

In Relational Processes things are assigned attributes or identities hence, they are stated as *being*, *having* and *being at*. Relational processes can be Attributive (ascriptive) or Identifying (Eggins, 2004). In Attributive process a quality is ascribed to a participant. There are two basic participants in Attributive process; Attribute and Carrier. The Attribute is the quality assigned to a participant and the Carrier is a participant assigned the Attribute. An Attributive clause has no passive form hence it is not reversible (Eggins, 2004). On the other hand, in an Identifying process one entity is used to identify another. Identifying processes involve two participants; Token (that which stands for what is being defined) and Value (that which defines). Identifying clauses can form passives, as such, they are reversible (Eggins, 2004).

The experiential structures of Transitivity described above and the system of Logical meaning described in Section 4.4.1.1 above work hand in hand in the construal of experience as meaning. Through choices of Transitivity and Clause Complex, we are able to ‘express ideational meanings as we turn life into text’ (Eggins, 2004:256).

4.4.2 The Interpersonal Metafunction

The interpersonal metafunction is concerned with enacting social roles and relationships between participants as meaning. Through the interpersonal metafunction ‘users of language establish, negotiate and assume their position in social relationships’ (Gallardo, 2006:738). Speakers make meanings about interpersonal dimensions such as ‘the power or solidarity of their relationship; the extent of their intimacy; their level of familiarity with each other and their attitudes and judgements’ (Eggins, 2004:184). The interpersonal

metafunction is expressed through MOOD. 'MOOD is concerned with the topic of information or service and whether it is giving or demanding and the tenor of the relationship between interactants' (Haratyan, 2011:262). It is the meaning in terms of communication roles (Fawcett, 2008). The Interpersonal meaning of the clause, in the MOOD system, is defined by the system of MOOD TYPE and the system of MODALITY (Eggins, 2004).

4.4.2.1 The system of MOOD TYPE

The system of MOOD TYPE is 'the grammaticalization of the semantic system of SPEECH FUNCTION in the clause in adopting and assigning speech roles' (Matthiessen, Teruya & Lam, 2010:146). In the system of MOOD TYPE a clause can either be indicative or imperative. Indicative Mood with subtypes declarative and interrogative is used to exchange information and on the other hand, imperative Mood is used to exchange goods and services (Matthiessen, Teruya & Lam, 2010). The mood of a clause is determined by two functional constituents: a MOOD element and a RESIDUE (Haratyan, 2011). Eggins (2004:150) describes the MOOD element as carrying 'the burden of the clause as an interactive event' hence it is the core of the proposition. A MOOD element consists of Subject and Finite. The Subject is realized by a nominal group and invested with the 'responsibility for the validity of the proposition or proposal realized by the clause' (Matthiessen, Teruya & Lam, 2010:208). The Finite is realized by a verbal operator. The Finite makes the proposition finite and 'expresses the arguability value of the clause as exchange by reference to either tense (past, present or future) or modality (probability, usuality, obligation, inclination, or ability; high, median, or low value)' (Matthiessen, Teruya & Lam, 2010:98). The Finite also specifies POLARITY, 'since to make something arguable it has to be either positive (something is) or negative (something isn't)' (Eggins, 2004:153).

The RESIDUE is 'that part of the clause which is somehow less essential to the arguability of the clause than is the MOOD component' (Eggins, 2004:154). The RESIDUE can contain the functional elements: Predicator, Complement(s) and

Adjunct(s). The Predicator is a verbal part of the RESIDUE and it is realized by ‘a verbal group or a verbal group complex excluding only the Finite’ (Matthiessen, Teruya & Lam, 2010:163). Where there is only one verbal constituent in a clause, the element of Finite and Predicator are fused realizing Finite/Predicator. The Predicator ‘fills the role of specifying the actual event, action or process being discussed’ (Eggs, 2004:155). In addition to this function, the Predicator, as Eggs (2004:156) points out, also does the following functions in a clause: it adds time meanings through expressing a secondary tense, it specifies aspects and phases, and finally, it specifies the voice of the clause. The Complement is a potential Subject realized by a nominal group. Eggs (2004:157) defines a complement as ‘a non-essential participant in the clause, a participant somehow affected by the main argument of the proposition’. There can be one or two Complements in a RESIDUE. The Adjunct, realized by an adverbial group or a prepositional phrase, has no potential to become Subject although part of an adjunct realized by a prepositional phrase may become Subject since the structure of a prepositional phrase includes a nominal group functioning Complement (Matthiessen, Teruya & Lam, 2010). Adjuncts have been defined by Eggs (2004:158) as ‘clause elements which contribute some additional (but non-essential) information to the clause’. Adjuncts are categorised into Circumstantial, Modal and Conjunctive. An indefinite number of Adjuncts can be contained in a single clause.

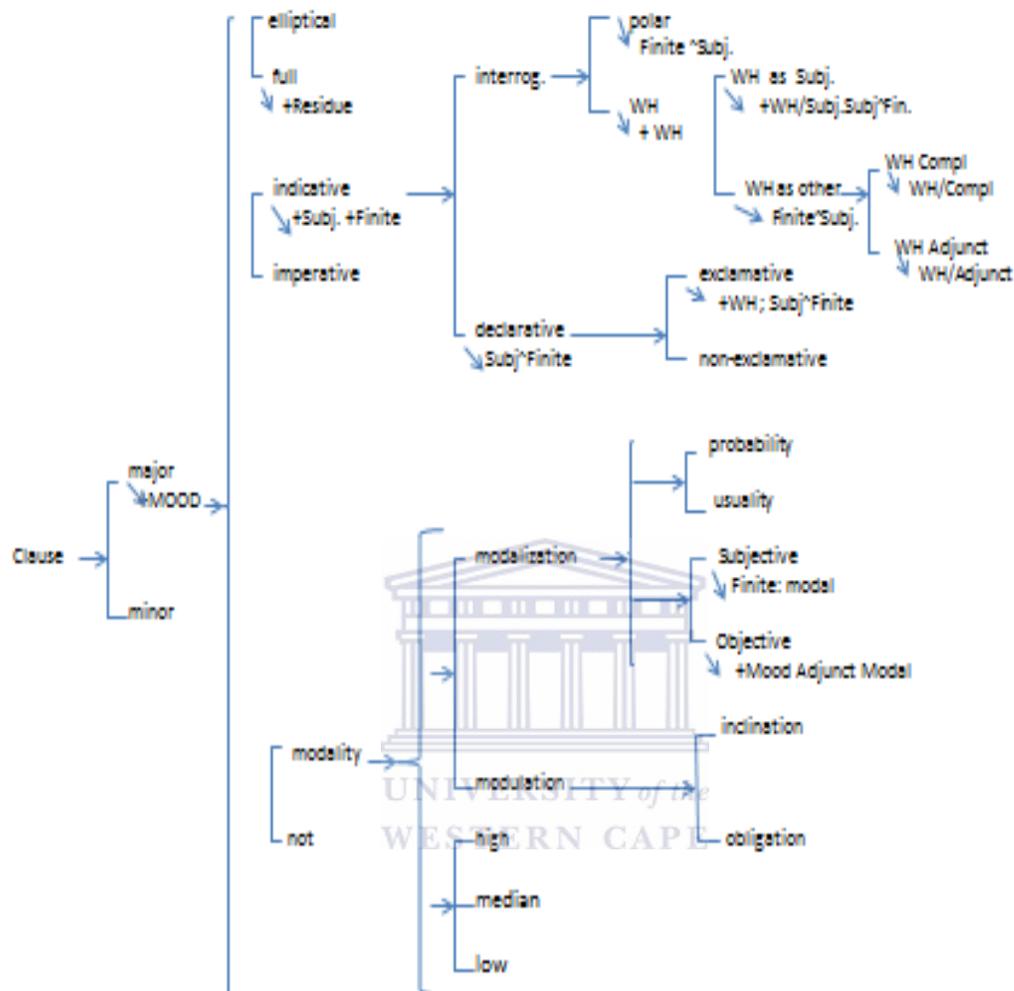
4.4.2.2 The system of Modality

Modality is defined by (Matthiessen, Teruya & Lam, 2010:141) as ‘expressions of indeterminacy between the positive and the negative poles which interpersonally construct the semantic region of uncertainty that lies between ‘yes’ and ‘no’’. It refers to the ways a language user expresses various attitudes and judgements in his/her message. There are two types of Modality: Modalization and Modulation. Modalization is concerned with the degree of propositions (statements, questions) on the scale between positive (it is so) and negative (it isn’t so) polarity (Matthiessen, Teruya & Lam, 2010:144). It is ‘the expression of the speaker’s attitude towards what s/he’s saying’ (Eggs, 2004:174). It is the way a language user expresses degrees of probability and

usuality. Implicit judgement is expressed by Modalization. Modulation, on the other hand, is concerned with the degrees of proposals (commands, offers) on the scale between positive (do it) and negative (don't do it) polarity (Matthiessen, Teruya & Lam, 2010:145). Modality, through modalization and modulation, allows language users 'to temper the exchange by expressing degrees of either probability/usuality or obligation/inclination' (Eggins, 2004:184). The system of Modality together with the system of MOOD types in the system of MOOD allow language users to 'make meanings about such interpersonal dimensions as: the power or solidarity of their relationship; the extent of their intimacy; their level of familiarity with each other; and their attitudes and judgements' (Eggins, 2004:184). The system of MOOD has been presented in Figure 4.5 below adapted from Eggins (2004:199).



Figure 4.5 The system of MOOD



4.4.3 The Textual Metafunction

The textual metafunction is the way clauses are organised to form a unified text that makes meaning. Unlike the other two metafunctions discussed above (ideational and interpersonal), textual metafunction is intrinsic to language and it is at the helm of the creation of text. It is ‘the level of organization of the clause which enables the clause to be packaged in ways which make it effective given its purpose and its context’ (Egins, 2004:298). The textual strand of meaning does not add new content nor new interpersonal dimension into a text but it is crucial to the hanging together and making sense of a text.

The ideational and interpersonal meanings cannot be expressed in a coherent manner without the textual systems although these meanings are essential to the creation of text (Eggins, 2004). Thus, Matthiessen, Teruya and Lam (2010:220) refer to textual metafunction as ‘the enabling metafunction, providing the resources for presenting ideational and interpersonal meanings as a flow of information in text unfolding its context’. On the other hand, a text cannot be created by textual choices alone. It would be devoid of content and we would not interact with it (Eggins, 2004).

The textual metafunction structures the message using two types of texture forming resources: the structural and the cohesive. The structural resources make reference to the intraclausal relationships and the cohesive resources to the interclausal relationships (Lirola, 2005:38). These resources have been described in detail in the sections that follow.

4.4.3.1 The Structural Resources

The structural resources are intraclausal and these express textual meaning in the clause. There are two key systems that play a role in the expression of textual meaning in the clause. These are the system of Theme and the system of Information Structure. The system of Theme is realized through two main constituents: a Theme and a Rheme (Eggins, 2004:298). Theme is ‘the element which serves as the point of departure of the message; it is that which locates and orients the clause within its context’ (Halliday and Matthiessen, 2004:64). Therefore, Theme is the point from which the message is developed. Theme typically contains information that is already known from the context or that has been given in the text. In English, Theme is the element that takes the first position in a clause. There are three types of Theme: topical (or experiential), interpersonal and textual. These Theme types can be realized by the insertion of a particular type of constituent in Thematic position (Eggins, 2004). The constituent which can function as topical Theme is the one which is the first participant in a clause, to which a Transitivity function can be assigned. A constituent is called interpersonal Theme when a Mood label can be assigned to it but not a Transitivity label and it happens

to be the first participant in a clause. The unfused Finite (in interrogative structures) and Modal Adjuncts (Mood, Vocative, Polarity and Comment) can function as interpersonal Theme (Eggins, 2004). Finally, when a textual element occurs in Thematic position is called textual Theme. There are two textual elements that can get to be Theme: Continuity Adjuncts and Conjunctive Adjuncts (Eggins, 2004). Sometimes we can have a combination of these Themes in a clause.

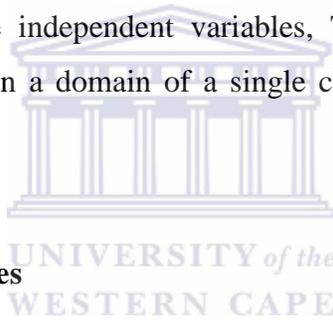
The network of Theme also makes a distinction between marked and unmarked Theme. Theme markedness depends on 'how the functional roles assigned to constituents in a Theme analysis conflate with the functional roles assigned to those same constituents in the Mood structure' (Eggins, 2004:318). Unmarked Theme is the most typical or usual choice. Theme is unmarked 'when the roles of topical Theme and Subject are played by the same element' (Ravelli, 2000:55). On the other hand, Theme is marked when 'Theme conflates with any other constituent from the Mood system' (Eggins, 2004:318). Marked Theme is atypical or unusual hence a marked choice signals that all things are not equal and that something in the context requires an atypical meaning to be made (Eggins, 2004), otherwise an unmarked choice will be made if all things are equal.

Rheme, another constituent of the system of Theme, is 'the part of the clause in which the Theme is developed' (Eggins, 2004:300). Typically, Rheme contains new information. It appears as a comment after the topic to 'expand, justify and provide additional information to preceding information' (Haratyan, 2011:263). In a clause, Rheme is everything that remains after identifying the Theme. For instance, in the clause *Chimwemwe donated blankets to the children* 'Chimwemwe' is the Theme and 'donated blankets to the children' is the Rheme.

The system of Theme is an essential component in the construction of texts. Without the Theme/Rheme structure no text could be constructed. 'The clause acts as a message in the thematic statuses of Theme and Rheme in terms of the local and spatial position in a sequence where Theme takes the initial position whether marked or unmarked and Rheme the non-initial position' (Haratyan, 2011:263). In a clause information moves

from thematic top to thematic bottom. This hierarchy of textual organization underlines the systemic claim that the textual metafunction is the enabling metafunction (Eggins, 2004).

The system of Information Structure, the other key system in the expression of textual meaning in a clause, is concerned with the ‘organization of discourse in a lineal series of tonal units’ (Lirola, 2005:39) realized through choices of intonation. It is the degree of newsworthiness: ‘a cline from given information to new information, presented as a configuration of Given + New’ (Matthiessen & Halliday, 1997). Given is the ‘information presented as recoverable to the listener because it is already known or predictable’ (Matthiessen, Teruga & Lam, 2010:107). New refers ‘to those parts of the message that the hearer does not know’ (Lirola, 2005:39). Although systems of Theme and Information Structure are independent variables, Theme/Rheme and Given/New complement one another within a domain of a single clause (Matthiessen & Halliday, 1997).



4.4.3.2 The Cohesive Resources

The cohesive resources express ‘relations within text without creating grammatical structure’ (Matthiessen, Teruya & Lam, 2010:74). They are interclausal in that they link successive clauses together to form a text. The cohesive resources include reference, ellipsis and substitution, conjunction and lexical cohesion. Reference is when ‘a participant or circumstantial element introduced at one place in the text can be taken as a reference point or something that follows’ (Lirola, 2005:39). Reference is classified into homophoric (relates to a generic phrase that has the same referent within a given context), -exophoric (refers to something that the reader is not told) and endophoric (refers to something in the same text). Endophoric reference is divided into anaphoric, cataphoric and esphoric. Ellipsis and substitution is ‘the omission of part of a clause and use of one element instead of another in the same grammatical slot. As cohesive element, Conjunction ‘links the pieces and clauses of a text together to give meaning to the text’ (Haratyan, 2011:264). In Conjunction, cohesion can come about through three options:

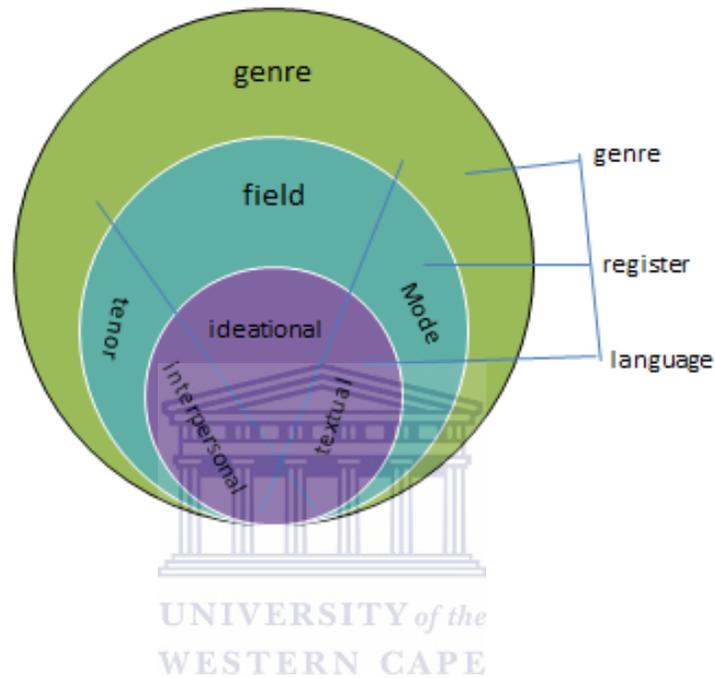
Elaboration (clarification and broadening by exemplification or simplification), Extension (adding information) and Enhancement (Haratyan, 2011). Lexical cohesion is non-grammatical and it focuses on sense relations and lexical repetitions.

The metafunctions discussed above, as already indicated, are of equal status. No metafunction is superior to the others although textual metafunction is seen as parasitic upon ideational and interpersonal metafunctions. All the metafunctions are simultaneously relevant at any stratum of the linguistic system (Teich, 1999). They occur simultaneously in every sentence thereby providing different layers of meaning. Each metafunction cannot create meaning on its own. All the three metafunctions interact to create meaning as Eggins explains:

In its role of organizing the message, the textual metafunction is in a sense parasitic upon both the ideational and the interpersonal strands of meanings. Textual choices alone cannot create text: the text would have no content, nor would it be possible to interact with it. Meanings cannot be prioritized until those meanings have themselves been chosen; thus we need to construct Transitivity structures by making experiential choices, and to segment and link those experiential choices through logical relations. And text cannot be reacted to until it is first structured to initiate interaction; thus, we need to construct Mood structures by making interpersonal choices. (Eggins, 2004:320)

Therefore, to describe a language is to describe how these metafunctions are realized in the lexico-grammar and how they realize the social context. Thus, there is a relationship between the metafunctions and particular aspects of the context of situation. This relationship is 'bi-directional because one can infer the values of the contextual (register) variables from the language of the text and one can also predict the meanings likely to be constructed in language from the values of the register variables' (Christie & Unsworth, 2000:6-7). The metafunctions 'are linked to the social context through the notion of register; field is said to be realized in the experiential metafunction; tenor in the interpersonal metafunction and mode in the textual metafunction (Derewianka & Jone, 2010:9). The relationship between language and social context is represented in Figure 4.6 below adapted from Martin (2009:160).

Figure 4.6 Metafunction in relation to register and genre



4.5 The Grammatical Metaphor

Grammatical metaphor refers to the interstratal relationship, based on realization, between semantics and lexico-grammar within the grammatical zone of lexico-grammar (Matthiessen, Teruya & Lam, 2010). It is the inherent creative potential in the grammar that enables language users to de-couple the lexico-grammatical/semantic interface and to re-couple it with a different ordering (Halliday, 2009b). Grammatical metaphor is ‘the pattern of playing with the system, of using non-typical structures to express our meaning in ways that can be highly sensitive to contextual constraints (Eggins, 2004:119). In grammatical metaphor a meaning that was construed by one wording comes to be construed by another. For instance, in *planets move* a phenomenon is construed as happening with a process/verb *move* and a participant entity/noun *planets* but in *planetary motion* a process which was realized by a verb in *planets move* is now realized by a noun *motion*, a class which typically realizes ‘participating entity’. In the nominal

construal of experience, the grammatical metaphor, *motion* is a junction of the process *move* and the grammatical category noun which is the participating ‘entity’ or ‘thing’. Thus, *motion* combines the features of ‘process’ and of ‘thing’. This means grammatical metaphor involves the junction of category meanings and not of word meanings (Halliday, 2009b).

Ontogenetically, metaphorical grammar develops late in children after the everyday grammar is already deeply installed. The metaphorical grammar and everyday grammar co-exist and interpenetrate and the individual moves freely between more and less elaborated modes of discourse. Experience is ‘modelled from both standpoints in order to get a rounded picture of ‘reality’, one which will enable us to go on interacting in increasingly complex ways with our environment’ (Halliday, 2009b:122). Thus, analysis of grammatical metaphor can reveal how the everyday grammar of experience is deconstructed and reconstructed metaphorically in Cicewa idioms, the system of the language (automatized, or ‘dead’ in rhetorical terms), which have taken over the field and become a natural mode of expression (Halliday, 2009b:132). This kind of analysis can lead to the understanding of how children learn to interpret Cicewa idioms.

4.6 Language acquisition and SFL

Understanding how children learn to mean (Halliday, 2009b) is central in Systemic Functional Linguistics as the learning process provides evidence for key dimensions of the theory such as ‘the stratificational and metafunctional organization of language and the relation of text to both context and system’ (Painter, 2009:87). SFL views language learning as a gradual process in which children build up the linguistic ‘meaning potential’ as they interact with others. Children’s linguistic ‘meaning potential’ keeps changing as they interact with adults who have a different ‘meaning potential.’ In the interaction process both children and adults negotiate an actual text which is meaningful and relevant to both of them. Through this process, ‘the contingencies of the spontaneous interaction may lead to a new understanding or may lead the child to produce an utterance that is in some way ‘beyond’ what has gone before’ (Painter, 2000:66). This kind of a text may

disturb the current linguistic system and if there is more evidence the child's linguistic system may adjust to accommodate new meaning choices. The child's linguistic system keeps adjusting as the child participates in meaning – making activities until it resembles the adults system.

There are three phases that children go through when they are learning to mean: the Protolanguage, the Transition and into language (Painter, 2009). The Protolanguage phase begins at about 9 months of age and continues for about 6 months. It is the period when an infant's vocalization or gesture carries meaning. These vocalizations or gestures are idiosyncratic and do not constitute words of adult language but they form symbolic/communicative system that constitute a 'proto' form of language as they express small sets of opposed meanings and realize various micro contexts of an infant's life (Painter, 2009). Halliday (2009b) refers to these forms as 'child tongue' before the mother tongue begins to take over. A child enters the second phase, Transition, at about 16 to 18 months of age and it lasts for six months. In this phase, a child produces true lexical words. During this period, the child's utterances emerge as generalizations of protolanguage uses into two broader functions: that of acting on other people (pragmatic function) and that of reflecting on and understanding the world (mathetic function) (Halliday, 2009b; Painter, 2000; 2009). Children use intonation or voice quality or a combination of the two to distinguish these two functions. During this period the child is not informative as the child has no concept of language as information. In the last phase, into language, there is a 'gradual development of a semiotic system organised on metafunctional and stratal lines' which is present by age 2 (Painter, 2009:95). During this phase, the child uses the parallel grammatical choices of MOOD and TRANSITIVITY in the produced text. Many aspects of grammar, as some case studies have shown, develop after two and half years. There are also other aspects of language such as grammatical metaphor and idiomatic meaning that develop quite late in children but not much research has been conducted to explain how these develop. Thus, studying how idiomatic meaning develops within SFL would contribute to the general understanding of the grammar.

4.7 Summary of chapter

This chapter has described Systemic Functional Linguistics (SFL) and highlighted the major aspects of SFL that are crucial to the understanding of how Cicewa speaking children learn the Cicewa idiomatic meaning. It has explained how the analysis of aspects such as social context, metafunctions and grammatical metaphor can help us understand and explain how Cicewa speaking children learn the Cicewa idiomatic meaning. It has also explained how language acquisition/development is viewed in SFL. The application of this theory is done in Chapters six and seven where the sociocultural contexts in which Cicewa idioms are consumed have been identified. The next chapter describes the research methodology employed in this study.



Chapter Five

Research Method used in the study

5.0 Introduction

This chapter explains the method used in the study. It explains the research design followed in the study. It describes the participants and provides their demographic information. It explains how the researcher accessed the participant children. The materials used and the procedure followed to collect data are also described. It also explains the way the data were coded and analysed. The chapter also highlights the challenges faced and the ethical considerations followed in the study.

5.1 Research Design

Language being a complicated phenomenon, the study adopted both cross-sectional and experimental designs. It was cross-sectional in that different native Cicewa speaking children were studied at different stages of development and different points of progression through time (Cook, 1986). The cross-sectional design was necessary as it allowed the researcher to adequately compare developmental stages in the acquisition of Cicewa idiom interpretation by native Cicewa speaking children of various ages at a single point in time. It also allowed the researcher to compare different variables at the same time and describe patterns of relationship (Dörnyei, 2007). The study was experimental as it systematically manipulated different aspects of idioms and language that would influence idiom acquisition and interpretation. In this study, experiments were conducted on native Cicewa speaking children of varying ages with the hope that the pooled results will be representative of the wider population (Wray & Bloomer, 2006) since different stages of development were considered as if were cross-sections of the same children (Cook, 1986). Experimental design allowed the researcher to examine specific aspects of idiom acquisition without the confounding effects of other factors as extraneous variables were excluded. Experimental tests are designed to reveal patterns

which may have been obscured by more global analyses of learning (Bialystok & Swain, 1978). This allowed the researcher to identify idiom acquisition developmental patterns and understand the factors that underpin the learning of idiom interpretation. Experimental data is much more focused (Wray & Bloomer, 2006) as such it was easy for the researcher to relate results to each other.

5.2 Participants

Twenty children¹ who are native speakers of Cicewa participated in the study. The children were drawn from Mpalume Village, one of the areas that mostly use Cicewa, in Chinamawali Township, Zomba Malawi. These children go to a local primary school in the area. This was an important aspect in the study because Cicewa is used as a medium of instruction in the lower classes in government primary schools and this is where most of the targeted age groups belonged as such they had more chances of encountering idioms. Abrahamsen and Smith (2000:228) state that ‘children encounter idioms in both written and oral language as they progress through the school years’. Furthermore, these schools teach Cicewa as a mandatory subject. This means these children were more likely to come across idiomatic expressions which are quite common in the Cicewa prescribed textbooks they read at school. In addition, these children were those that come from families that use Cicewa all the times because children encounter idiomatic use of language in their native tongue (Schnell, 2007). This aspect was important because it provides children with an opportunity of encountering idiomatic expressions more often.

Twenty Cicewa native speaker children were purposively selected for the study. These children were in the age groups 4, 6, 9, 12 and 14 years (see Table 5.1 below). These intervals helped to show the developmental aspects of idiom interpretation. For each age group, four children were selected. The 4 years old children were selected because they are not very much exposed to idioms because according to literature idiom comprehension starts when children are in school. This is mainly when they are 7 years old and above (Levorato & Cacciari, 1992, 1995). However, there is observation that

¹ In this study a child is any one aged 14 and below since ‘the critical period’ i.e. the window of language acquisition lies within these bounds. (Beyond 14 you lose it).

children at 3½ years are able to produce expressions similar to idioms. So the 4 years old children were selected to find out the transition that is there in the acquisition of the interpretation of idioms since in Malawi official school starting age is 6 and 4 years is a time when a child is not in school (it is 2 years before they start school). This also helped to find out whether literature is correct and whether indeed it is true that idioms start when kids are in school. With this, we would be able to know how much idioms are learnt before school. On the other hand, the 14 years old children were selected because according to literature they are exposed and said to understand a good number of idioms (Levorato and Cacciari (1999)). Below is Table 5.1 showing age distribution of the participant children.

Table 5.1 Age distribution of the participant children

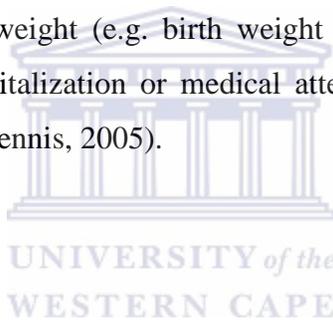
Child	Sex	Age ²	Level at school ³
A4	F	4.1	Pre-school
B4	M	4.2	Pre-school
C4	F	4.9	Standard 1
D4	F	4.11	Pre-school
E6	F	6.0	Standard 2
F6	F	6.10	Standard 2
G6	F	6.10	Standard 2
H6	F	6.11	Standard 2
I9	M	9.8	Standard 3
J9	M	9.2	Standard 4
K9	F	9.0	Standard 4
L9	M	9.1	Standard 4
M12	M	12.4	Standard 5
N12	F	12.2	Standard 6
O12	F	12.6	Standard 6
P12	F	12.9	Form 1
Q14	F	14.2	Standard 7
R14	M	14.0	Standard 6
S14	F	14.0	Standard 6
T14	F	14.0	Standard 7

² Age of a child at the start of the experiments

³ Class of a child at the start of the experiments

As Table 5.1 shows, the ages of 4 years old children ranged from 4.1 – 4.11 years with a mean age of 4.3; the ages of 6 years old children ranged from 6.0 – 6.11 years, mean age 6.1; the ages of 9 years old children ranged from 9.0 – 9.8 years, mean age 9.3; the ages of 12 years old children ranged from 12.2 – 12.9 years, mean age 12.5; and the ages of 14 years old children ranged from 14.0 – 14.2 years, mean age 14.1.

All the children who participated in the study were normal/typically developing Cicewa native speaker children. The interview with parents revealed that all the children met the following exclusion criteria: diagnosis of a language disorder; severe learning difficulties or requirement for special educational services; schooling in a language other than Cicewa or not studying Cicewa at school; chronic disorder (e.g. diabetes); history of premature birth or low birth weight (e.g. birth weight <2500g/5lbs, and/or <37weeks gestation) and history of hospitalization or medical attention for a closed head injury (Huber-Okrainee, Blaser and Dennis, 2005).



5.3 Access and Acceptance

After granting permission, the Village Head Mpalume instructed his right hand man to introduce the researcher to the villagers and explain the purpose of her presence. The researcher was introduced to the individual parents by a primary school teacher who also lives in the village and teaches at one of the local schools. The parents, after consenting that their children could participate in the experiments, introduced the researcher to their children and made the children available for the experiments.

5.4 Materials used

Cicewa idioms used in the experiments were taken from Cicewa textbooks used in primary schools in Malawi. A total of 110 idioms were picked. Firstly, these idioms were evaluated regarding their familiarity by 20 adult Cicewa native speakers, above the age of 25 years, as there are no frequency references available for idioms in Cicewa. The speakers were asked to say how frequently they had heard, seen or used each idiomatic

expression without considering whether or not they knew what it meant, using a 4-point scale ranging from never (1) to more often (4). The idioms that they had never heard, seen or used were to be rated 1; idioms that they had heard, seen or used very often were to be rated 4. From the idioms that were rated familiar, top 20 semantically analyzable and top 20 semantically non-analyzable idioms were picked. In total, 40 idioms were picked. The most familiar idioms were picked because research has shown that they are the most meaningful (Kamanga, 2007, 2012; Janyan & Andonova, 2000; Titone & Connine, 1994; Schweigert & Cronk, 1992/93). Familiar semantically non-analyzable idioms were also picked because Kamanga (2007, 2012) found that semantic analyzability did not affect idiom interpretation in Cicewa and we wanted to find out if this is also the case with idiom acquisition by children. For each idiom, a short story that was biased towards an idiomatic meaning was developed according to the schema proposed by story grammar - a setting followed by an episode. Each story contained one idiom only and it ended with an idiom. The stories had an average number of 28 words. Each story was followed by a question: 'What does it mean that he/she did (or was) ... idiom?' (e.g. What does it mean that he broke the ice?). Then three options were provided: (a) an idiomatic interpretation of the string ('idiomatic' answer); (b) a paraphrase of the literal meaning ('literal' answer); (c) a response referring to an aspect of the context presented by the story but neither literal nor idiomatic ('filler /associative' answer). The developed stories were then presented to 10 primary school teachers for them to provide answers for validity. All the options were removed from the stories and the teachers were supposed to provide answers from their heads. Three teachers had problems to interpret 2 idioms and the stories containing the idioms that caused problems were removed from the list. The data informed the selection of 20 idioms and stories that were used to collect the data for the study and 3 idioms and stories that were used to serve as practice items.

The twenty idioms that were used for data collection ranged from phrase idioms to sentence idioms. Phrase idioms included noun and verb phrase idioms. Adjectival phrase idioms are very few in Cicewa (Kamanga, 2007) and those that were selected caused problems when the stories were presented to primary school teachers so they were

removed from the list. Cicewa has no prepositional and adverbial idioms (Kamanga, 2007) hence not on the list. The noun phrase idioms included those with structures N+Adj, N+Adj+N, N(Infinitive)+N(base), N(derived)+N and verb phrase idioms included those with structures V+N(base), V+N+Adj, V+N(Locative), V+N+N (Locative), V+N+Numeral. Sentence idioms included simple sentences only as complex sentence idioms are very few (Kamanga, 2007) and those that were selected caused problems when the stories in which the idioms were embedded were presented to primary school teachers so they were removed from the list.

A list of sentences containing idiomatic expressions was also used to collect the data on how children understand idioms. The sentences contained the same idioms that were in the developed stories. Unlike the stories, no answers were provided for the sentences but the same question was raised: ‘What does it mean that he/she did (or was) ... idiom?’ (e.g. What does it mean that he broke the ice?’). Children had to provide the meanings from their heads using the sentence context. This was done to test at what age children start searching for the contextual cues leading to the identification of the contextually appropriate interpretation. Apart from the stories, and a list of sentences, a list of idiomatic expressions was also used. These were the same idioms that were embedded in the stories and the sentences but in this list no context was provided and also no answers were provided. A list of idioms and a list of sentences containing idioms were also used to identify strategies employed by children to interpret idioms when presented in context and out of context. Another tool that was used to collect data for the study was a set of sentences that contained incomplete idiomatic expressions. The sentences contained the same idiomatic expressions used in the other tools mentioned above but in these sentences one word was omitted from the idioms. No options were provided for the children to choose from. These incomplete sentences were used to test whether idioms are acquired as ‘texts’ (holistic units) and to test at what age children are able to identify expressions as idiomatic and whether they are able to recall the idiomatic expression. Lastly, to test if syntactic modification affects idiom acquisition, a set of sentences with syntactically modified idioms was used.

5.5 Data collection procedure

The experimenter made three visits to each child's home before data collection started to build rapport. During these visits, the experimenter presented the participant children with three stories that served as practice items to build up to speed. One story was presented during each visit. The experimenter read aloud the story to the child while the child aged 6 and below listened and that aged 9 and above followed a printed copy. At the end of the story, the experimenter read the question and the three meaning options then asked the child to choose one meaning from the given options which s/he thought was the most appropriate. The data for these stories were not included in the data analysis.

After establishing rapport, the data for the study were collected in three phases. Phase I consisted of three experiments that tested children's ability to understand both semantically analyzable and non-analyzable idioms. In Phase II, children's ability to recognise an idiomatic expression as a 'text' (holistic unit) was tested. Their ability to recall the idiom was also tested. Phase III tested whether syntactic modification affects idiom acquisition. On average experiments took a maximum of 6 minutes as children have too short attention span.

5.5.1 Phase I

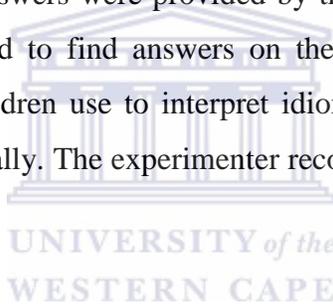
Three experiments were carried out in this phase to test children's ability to understand idioms using the contextual cues leading to appropriate interpretation. Experiment 1 tested whether children are able to interpret idioms when embedded in stories that are biased towards an idiomatic interpretation. It also aimed at identifying the age at which children start understanding idiomatic expressions. Experiment 2 tested whether children are able to interpret idiomatic expressions using the information provided by the sentences containing them. Experiment 3 tested whether children are able to interpret idiomatic expressions out of context. Experiments 2 and 3 were also carried out to identify the strategies employed by children to learn to interpret idioms when presented in context and out of context.

EXPERIMENT 1

In this experiment, children were exposed to twenty idioms embedded in different contexts since idioms have a fuzzy meaning as such their meaning has to be adapted each time to the context and the communicative intentions of the speaker (Levorato, Roch & Nesi, 2007). Children's ability to understand the idiomatic expressions was tested using a multiple-choice task that followed a short story ending with an idiom. It involved reading to each child the twenty stories that contained one idiom only. The idioms were reduced to twenty to avoid fatigue effects. The children listened to the stories one story at a time. Each of the stories was presented to all the participant children. Each story was followed by a question: 'What does it mean that he/she did (or was) ... idiom?' (e.g. What does it mean that he broke the ice?') then three options: (a) an 'idiomatic' answer; (b) a 'literal' answer; (c) a 'filler' answer. This kind of a task has been used in various studies on idiom acquisition and it has proved to be a good test as it is sensitive to the developmental changes that occur in the course of idiom acquisition (Levorato, Roch & Nesi, 2007). The experimenter tested each child individually by reading aloud the story to the child while the child aged 6 and below listened and that aged 9 and above was allowed to follow a printed version. At the end of the story, the experimenter read the question and the three answers then invited the child to choose the answer s/he believed to be the most appropriate. The choice of the idiomatic answer shows that the child recognizes the figurative meaning as appropriate in the context; the choice of the filler shows that the global meaning of the story is not grasped although the literal meaning is recognized as inappropriate; and a literal choice shows that 'a shallow processing of the text is performed and that the linguistic information undergoes a piece by piece analysis' (Levorato, Roch & Nesi, 2007:481). The experimenter marked the answers chosen by each child on the response sheet.

EXPERIMENT 2

Experiment 2 tested whether children are able to interpret idiomatic expressions using the contextual cues leading to the identification of the contextually appropriate interpretation and at what age children start searching for the contextual cues to arrive at the appropriate meaning. In this experiment, the researcher read twenty sentences containing idiomatic expressions to each child. The sentences contained the idiomatic expressions that the children were exposed to in experiment 1. The experimenter read each sentence to a child while the child aged 6 and below listened and that aged 9 and above followed on a printed version. After reading the sentence, the experimenter asked the child to answer the question: ‘What does it mean that he/she did (or was) ... idiom?’ (e.g. What does it mean that he broke the ice?’). The child had to answer this question before the next sentence was read. No answers were provided by the experimenter for the child to choose from. The children had to find answers on their own. This was necessary to identify the strategies that children use to interpret idioms when embedded in context. Each child was tested individually. The experimenter recorded the answers given by each child on the response sheet.



EXPERIMENT 3

Experiment 3 tested whether children are able to interpret idiomatic expressions out of context. It aimed at identifying the age at which a child is able to interpret idiomatic expressions out of context and to find out the strategies that the child uses to do this. Children’s ability to understand idiomatic expressions out of context was tested using a list of twenty idiomatic expressions. These were the same idioms that were embedded in the stories and the sentences but in this list no context was provided and also no answers were provided. The experimenter read to each child the idioms while the child aged 6 and below listened and that aged 9 and above followed on a printed version. After reading each idiomatic expression, the experimenter asked the child to say what the idiomatic expression meant. The child had to answer this question before the next idiomatic expression was read. No answers were provided by the experimenter for the child to

choose from. The children had to find answers on their own. This was necessary to identify the strategies that children use to interpret idioms when out of context. Each child was tested individually. The experimenter recorded the answers given by each child on the response sheet.

5.5.2 Phase II

The experiment carried out in this Phase, experiment 4, tested whether idioms are acquired as 'texts' (holistic units) and tested at what age children are able to identify expressions as idiomatic. It also tested whether children are able to recall the idiomatic expressions they were exposed to. These were tested using a set of twenty incomplete sentences. The sentences contained the same idiomatic expressions used in Phase I but in these sentences one word was omitted from the idioms. No answers were provided for the children to choose from. The experimenter read to each child the incomplete sentences while the child aged 6 and below listened and that aged 9 and above followed on a printed version. After reading each incomplete sentence, the experimenter asked the child to provide the missing word in the sentence. The child had to provide the missing word before the next incomplete sentence was read. The children had to recall the missing words from the idiomatic expressions they were exposed to in the other experiments. The experimenter recorded the answers given by each child on the response sheet. Each child was tested individually.

5.5.3 Phase III

Phase III tested whether syntactic modification affects idiom interpretation and acquisition by children. Experiment 5 tested whether children had problems to interpret syntactically modified idioms and acquire the same. This was tested using a set of sentences that contained syntactically modified idioms. The idioms that were used in these sentences were only those that can be modified and were picked from the idioms that the children were exposed to in Phase I. The experimenter read to each child the sentences while the child aged 6 and below listened and that aged 9 and above followed on a printed version. After reading each sentence, the experimenter asked the child to say

what the idiomatic expression meant in the sentence. The child had to provide the meaning of the idiomatic expression before the next sentence was read. No answers were provided by the experimenter for the child to choose from. The children had to find answers on their own using the context provided in the sentences. Each child was tested individually and the experimenter recorded the answers given by each child on the response sheet. The findings from this experiment were compared with the findings from Experiment 2 for the idioms in question to determine if there were any differences in the way children interpreted the idioms.

For validity, all the experiments described above were also conducted on adult Cicewa native speakers. The same procedures used in children experiments were used in adult experiments.

5.6 Data coding and Analysis

The data were analyzed in two phases. In the first phase the data were qualitatively analyzed and in the second phase they were quantitatively analyzed. In qualitative analysis the responses were compared several times to identify patterns, differences and similarities. It involved identification of strategies employed by children to interpret the idioms. The identified strategies were named with reference to previous studies. Types of responses given by children in the experiments were also identified and named accordingly. The factors that influence children's interpretation and acquisition of idioms were also identified. After identifying the employed strategies, response types and the factors that influence children's interpretation and acquisition of idioms, the identified strategies, response types and the factors were coded for statistical analysis. The lexicogrammatical analysis of the data was also done using Systemic Functional Linguistics to identify the strategies and the sociocultural context within which children interpreted the idioms. Apart from analyzing the data, the lexicogrammatical analysis of the stories and sentences within which idioms were embedded and the idioms themselves was also done to identify the sociocultural contexts within which the idioms were produced and meant to be interpreted. The lexicogrammatical analysis involved schematic structure, logical

relations (clause complex), mood, transitivity (process type), theme, conjunctive relations, lexical relations and reference.

In the second phase of analysis, the data were statistically analyzed using Statistical Package for Social Sciences (SPSS) version 22. Descriptive statistics (frequencies) and inferential statistics (cross tabulations, correlation tests, paired-sample t-test and Analysis of Variance (ANOVA)) with post-hoc test were conducted. Frequencies were conducted to determine how many times children gave a specific type of response. This was important for us to determine what type of response was popular among children in specific environments. Cross-tabulations were conducted to determine which age group gave what kind of response. This was crucial because it provided information that formed the basis of identification of stages in idiomatic meaning acquisition. The correlation tests were conducted to describe the strength and direction of the linear relationship between variables (Pallant, 2011). This was important because it helped us to establish if some factors influence idiomatic meaning acquisition. The paired-sample t-test was conducted to compare the mean scores for children when the idioms were not modified and when the idioms were modified. This test helped us to establish if modification of idioms affect the acquisition of idiomatic meanings. Analysis of Variance (ANOVA)) with post-hoc tests were conducted because we wanted to compare mean scores of more than two groups. Through ANOVA we were able to compare the variance between the responses that children of different age groups gave. This helped us to determine if there were some differences in the way children interpreted the idioms. Post-hoc tests were done to identify which age group interpreted the idioms differently from which other age group in the case where ANOVA results were statistically significant (Pallant, 2011).

5.7 Challenges

Not many challenges were faced during the data collection period. However, one 4 years old child relocated to another town in the course of data collection because the parents had to move. It took longer for the researcher to identify another child to replace the one

who moved. This made the identified child to lag behind as she joined in later after data collection had already started. Despite this, the child participated in all the experiments designed for the study.

5.8 Ethical issues

The participants for the study were drawn from Mpalume Village, in Chinamawali Township, Zomba, Malawi. In this case, the researcher, first, sought permission from the Village Head Mpalume to carry out research in his area before data collection started. The researcher introduced herself orally to the village head then presented the letter of introduction from Linguistics Department of the University of the Western Cape (Appendix A). The researcher orally explained the aim and objectives of the research, how the children will be involved in the study then presented the information sheet to the village head who, after reading the information sheet, orally granted permission to carry out the research in the village. When permission was granted by the village head, the researcher sought permission from the parents/guardians of the participating children and from the participating children aged 9 to 14 years. The researcher explained the purpose and the nature of the research project, aim and objectives of the research, how the children will be involved and how the children will benefit from the study to the parents/guardians of all participating children and to the participating children aged 9 to 14 years. This was done verbally as well as through information sheet (Appendix B) which was presented to parents/guardians and the participating children aged 12 and 14 years. Parents/guardians of all participating children were asked for consent for their children/wards to participate in the experiments before the experiments started because children are not old enough to decide what is best for them (Wray & Bloomer, 2006). The consent was given verbally as well as by signing the consent form (Appendix C). When the parents/guardians gave their consent, the older children aged 9 to 14 were also asked for their consent to participate in the experiments. The consent was granted by signing the consent form (Appendix D). To make sure that all the parents/guardians and the participating children had full understanding of the information on the information sheet and the consent form, they were translated to Cicewa, Malawi's native language.

Throughout the experiments, the participants together with their parents/guardians were reminded that participation was voluntary and that they had a right to withdraw or withdraw their children/wards at any stage without any obligation to explain their decision and without penalty. Should they decide to withdraw or withdraw their child from the study; all data produced as a consequence of their participation or their child's participation would be destroyed. Confidentiality was maintained by using identification codes that consisted of a letter and the age of a participant. The information gathered was safely stored and only the researcher had access to the information.

5.9 Summary of chapter

The chapter has described the methodology employed in the study. It has explained the research design followed in the study and described the participants by providing their demographic information. How the researcher accessed the participant children has been explained. It has described the materials used and the procedure followed to gather data. It has also explained how data were coded and analysed. The chapter has also highlighted the challenges faced and the ethical considerations followed in the study. The findings collected through the methodology described above are presented in the coming chapters six, seven, eight and nine. The coming chapter, Chapter Six, presents findings on factors that influence children's meaning choices and explores the sociocultural context within which idioms are used.

Chapter Six

The sociocultural contexts and factors influencing children's meaning choices in Cicewa idiom interpretation and acquisition

6.0 Introduction

This chapter presents the findings of the study regarding the factors that influence children's interpretation and acquisition of idioms. Four factors (context, semantic analyzability, idiom's internal structure and idiom modification) were tested through the experiments described in the methodology chapter above. The chapter adopts a Systemic Functional Linguistics (SFL) approach, described in Chapter Four, to examine the sociocultural contexts that influence children's interpretation of Cicewa idioms and acquisition of the same. It utilises aspects of SFL such as social context, text, lexicogrammar, transitivity structure and grammatical metaphor. The chapter demonstrates that knowledge of linguistic context is not enough for a child to interpret Cicewa idioms figuratively. It further demonstrates that children's interpretation and acquisition of idioms is not really dependent on analyzability and internal structure of the idioms although these affect interpretation and acquisition to some extent. The idiom can be analyzable or can have a well-formed structure but if children are not aware of the sociocultural contexts within which the idioms are consumed they will fail to appropriately interpret the idioms. It also demonstrates that idiom modification does not affect children's interpretation of idioms as children are able to figuratively interpret both modified and non-modified idioms if they are aware of the sociocultural contexts in which the idioms are used. Thus, the chapter argues that the sociocultural context within which the idioms are produced is central to the interpretation of the idioms.

6.1 Linguistic Context

Research findings have shown that linguistic context helps young children to infer the figurative meaning of an idiom and learn the meaning (Huber-Okrainee, Blaser &

Dennis, 2005). Studies by Cacciari and Levorato (1998); Levorato and Cacciari (1992; 1995; 1999); Laval and Bernicot (2002); Laval (2003); Levorato, Nesi and Cacciari (2004); Hsieh and Hsu (2010) have shown that children do better when idioms are presented in linguistically supportive context than when context is not available. Even the younger children demonstrated an understanding of the idioms when they occurred in linguistically supportive contexts compared to non-supportive or absent contexts. In the current study, this variable was tested in 20 normally developing Cicewa speaking children aged 4 – 14 years in three experiments; Experiment 1 tested children's ability to interpret idiomatic expressions in story context, Experimented 2 tested children's ability to interpret idiomatic expressions in sentence context and Experiment 3 tested children's ability to interpret idiomatic expressions out of context.

Experiment 1

Experiment 1 tested children's ability to interpret idiomatic expressions in a linguistic context where idioms were embedded in stories that were biased towards an idiomatic interpretation. The stories ended with an idiom and each story was followed by a question: 'What does it mean that he/she did (or was) ... idiom?' (e.g. What does it mean that he broke the ice?') then three options: (a) an 'idiomatic' answer; (b) a 'literal' answer; (c) a 'filler' answer. The experimenter tested each child individually by reading aloud the story to the child while the child aged 6 and below listened and that aged 9 and above was allowed to follow a printed version. The children listened to the stories one story at a time. At the end of the story, the experimenter read the question and the three options then invited the child to choose the option s/he believed to be the most appropriate. The choice of the idiomatic answer shows that the child recognizes the figurative meaning as appropriate in the context; the choice of the filler answer shows that the global meaning of the story is not grasped although the literal meaning is recognized as inappropriate; and a literal choice shows that 'a shallow processing of the text is performed and that the linguistic information undergoes a piece by piece analysis (Levorato, Roch & Nesi, 2007:481). Frequencies of response types were calculated and cross-tabulation, correlation test and Analysis of Variance (ANOVA) with post hoc tests were conducted.

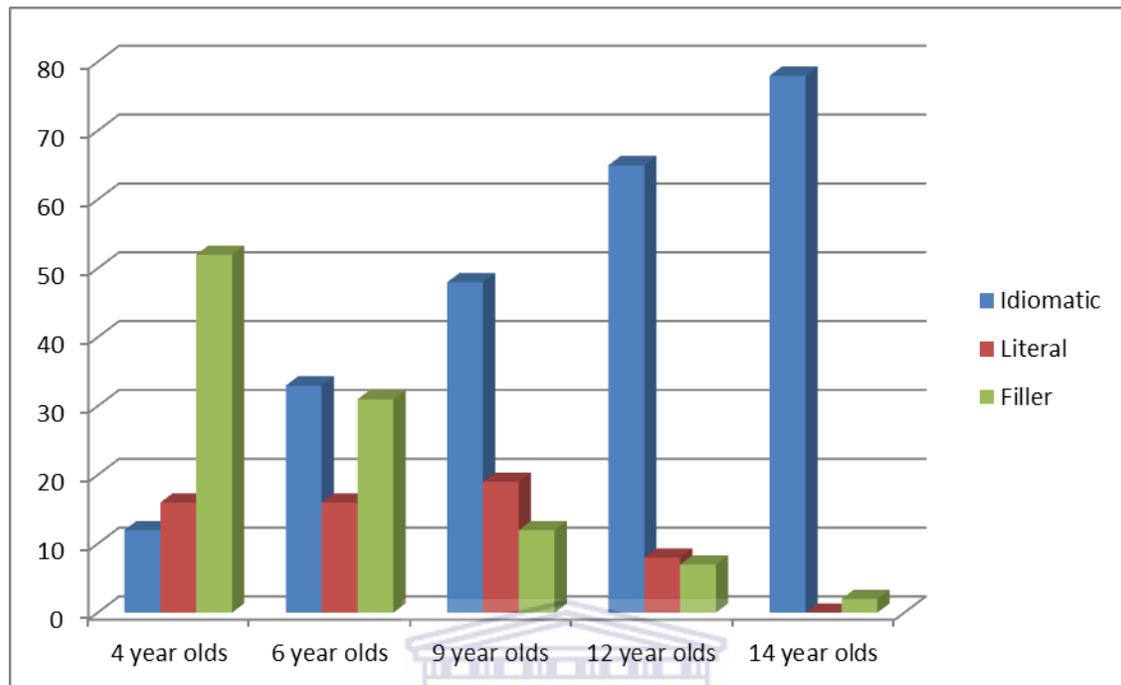
The frequencies of responses indicated that ‘idiomatic’ responses 236 (59%) were predominant when idioms were embedded in stories and that ‘literal’ responses 59 (14.8%) were less preferred. The ‘filler’ responses 105 (26.3%) were preferred more than ‘literal’ responses (see Table 6.1).

Table 6.1 Frequency of Response types in story context

	Frequency	Percent	Valid Percent	Cumulative Percent
Idiomatic	236	59.0	59.0	59.0
Literal	59	14.8	14.8	73.8
Filler	105	26.3	26.3	100.0
Total	400	100.0	100.0	

The frequencies in Table 6.1 indicate that most children were able to recognize figurative meaning as appropriate in the contexts hence more idiomatic responses were selected than literal and filler responses. This supports the findings reported by Cacciari and Levorato (1998); Cooper (1999); Levorato and Cacciari (1992, 1999); Laval and Bernicot (2002); Laval (2003); Levorato, Nesi and Cacciari (2004) and Hsieh and Hsu (2010) who found that children provided more idiomatic answers when idioms were embedded in supportive contexts. However, filler responses were preferred than literal responses. The predominance of ‘filler’ responses over ‘literal’ responses suggests that children were able to detect that the literal meaning was inappropriate in the context but they were not able to grasp the global meaning of the story (Levorato, Roch & Nesi, 2007). It can be suggested that children are aware of the idiomatic expressions as ‘texts’ which need to be interpreted in the sociocultural context within which they are produced. The ‘response type’ against ‘age’ cross-tabulation results presented in Figure 6.1 below show which age groups produced more of these response types.

Figure 6.1 Response type against Age in Story context



The findings reveal that 4-year old children chose 'filler' responses more (52) than any other age group. The findings also show that 4 years old children chose more 'filler' responses than 'literal' responses (16) and that they chose the least 'idiomatic' responses (12) than any other age group. On the other hand, the findings reveal that 6-year old children chose 31 'filler' responses, 16 'literal' responses and 33 'idiomatic' responses. These findings are in conflict with the findings of other studies (Prinz, 1983; Abkarian et al., 1992; Levorato, 1993; Vulchanova, Vulchanov & Stankova, 2011) who reported that younger children aged below 6-year tend to interpret idioms literally. However, the current findings are consistent with the findings by Leung (2011) who reported that children aged 6 years avoided literal responses and instead gave responses that were context dependent. Also Laval (2003) and Hsieh and Hsu (2010) reported that 6-year old children produced explanations based on context when they were asked to explain their responses in idiom interpretation task. The choice of 'filler' responses by 4-year old children shows that Cicewa speaking children as young as 4 years were able to recognize that the literal response is in conflict with the linguistic context within which the idiom is embedded and at the same time the idiomatic meaning is not available to them, so they

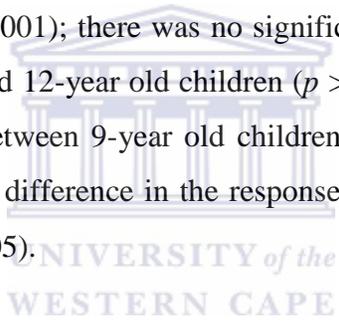
chose a ‘filler’ response because it seemed plausible in the linguistic context. This suggests that children as young as 4 years are able to use the information provided by the linguistic context to interpret idioms but they fail to correctly interpret the idioms because they fail to go beyond the linguistic context as a result they cannot determine the dimensions of reality being talked about. The meaning of an idiom depends on the agreed upon linguistic convention shared by a specific language community that relates a given linguistic form to a non-literal meaning (Hsieh & Hsu, 2010). This suggests that linguistic context alone is not enough for one to interpret the idioms hence it can be argued that idioms are texts which need to be interpreted within the sociocultural context in which they are produced. Eggins (2004:7) states that a ‘text carries with it, as a part of it, aspects of the context in which it was produced and, presumably, within which it would be considered appropriate’. Thus, it can be explained that 4-year old children are not able to deduce the sociocultural context within which the idioms are used from the linguistic patterns in the stories as a result they fail to correctly interpret the idioms even though they are aware that the literal meaning is not appropriate. However, the 4-year old children were still able to figuratively interpret some idioms though few. This is consistent with the findings of Schnell (2007) who found that pragmatic competence emerges at around age 4 as such children of this age are able to handle non-literal expression like idioms.

The choice of more idiomatic responses (33) by 6-year old children can be due to the linguistic patterns in the stories that helped them to determine the dimensions of reality being talked about hence more idiomatic responses were given. The occurrence of idiomatic responses might suggest that the awareness of ‘cultural frames of reference and meaning’ (Lirola, 2005: 19) has already started at the age of six although the filler responses (31) are still predominant.

The data show that 14-year old children chose idiomatic responses more (78) followed by 12-year old children (65) then 9-year old children (48). The finding that 14-year old children selected more idiomatic responses is consistent with the findings of Karuppali and Bhat (2013). The choice of more idiomatic responses by 14-year old children

suggests that 14-year old children have developed the awareness of the cultural frames of reference and meaning as such they are able to deduce the dimensions of reality being talked about. Therefore, it can be suggested that at the age of 14 the child's knowledge of idiomatic meanings starts resembling that of adults although 14-year old children failed to achieve 100%, which suggests that the awareness of the cultural frames of reference and meaning has not yet reached the highest peak at this age. For instance, one 14-year old child failed to correctly interpret '*kupha phala*' ('to kill porridge' = to drink beer a lot) and another one failed to correctly interpret '*khala maso*' (be alert). The child who failed to appropriately interpret '*kupha phala*' chose a 'filler' response '*amalima kwambili*' (he farms a lot). The choice of '*amalima kwambili*' suggests that this child was aware of the lexico-grammatical patterns in the story such as schematic structure, logical relations (clause complex), mood, transitivity (process type), theme and conjunctive relations. However, she failed to recognize the situational and cultural context in which the idiom '*kupha phala*' ('to kill porridge' = to drink beer a lot) is used. This could be mainly due to the transitivity metaphorical nature of the idiom. The idiom contains a verb of Material process '*kupha*' (to kill) with a non-living entity '*phala*' (porridge) as Goal. '*Phala*' cannot be killed as it is devoid of life. This internal contradiction led the child to abandon the idiom completely and search for more appropriate meaning in the provided linguistic context, the 'filler' response (*amalima kwambili*). This shows that the linguistic context alone is not enough for one to interpret the idiom correctly. This child lacked knowledge of the situational and cultural context in which the idiom is used as idioms have their roots in a particular culture (Chunke, 2011). Cicewa speakers also use the verb '*kupha*' (to kill) to refer to situations where someone has overdone something. For instance, when someone has cultivated a big portion of land within the shortest period of time they refer to that as '*kupha ndime*' (to kill a portion of land). '*Ndime*' refers to the portion of land that has been cultivated. They also use the word '*phala*' (porridge) to refer to traditional beer made from maize flour and millet flour because it is in the porridge form. So, the child needed this sociocultural knowledge in order to correctly interpret the idiom '*kupha phala*' as 'to drink beer a lot'. This also suggests that it is not the idiom that needs to be familiar but the sociocultural context since only familiar idioms were used in the experiment and the child was familiar with the idiom.

As the data show 12-year old children selected less idiomatic responses (65) than what 14-year old children selected but they selected more idiomatic responses than the idiomatic responses (48) selected by 9-year old children. Nine year old children selected more idiomatic responses than 6-year old children and 6-year old children selected more idiomatic responses than 4-year old children. The one-way between-groups Analysis of Variance (ANOVA Test) with post-hoc Tukey tests with age as independent variable showed that the responses of the five age groups were significantly different in the story context ($F(4,395) = 55.059, p < .0001$). The post-hoc Tukey tests indicated that in the story context there were significant differences in the responses between 4-year old children and 6-year old, 9-year old, 12-year old, and 14-year old ($p < .001$); there were significant differences in the responses between 6-year old children and 9-year old, 12-year old and 14-year old ($p < .001$); there was no significant difference in the responses between 9-year old children and 12-year old children ($p > .05$) but there were significant differences in the responses between 9-year old children and 14-year old children ($p < .001$); there was no significant difference in the responses between 12-year old children and 14-year old children ($p > .05$).



The data also show that 9-year old children selected more ‘literal’ responses (19) than any other age group. This suggests that 9 years is a transitional age in idiom acquisition. It is the age at which a child is able to look for contextual information, both linguistic and sociocultural, in order to understand the idiom’s meaning. However, the awareness of sociocultural information is still developing at this age as a result the children find it difficult to relate the linguistic information with the sociocultural information which sometimes is not even available to them. But because at this age the children have acquired sensitivity towards the contextual information (Levorato, 1993; Levorato & Cacciari, 2002) they always search for linguistic information to deduce the meaning of the idiom as a result 9-year old children ended up providing more literal answer because they were the most plausible. This can be illustrated by ‘*galu wakuda*’ (‘black dog’ = famine) one of the idioms that could not be correctly interpreted by 9-year old children. Three of 9-year old children interpreted this idiom literally. These children realized that

the ‘filler’ answer was not appropriate in the provided linguistic context but they could not recognize the sociocultural context within which the idiom is consumed thus the idiomatic answer could not make sense in the provided linguistic context and they ended up selecting a literal answer as it was the safest answer. For these children to correctly interpret the idiom, they needed to know the visual problems that people experience due to severe hunger. People fail to see properly because of low sugar level, dehydration and vitamin A deficiency. As a result when they are looking everything looks like a dark looking object to the extent that they cannot identify it. Since in most Malawian homes they tame dogs, it is assumed that the unidentified dark object is a dog black in color. Because this unidentified object, wrongly identified as a black dog, is seen when people have nothing to eat during famine it is believed that this ‘black dog’ is the one that mysteriously eats all the food leaving people with nothing to eat hence famine is referred to as ‘*galu wakuda*’ (literally, a black dog). The 9-year old children lacked this sociocultural knowledge as a result they had no choice but to select a literal answer which seemed more plausible in the provided context than the filler answer and the idiomatic answer. However, the 14-year old children did not select any literal response in the story context. This suggests that 14-year old children have developed high awareness of the sociocultural context within which idioms are used.

The data also show that the non-idiomatic responses decreased with age. The relationship between age and response type was investigated using Pearson product-moment correlation coefficient. The correlation was significant at the 0.01 level (2-tailed). The Pearson correlation showed a strong negative correlation between age and response type, $r = -.587$, $n = 400$, $p < .0005$. This suggests that as children grow up they abandon the non-idiomatic responses. This is consistent with the findings in the studies by Prinz (1983); Laval (2003); Levorato, Nesi and Cacciari (2004); Hsieh and Hsu (2010); Vulchanova et al. (2011) and Karuppali and Bhat (2013). Children’s ability to interpret idiomatic expressions was also tested in sentence context. This was done in experiment 2. Presented below are the findings from experiment 2.

Experiment 2

Experiment 2 tested children's ability to interpret idiomatic expressions using contextual cues provided by the sentence. It also tested the age at which children start searching for the contextual cues to arrive at the appropriate meaning. In this experiment, twenty sentences containing idiomatic expressions, that the children were exposed to in experiment 1, were read to each child individually while the child aged 6 and below listened and that aged 9 and above followed on a printed version. After reading the sentence, the experimenter asked the child to answer the question: 'What does it mean that he/she did (or was) ... idiom?' (e.g. What does it mean that he broke the ice?'). The child had to answer this question before the next sentence was read. No answers were provided by the experimenter for the child to choose from. Frequencies of response types were calculated and cross tabulation, correlation test and Analysis of Variance (ANOVA) with post-hoc Tukey tests were conducted.

The frequencies indicate that 'idiomatic' responses 139 (34.8%) followed by 'same idiom' 118 (29.5%) (a response in which children gave back the idiom as an answer) were predominant when idioms formed part of the sentences. The frequencies also indicate that 'irrelevant' responses 67 (16.8%) (a response that was not related, in any way, to the sentence or the idiom in question) were common. The literal response 18 (4.5%) were less preferred by children when idioms were contained in sentences. Frequencies indicate that there were also other responses given by children like 'associative' 27 (6.8%) (a response related to part of the sentence or part of the idiom) and 'related to idiomatic meaning' 25 (6.3%) (a response that was closely related to the idiomatic meaning of the idiom). Lastly, there was also 'no response' 6 (1.5%) (where children did not give any answer) although it was less frequent (see Table 6.2).

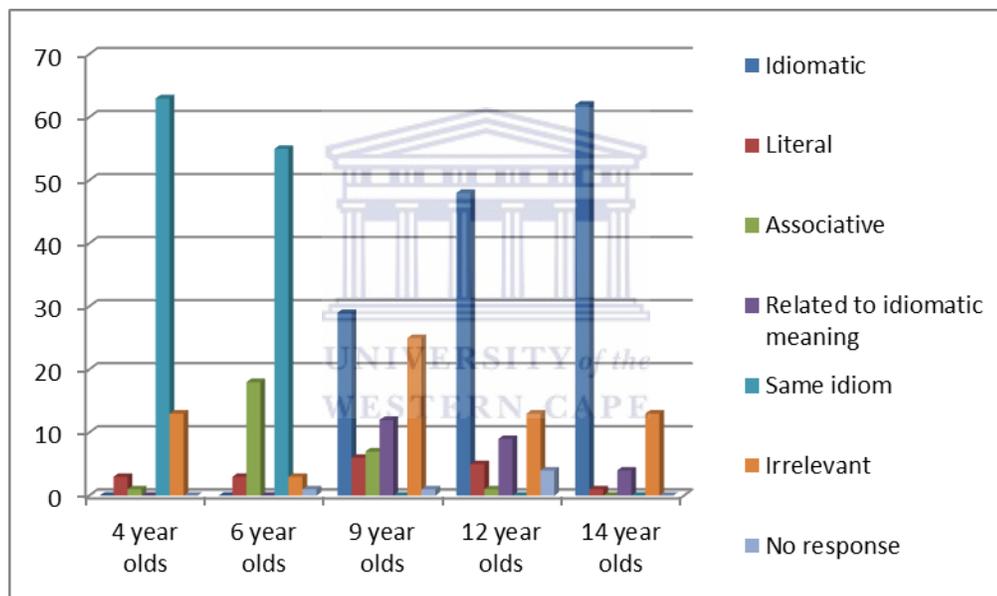
Table 6.2 Frequency of Response types in sentence context

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Idiomatic	139	34.8	34.8	34.8
Literal	18	4.5	4.5	39.3
Associative	27	6.8	6.8	46.0
Related to idiomatic meaning	25	6.3	6.3	52.3
Same idiom	118	29.5	29.5	81.8
Irrelevant	67	16.8	16.8	98.5
No response	6	1.5	1.5	100.0
Total	400	100.0	100.0	

The predominance of idiomatic responses 139 (34.8%) indicates that some children were able to search for contextual cues, from the sentences and determine the dimensions of reality being talked about, contributing to the idiomatic meaning of the idioms. Despite this, 'same idiom' 118 (29.5%) (the response where children gave back the same idiom without any attempt to interpret it) was also prevalent. This suggests that some children were able to recognize idioms as 'instances of language in use' (Fawcett, 2008: 6) but failed to interpret the idioms. 'Irrelevant' responses 67 (16.8) were also common which shows that children were able to recognize idiomatic expressions as texts but they could not deduce the appropriate interpretation from the available linguistic context probably because, as already pointed out, they lacked knowledge of the sociocultural context within which the idioms are consumed. This could also be the reason why 'literal' responses 18 (4.5%) were less preferred by the children as they were able to detect that literal meanings were inappropriate even though the sociocultural information guiding the idioms' use was not available. Children also gave responses that were 'related to idiomatic meaning' 25 (6.3%) (responses that were closely related to the idiomatic meaning of the idiom). These responses suggest that some children had some knowledge of the sociocultural context in which the idioms are consumed but this knowledge had not yet reached its peak. The 'associative' responses 27 (6.8%) (a response related to part of the sentence or part of the idiom) indicate that some children were able to use the

contextual cues in their effort to interpret the idioms but they could not succeed possibly for the same reason that they lacked the sociocultural knowledge. There were also instances when children gave ‘no response’ 6 (1.5%) (where children did not give any answer). This could be due to the realization that the literal meaning was not appropriate but they could not access the idiomatic meaning because of lack of knowledge of the sociocultural context in which the idiom is used. The ‘response type’ against ‘age’ cross-tabulation results presented in Figure 6.2 below show which age groups produced more of these response types.

Figure 6.2 Response type against Age in sentence context



The findings show that 4-year old and 6-year old children produced zero (0) idiomatic interpretations when idioms were presented in sentences and no options were provided for them to choose from. This is in line with the findings of Prinz (1983); Abkarian et al. (1992); Levorato (1993); Vulchanova, Vulchanov and Stankova (2011) who found that children aged 6 and below fail to interpret idioms figuratively. The findings also show that ‘same idiom’ was only given by 4 years old and 6 years old children, 63 and 55 respectively. The predominance of ‘same idiom’ among 4 and 6-year old children indicates that Cicewa speaking children were able to recognise idioms as texts that need to be interpreted in ‘marked’ contexts in which they are produced as a result they avoided

interpreting the idioms literally. Instead, they gave the idiom back without interpreting it possibly because they lacked knowledge of the ‘marked’ contexts within which the idioms are used. However, 6-year old children gave more ‘associative’ meanings than any other age group. This suggests that 6-year old children are able to use contextual cues in their efforts to interpret idioms but the contextual cues provided by the linguistic context are not enough to enable them to appropriately interpret the idioms. For instance, two 6-year old children interpreted ‘*tsala madzi amodzi*’ in ‘*Nkhuku yanga yatsala madzi amodzi ili ndi chitopa*’ (‘My chicken has remained one water it has Newcastle’ = My chicken is about to die, it has Newcastle) as ‘*ikudwala chitopa*’ (it is suffering from Newcastle) instead of idiomatically interpreting it as ‘it is about to die’. For these children to arrive at this associative interpretation they used the available contextual cues. The children associated *chitopa* (Newcastle) with *nkhuku* (chicken) hence the interpretation *ikudwala chitopa* (the chicken is suffering from Newcastle). These children lacked knowledge of the social context guiding the use of the idiom ‘*tsala madzi amodzi*’ which lacks literal meaning because the literal meaning (remain one water) contradicts the world knowledge as it is not possible to count water. However, Cicewa speakers believe that water is a source of life and among the Cewas there is a saying that says ‘*madzi ndi moyo*’ (water is life). This belief makes Cicewa speakers to equate water with life thereby interpreting ‘*tsala madzi amodzi*’ as ‘be about to die’ because in this social context the expression is understood as very little life is remaining. Kamanga (2007) explains that when Cicewa speakers hear the expression ‘*tsala madzi amodzi*’ they visualize a bucket/basin containing very little water in it and if the water evaporates no water will remain in the bucket/basin since there is already very little water hence the meaning ‘be about to die’ does not contradict Cicewa speakers’ world knowledge. Lack of knowledge of the social context in which the expression ‘*tsala madzi amodzi*’ is consumed led 6-year old children to look for the meaning that would be appropriate in the context hence they opted for ‘*ikudwala chitopa*’. These children also failed to realize the metaphorical nature of the idiom although they have knowledge of the lexicogrammar and they ruled out the expression as ungrammatical and uninterpretable. They did not realize that ‘the selection of metaphor is itself a meaningful choice’ (Halliday, 1985: 321) because the knowledge of metaphor has not yet developed at this age. This

leads to the conclusion that children aged 6 years and below are able to recognize idioms as texts that need to be interpreted in a special way but they lack knowledge of metaphor and knowledge of the sociocultural context in which idioms are produced and need to be interpreted although they are able to use contextual cues to infer the appropriate sense of the idiomatic expression in their effort to interpret the idiom.

Nine years old children produced least of the idiomatic interpretations (29) but produced more of the other responses 'irrelevant' meanings (25), meanings 'related to idiomatic meaning' (12), associative meanings (7) and literal meanings (6). Nine years old children were able to interpret idioms figuratively because at this age knowledge of metaphor starts to develop (Halliday, 2009b) as such children are aware that the selection of metaphor is a meaningful choice and they search for a meaning that would be appropriate in the context even though the text may seem ungrammatical and lacking a literal interpretation. Furthermore, it can be explained that at age 9 the child has acquired some knowledge of cultural frames of reference in which the idioms are rooted. Thus a 9-year old child is able to deduce the dimensions of reality being talked about. However, the knowledge of the cultural frames of reference that a 9-year old child has is knowledge that has just started to develop as a result the child can deduce dimensions of reality that are not correct and select meaning choices that are inappropriate in a particular context. This explains why 9-year old children produced more of 'irrelevant' meanings, meanings 'related to idiomatic meaning', associative meanings and literal meanings. To illustrate this, consider the idiom '*ona nsana wanjila*' ('see the back of the road' = go back/return). Three 9-year old children were able to interpret this idiom figuratively when it was embedded in the following sentence '*Tabwela lija ndi kale tiwone nsana wanjila tsopano*' (It's long time when we arrived, we should go back now). This suggests that these children have knowledge of both metaphor and the sociocultural context in which the idiom is used. This idiom is a metaphor because it contains a verb of Mental process '*ona*' (see) with an object which has no front or back '*njila*' (the road/path) as Phenomenon. '*Njila*' cannot be perceived as having a back as this contradicts our world knowledge. However, despite this internal contradiction 9-year old children were able to realize that the selection of a metaphor is meaningful and they searched for the meaning

of the idiom although it has no literal interpretation. These children also had the sociocultural knowledge guiding the use of the idiom. Although a road/path cannot be perceived to have a back or a front the world knowledge informs Cicewa speakers that when someone is going back/returning s/he (re)traces the route s/he used and in the rural areas of Malawi there are mostly footpaths that have no tarmac. In this case, the person can actually see her/his footprints s/he made when coming. The part of the road that one actually sees, with the footprints, is perceived as its back. So these 9-year old children have this sociocultural knowledge and they appropriately interpret the idiom as ‘*abwelele kunyumba*’ (they should go back home); ‘*tilondole kunyumba*’ (we should go home) and ‘*tibwelele kunyumba*’ (we should go home).

The linguistic behaviour of 9-year old children can also be explained by considering the way 9-year old children interpreted the idiom ‘*taya madzi*’ (throw water away = ‘urinate’) which was contained in the sentence ‘*Usamwe tiyi wambili ungavutike kutaya madzi munjila*’ (Don’t drink a lot of tea you may be trouble throwing away water along the way’ = Don’t take a lot of tea you may need to urinate frequently along the way). Three 9-year old children interpreted this idiom figuratively and one child gave an interpretation that is very closely related to the idiomatic interpretation. The idiom ‘*taya madzi*’ (‘throw water away’ = urinate) has both literal meaning ‘throw away water’ and idiomatic meaning ‘urinate’. Although this is the case, none of the 9-year old children interpreted this idiom literally which suggests these children are aware of the sociocultural context in which the idiom is consumed. Cicewa speakers look at water and urine as sharing the characteristic liquid. There is also similarity in the way someone gets rid of dirty water from a container and what happens when a male person dispenses urine. Drawing on these similarities between water (a liquid which can only be contained in a bucket or container) and urine (a liquid which can only be contained in an individual or some animal), Cicewa speakers figuratively extend the word ‘*madzi*’ to ‘urine’ (Kamanga, 2007) hence ‘*taya madzi*’ to mean urinate. The 9-year old children had this knowledge as a result they interpreted the idiom ‘*taya madza*’ appropriately as ‘*kukoza*’ (urinate). One child who interpreted ‘*taya madzi*’ as ‘*mikozo*’, a meaning closely related to idiomatic meaning, also demonstrated knowledge of the sociocultural context in which

the idiom is used. However, this child had partial knowledge of the sociocultural context as a result he interpreted the idiom as a thing (noun) instead of an act (verb).

Although 9-year old children were able to interpret the idioms '*ona nsana wanjila*' and '*taya madzi*' appropriately, they failed to appropriately interpret the idiom '*gona pamphopo*' (sleeping where it's cold = 'not married'). None of the 9-year old children interpreted this idiom figuratively when it was presented in the sentence '*Gumede akugona pamphopo chifukwa akazi amangomukana*' ('Gumede is sleeping where it's cold because women refuse him' = Gumene has not married because women refuse him). One of the children interpreted it as '*akugona popanda nyumba*' (he is sleeping where there is no house) an interpretation which was irrelevant. However, this child used the information provided by the sentence, his world experience and reasoning to arrive at the interpretation he gave. The second child interpreted it as '*akazi amangomukana*' (women refuse him) an interpretation which was deduced from the provided linguistic context. The third child interpreted it literally as '*akugona pozizila*' (he is sleeping at a cold place). The last child interpreted it as '*akungomukana*' (they are refusing him) an interpretation based on linguistic context. All these interpretations indicate that these 9-year old children lacked knowledge of the cultural frames of reference for the idiomatic use of the idiom '*gona pamphopo*' (sleep where it's cold). The Cewas believe that because a man and a wife sleep very close to each other the heat radiated by the human body is double thereby keeping the place warm even if it might be cold around them they do not feel the cold. Someone who is not married relies on his/her body heat only so when it is cold s/he feels the cold. The nine years old children lacked this sociocultural knowledge as a result they all failed to interpret the idiom figuratively. This suggests that although they have access to other cultural frames of reference, other references have not yet developed at this age.

The data also show that 14-year old children gave more idiomatic meanings (62) than any other age group followed by 12-year old children (48). This supports the findings of Karuppali and Bhat (2013) who found that 14-year old children are able to interpret most idioms idiomatically. This shows that at 14 years the child is aware of the sociocultural

context in which the idioms are used. For instance, 14-year old children were able to appropriately interpret '*malo oduka mphepo*' (a place where the wind is cut = 'a secluded place') which could not be interpreted by the other age groups. Three 14-year old children gave the idiomatic meaning 'secluded place' for the idiom '*malo oduka mphepo*' when it was embedded in this sentence '*Tikambilane nkhaniyi pa malo oduka mphepo*' (We should discuss this issue at a place where the wind is cut = we should discuss this issue at a secluded place). This idiom '*malo oduka mphepo*' is metaphor, therefore, ungrammatical nominal group because the modifier '*oduka mphepo*' (where the wind is cut) is ill-formed in that '*mphepo*' (wind) cannot be cut although we can feel it, thus it lacks literal meaning because it contradicts our world knowledge. Despite the contradiction 14-year old children were able to recognize the idiom '*malo oduka mphepo*' as a meaningful choice and interpreted it figuratively because they have knowledge of both metaphor and the sociocultural information guiding the use of the idiom. Cicewa speakers have the knowledge that wind transmits sound and that sound cannot be transmitted if there is no wind. If people converse in a place where there is no wind (where the air is still) they are able to hear each other because the still air vibrates but other people who are outside this area will not hear the conversation (Kamanga, 2007). In this sense this place is believed to be secluded hence a safe place to discuss private and secret issues. The 14-year old children had access to this information and they figuratively interpreted the idiom which all the other age groups (4, 6, 9 and 12 years old children) failed to interpret appropriately.

However, these 14-year old children still had problems in interpreting the idioms as they also produced a good number of 'irrelevant' meanings (13). For instance, all 14-year old children failed to figuratively interpret the idiom '*dyela masuku pamutu*' ('eat masuku (wild loquat/Uapaca kirkiana) from one's head' = exploit someone) which also caused problems to the other age groups (4, 6, 9 and 12). When this idiom was presented in this sentence '*Chikondi amakonda kudyela masuku pamutu anzake*' (Chikondi likes to eat *masuku* from the heads of his/her friends = Chikondi likes to exploit her/his friends) all 14-year old children provided interpretations that were irrelevant that were based on their experience and the available linguistic context. These children lacked knowledge of the

cultural frames guiding the use of this idiom. The meaning of the idiom is drawn from a situation where young people go to gather *masuku* (wild loquat/*Uapaca kirkiana*) from the bush and when gathered enough they are put in one basket to be shared equally at home. The youngest person carries the basket (usually carries it on the head because of weight) so when the other children (usually the older ones) start getting *masuku* from the basket on the head and eat they abuse the younger child carrying the basket because s/he cannot get some and eat as the other peers are doing because of the load on his/her head but when they reach home, *masuku* are shared equally regardless of the fact that others have already eaten some of their share. In this way, the younger child who carried the basket is seen to be treated unfairly because firstly s/he carried a heavy thing instead of an elderly child carrying it. Secondly her/his share of *masuku* is also shared to others who have already eaten their share. So the children lacked this sociocultural knowledge for them to figuratively interpret the idiom. This shows that at 14 years idiom acquisition is still taking place and mastery of idioms has not yet been achieved although the child's knowledge of idiomatic meaning starts resembling that of adults. The increase in idiomatic interpretations provided by the 12-year old children indicates that at the age of 12 knowledge of sociocultural context is greater than at the age of 9 but it is still lower than the knowledge a 14-year old child has.

The one-way between-groups Analysis of Variance (ANOVA Test) with post-hoc Tukey tests with age as independent variable showed that the responses of the five age groups were significantly different in the sentence context ($F(4,395) = 45.280, p < .0001$). The post-hoc Tukey tests indicated that in the sentence context there were no significant differences in the responses between 4-year old children and 6-year old children ($p > .05$); there were significant differences in the responses between 4-year old children and 9-year old, 12-year old, and 14-year old ($p < .001$); there were significant differences in the responses between 6-year old children and 9-year old, 12-year old and 14-year old ($p < .001$); there were significant differences in the responses between 9-year old children and 12-year old children ($p = .027$); there were significant differences in the responses between 9-year old children and 14-year old children ($p < .001$); there was no significant

difference in the responses between 12-year old children and 14-year old children ($p > .05$).

The data also show that the non-idiomatic responses decreased with age. The relationship between age and response type was investigated using Pearson product-moment correlation coefficient. The correlation was significant at the 0.01 level (2-tailed). The Pearson correlation showed a strong negative correlation between age and response type, $r = -.559$, $n = 400$, $p < .0005$. This suggests that as children grow up they abandon the non-idiomatic responses. This is consistent with the findings in the studies by Prinz (1983); Laval (2003); Levorato, Nesi and Cacciari (2004); Hsieh and Hsu (2010); Vulchanova et al. (2011) and Karuppali and Bhat (2013). Children's ability to interpret idiomatic expressions was also tested in out of context. This was done in experiment 3. Presented below are the findings from experiment 3.

Experiment 3

Experiment 3 tested children's ability to interpret idioms out of context. This was done to identify the age at which a child is able to interpret idiomatic expressions out of context. In this experiment, the experimenter read to each child 20 idiomatic expression (that the children were exposed to in experiments 1 and 2) while the child aged 6 and below listened and that aged 9 and above followed on a printed version. After reading each idiomatic expression, the experimenter asked the child to say what the idiomatic expression meant. The child had to answer this question before the next idiomatic expression was read. No context was provided and also no answers were provided by the experimenter for the child to choose from. Frequencies of response types were calculated and cross-tabulation, correlation test and Analysis of Variance (ANOVA) with post-hoc Tukey tests were conducted.

The frequencies indicate that 'same idiom' 136 (34.0%) (a response in which children gave back the idiom as an answer) followed by 'idiomatic' responses 135 (33.8%) were predominant when idioms were presented out of context. The frequencies also indicate that 'irrelevant' responses 52 (13.0%) (a response that was not related, in any way, to the

idiom in question) were common. Literal responses 39 (9.8%), responses related to idiomatic meaning 26 (6.5%) (a response that was closely related to the idiomatic meaning of the idiom), same idiom with modification 8 (2.0%) (a response in which children gave back the idiom as an answer but the idiom was modified by adding an adjective or adverb), associative response 2 (.5%) (a response related to part of the idiom) and no response 2 (.5%) (where children did not give any answer) were also produced. Associative response and no response were less frequent (see Table 6.3).

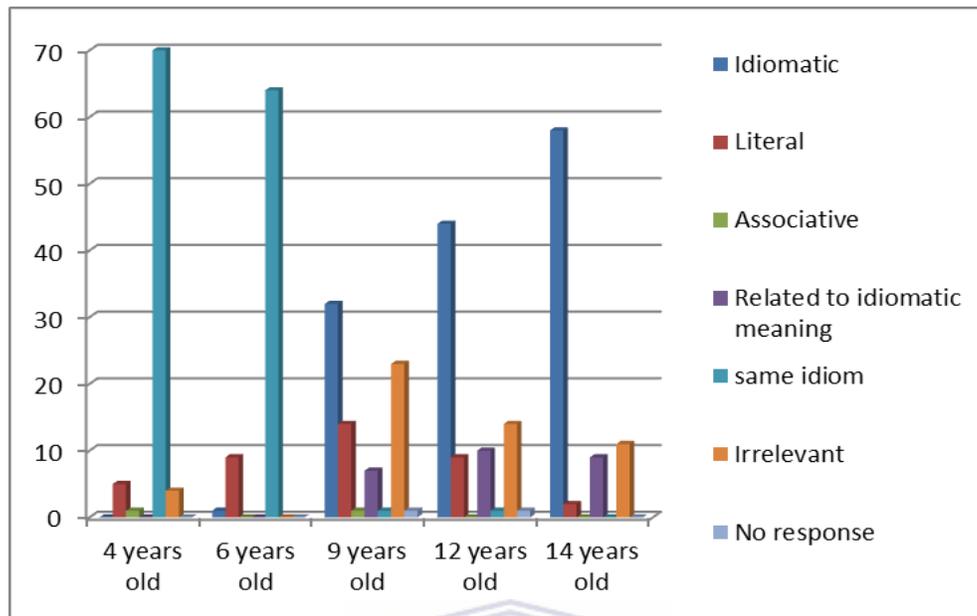
Table 6.3 Frequency of Response types in out of context

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Idiomatic	135	33.8	33.8	33.8
Literal	39	9.8	9.8	43.5
Associative	2	.5	.5	44.0
Related to idiomatic meaning	26	6.5	6.5	50.5
Same idiom	136	34.0	34.0	84.5
Same idiom with modification	8	2.0	2.0	86.5
Irrelevant	52	13.0	13.0	99.5
No response	2	.5	.5	100.0
Total	400	100.0	100.0	

The predominance of ‘same idiom’ 136 (34.0%) (a response in which children gave back the idiom as an answer) suggests that some children were able to recognize idioms as units but failed to interpret the idioms probably because they lacked knowledge of the sociocultural context within which the idioms are consumed. On the other hand, the predominance of idiomatic responses 135 (33.8%) indicates that some children were able to interpret idioms figuratively even when linguistic context was not available possibly because they have knowledge of the sociocultural context within which the idioms are used so even if the linguistic context is not present, the sociocultural context is always there to facilitate the selection of the appropriate meaning. ‘Irrelevant’ responses 52

(13.0%) were also common which shows that some children were able to recognize idiomatic expressions as meaningful choices that needed to be interpreted in certain contexts but they lacked knowledge of the sociocultural context in which these idioms were supposed to be interpreted as a result they avoided literal meanings and ended up with meanings that were irrelevant. The literal meanings 39 (9.8%) indicate that some children failed to recognize idioms as meaningful choices that are supposed to be interpreted in special contexts. Some children also gave meanings that were 'related to idiomatic meaning' 26 (6.5%). The selections of these meanings show that children were able to recognize idiomatic expressions as meaningful choices that are supposed to be interpreted in special contexts but they had partial knowledge of these contexts. Some children gave the 'same idiom with modification 8 (2.0%) (a response in which children gave back the idiom as an answer but the idiom was modified by adding an adjective or adverb) because they were able to recognize the idioms as texts but failed to interpret the idioms possibly because they lacked knowledge of the sociocultural context within which the idioms are consumed. The associative meaning 2 (.5%) (a response related to part of the idiom) was another response that some children gave. The occurrence of this response show that children were able to recognize an idiomatic expression as a meaningful choice that needed to be interpreted in a certain context but lacked knowledge of the context in which the idiomatic expressions is consumed. Lastly there were instances when children gave no response 2 (.5%) (where children did not give any answer). This could be because children recognized idiomatic expressions as instances of use but they lacked knowledge of the sociocultural context in which the idioms are used and at the same time they realized that the literal meaning was not appropriate. The 'response type' against 'age' cross-tabulation results presented in Figure 6.3 below show which age groups produced more of these response types.

Figure 6.3 Response type against Age in out context interpretation



The results show that 4-year old and 6-year old children gave back the ‘same idiom’ (a response in which children gave back the idiom as an answer), 70 and 64 respectively. The predominance of ‘same idiom’ among 4 and 6-year old children suggests that Cicewa speaking children were able to recognize idioms as instances of use that need to be interpreted in contexts in which they are produced but they lacked knowledge of the contexts as a result they gave the idiom back without interpreting it as they avoided interpreting the idioms literally. There were also some instances of literal interpretation among these children, 5 (4 years old) and 9 (6 years old). The literal interpretations indicate that some of the 4-year old children and 6-year old children failed to recognize idioms as meaningful choices that are supposed to be interpreted in special contexts. These findings are consistent with the findings of Prinz (1983); Abkarian et al. (1992); Levorato (1993); Vulchanova, Vulchanov and Stankova (2011) who found that children aged 6 and below fail to interpret idioms figuratively.

Nine year old children produced the least number of idiomatic interpretations (32) but they produced ‘irrelevant’ meanings (23) and literal meanings (14) more than any other age group. Nine-year old children were able to interpret idioms figuratively because at

this age the development of metaphor has started and also the child has acquired some knowledge of the cultural frames of reference in which the idioms are rooted hence children are aware that the selection of metaphor is a meaningful choice and are able to deduce the dimensions of reality being talked about as a result they search for a meaning that would be appropriate even though the text may seem ungrammatical and lacking a literal interpretation. However, the knowledge of the cultural frames of reference that a 9-year old child has is knowledge that has just started to develop. As a result the child can deduce dimensions of reality that are not correct and make meaning choices that are inappropriate. This explains why 9-year old children produced more of 'irrelevant' meanings. It also explains the presence of meanings related to idiomatic meaning (7) among this age group. The presence of literal meanings among this age group indicates that 9-year old children can fail to recognize an idiomatic expression as an instance of use that needs to be interpreted in a 'marked' context within which it was produced even though they have knowledge of metaphor and sociocultural context.

Twelve-year old children produced more idiomatic interpretations (44) than 9-year old children but they produced fewer idiomatic interpretations than 14-year old children (58). The increase in idiomatic interpretations provided by the 12-year old children indicate that at the age of 12 knowledge of sociocultural context is greater than at the age of 9 but it is still lower than the knowledge a 14-year old child has. This can explain why 12-year old children produced more interpretations that were 'related to idiomatic meaning' (10) than any other age group because their knowledge of the cultural frames of reference is still developing at age 12 as a result the child can deduce dimensions of reality that are not correct and select meaning choices that are inappropriate.

The prevalence of idiomatic interpretations (58) among 14-year old children indicates that at the age 14 children are aware of the sociocultural context in which the idioms are consumed and also the knowledge of metaphor has reached maturation as a result children are able to realize that the selection of metaphor is a meaningful choice and are able to deduce the dimensions of reality being talked about hence they search for a meaning that would be appropriate even though the text may seem ungrammatical and

lacking a literal interpretation. However, the presence of ‘irrelevant’ meanings (11) and meanings ‘related to idiomatic meaning’ (9) among 14-year old children suggests that knowledge of the cultural frames of reference is still developing at this age consequently children of this age can deduce dimensions of reality that are not correct and make meaning choices that are inappropriate. This corroborate the findings of Karuppali and Bhat (2013) who found that 14-year old children could not achieve 100% accuracy in the figurative interpretation of idioms even though they are able to interpret most idioms figuratively.

The one-way between-groups Analysis of Variance (ANOVA Test) with post-hoc Tukey tests with age as independent variable showed that the responses of the five age groups were significantly different in the out of context interpretation ($F(4,395) = 29.223, p < .0001$). The post-hoc Tukey tests indicated that in the out of context interpretation there were no significant differences in the responses between 4-year old children and 6-year old children ($p > .05$); there were significant differences in the responses between 4-year old children and 9-year old, 12-year old, and 14-year old children ($p < .001$); there were significant differences in the responses between 6-year old children and 9-year old, 12-year old and 14-year old children ($p < .001$); there were no significant differences in the responses between 9-year old children and 12-year old children ($p > .05$); there were significant differences in the responses between 9-year old children and 14-year old children ($p = .001$); there was no significant difference in the responses between 12-year old children and 14-year old children ($p > .05$).

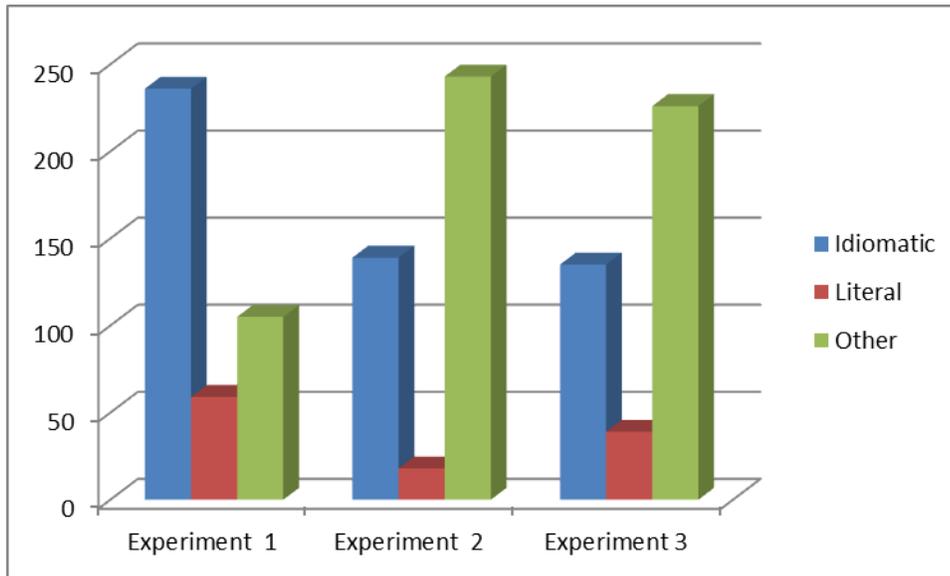
The data also show that the non-idiomatic responses decreased with age. The relationship between age and response type was investigated using Pearson product-moment correlation coefficient. The correlation was significant at the 0.01 level (2-tailed). The Pearson correlation showed a negative correlation between age and response type, $r = -.473, n = 400, p < .0005$. This suggests that as children grow up they abandon the non-idiomatic responses. This is consistent with the findings in the studies by Prinz (1983); Laval (2003); Levorato, Nesi and Cacciari (2004); Hsieh and Hsu (2010); Vulchanova et al. (2011) and Karuppali and Bhat (2013).

Having presented the research findings from the three experiments (Experiments 1, 2 and 3) in isolation, it is important that we have an integrated summary of these results for us to arrive at a well-informed conclusion. The integrated summary of the findings from Experiments 1, 2 and 3 is presented below.

6.1.1 An integrated summary of the findings on the role of context in children's interpretation of idioms

The findings of the Experiments 1, 2 and 3 presented above support the claim by Huber-Okrainec, Blaser and Dennis (2005) that linguistically supportive context helps young children to infer the figurative meaning of an idiom and learn the meaning of the idiom. In this study, children produced more idiomatic interpretations when the idioms were presented in stories in Experiment 1 than when they were presented in sentences in Experiment 2 and out of context in Experiment 3 (see Figure. 6.4 below). This is consistent with the findings by Cacciari and Levorato (1998); Levorato and Cacciari (1992, 1999); Laval and Bernicot (2002); Laval (2003); Levorato, Nesi and Cacciari (2004) and Hsieh and Hsu (2010).

Figure 6.4 Summary of response types in Experiments 1, 2 and 3



The linguistically supportive context triggered idiomatic responses even in the youngest children, the 4-year old children who failed to provide any idiomatic response in Experiment 2 (where idioms were presented in sentences) and Experiment 3 (where idioms were presented out of context). This is consistent with the findings of Schnell (2007) who found that children around the age of 4 years are able to handle non-literal expressions like idioms. The 6-year old children also produced a good number of idiomatic responses in the story context but they produced none of idiomatic responses in the sentence context and one idiomatic response in out of context. It can be suggested that the linguistic patterns in the stories helped 4-year old and 6-year old children to determine the dimensions of reality being talked about hence the idiomatic responses.

In this study, literal responses were not popular in all the three experiments (see Figure 6.4). Even the youngest children, 4-year old and 6-year old, avoided literal responses. These findings are in conflict with the findings of other studies (Prinz, 1983; Abkarian et al., 1992; Levorato, 1993; Vulchanova, Vulchanov & Stankova, 2011) who reported that younger children aged 6 years and below tend to interpret idioms literally but they are consistent with the findings by Laval (2003), Leung (2011) and Hsieh and Hsu (2010) and who reported that children aged 6 years are able to give responses that are context

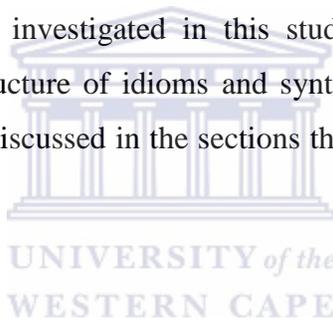
dependent. These findings show that Cicewa speaking children as young as 4 years are able to recognize that the literal response is in conflict with the linguistic context within which the idiom is embedded so they choose a response that seem plausible in the linguistic context. Even when the idioms were presented out of context, these children avoided a literal response. This suggests that Cicewa speaking children as young as 4 years are able to recognize idioms as instances of use that need to be interpreted within the social context in which they are produced. However, children aged 4 and 6 years fail to correctly interpret the idioms because they fail to go beyond the linguistic context as a result they cannot determine the dimensions of reality being talked about. The meaning of an idiom depends on the agreed upon linguistic convention shared by a specific language community that relates a given linguistic form to a non-literal meaning (Hsieh & Hsu, 2010); hence linguistic context alone is not enough for one to interpret the idioms or acquire them. A 'text carries with it, as a part of it, aspects of the context in which it was produced and, presumably, within which it would be considered appropriate' (Eggins, 2004:7). Therefore, it can be concluded that children aged 6 years and below are able to recognize idioms as texts but they lack knowledge of the sociocultural context in which idioms are produced and need to be interpreted although they are able to use contextual cues to infer the appropriate sense of the idiomatic expression.

The findings also show that 9-year old children, 12-year old children and 14-year old children were able to interpret idioms figuratively in all contexts (story context, sentence context and out of context) although 9-year old children produced the least idiomatic responses. Nine-year old children were able to interpret idioms figuratively in all the three contexts because at this age a child has acquired some knowledge of cultural frames of reference in which the idioms are rooted and knowledge of metaphor (Halliday, 2009b). Therefore, a 9-year old child is aware that the selection of metaphor is a meaningful choice even though the text may seem ungrammatical and lack a literal interpretation so the child is able to deduce the dimensions of reality being talked about and search for a meaning that would be appropriate in the context. The 14-year old children provided more idiomatic interpretations than the other two age groups (9 years and 12 years). This suggests that at the age 14 a child is aware of the sociocultural

context in which the idioms are used. However, 14-year old children still had problems in interpreting the idioms as they also produced a good number of non-idiomatic responses. This shows that at 14 years idiom acquisition is still taking place and mastery of idioms has not yet been achieved.

The findings of this study show that idiomatic responses increase with age. This suggests that as children grow older they abandon the non-idiomatic responses. This is consistent with the findings in the studies by Prinz (1983); Laval (2003); Levorato, Nesi and Cacciari (2004); Hsieh and Hsu (2010); Vulchanova et al. (2011) and Karuppali and Bhat 2013.

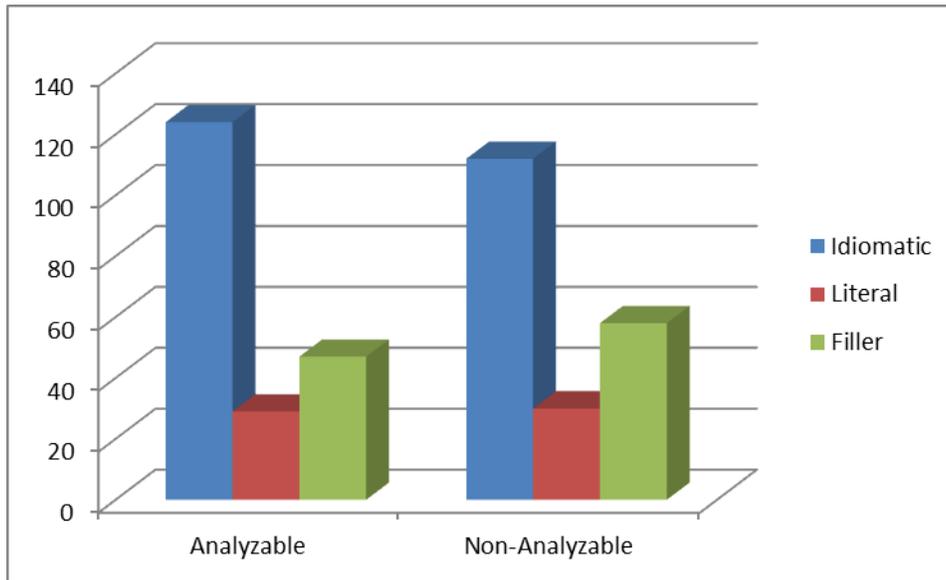
Linguistic context and age are not the only factors influencing idiom interpretation and acquisition. The other factors investigated in this study were semantic analyzability (decomposability), internal structure of idioms and syntactic modification of an idiom. The findings on these will be discussed in the sections that follow starting with semantic analyzability.



6.2 Semantic analyzability

Research findings have shown that children understand analyzable idioms more readily than non-analyzable idioms (Gibbs, 1987; Gibbs & Nayak, 1989; Nippold & Taylor, 1995; Cacciari & Levorato, 1998). This factor was tested in this study in three experiments (Experiments 1, 2 and 3) described above. 20 idioms (10 analyzable and 10 non-analyzable) were presented in story context, sentence context and out of context. Cross-tabulation and Analysis of Variance (ANOVA) with post-hoc Tukey tests were conducted. The 'response type' against 'analyzability' cross-tabulation results presented in Figure 6.5 below show that more idiomatic responses were selected for analyzable idioms (124) than for non-analyzable idioms (112).

Figure 6.5 Response types against Analyzability in the story context



The results in Figure 6.5 suggest that children understood analyzable idioms better than non-analyzable idioms. However, the one-way between-groups Analysis of Variance (ANOVA Test) with analyzability as independent variable showed no significant difference between the responses on analyzable idioms and non-analyzable idioms ($F(2,397) = 0.887, p = .413$). This suggests analyzability did not affect children's interpretation of idioms when the idioms were embedded in stories. When analyzable and non-analyzable idioms were presented in sentence context in Experiment 2, the one-way between-groups Analysis of Variance (ANOVA Test) with analyzability as independent variable showed no significant difference between the responses on analyzable idioms and non-analyzable idioms ($F(1,398) = 3.270, p = .071$). This indicates that analyzability did not affect the way children interpreted the idioms when they were presented in sentences. However, the one-way between-groups Analysis of Variance (ANOVA Test) with analyzability as independent variable showed significant differences between the responses on analyzable idioms and non-analyzable idioms when idioms were presented in out of context in Experiment 3 ($F(1,398) = 7.285, p = .007$). This shows that analyzability affected how idioms were interpreted by children when the idioms were presented out of context. Children gave more idiomatic meanings (75) for analyzable idioms than they gave for non-analyzable idiom (60). It can be explained that lack of

context did not provide hints on the social cultural contexts within which the idioms are consumed. The results from these three experiments suggest that analyzability did not affect how children interpreted idioms when the idioms were presented in context but it affected idiom interpretation when the idioms were presented out of context. These results are consonant with the findings of Levorato and Cacciari (1999) and Fadlon et al. (2013).

Furthermore, cross-tabulation of response type in relation to analyzability of the idioms show that some responses were associated with non-analyzable idioms more than analyzable ones when the idioms were presented in sentence context and out of context (see Figure 6.6 below).

Figure 6.6 Response types against Analyzability in sentence and out of context

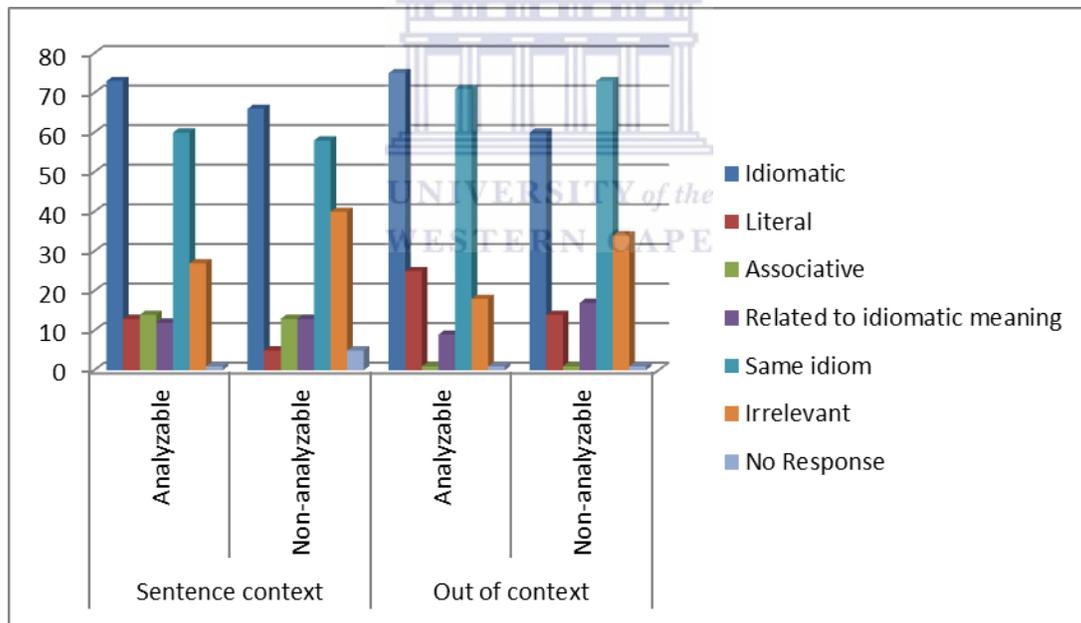


Figure 6.6 shows that literal responses were produced more in analyzable idioms than in non-analyzable idioms in both sentence context and out of context. This is consistent with the findings of Leung (2011). This suggests that children could not realize that the expression was an instance of use that needed to be interpreted within a certain sociocultural context within which it was produced. The figure also shows that more

irrelevant responses were given for non-analyzable idioms than for analyzable idioms. This indicates that children were aware that the expression was an instance of use that needed to be produced within certain sociocultural context in which it was produced but they lacked knowledge of the sociocultural context so in search for a meaning that would be relevant they ended up selecting a meaning that was irrelevant. Children also gave a high number of meanings that were related to idiomatic meaning when the idiom was non-analyzable than when it was analyzable. This suggests that children recognized the idiom as an instance of use to be interpreted within the sociocultural context in which it was produced but they had fuzzy knowledge of the relevant sociocultural context.

These findings indicate that analyzability affects children's interpretation of idioms in Cicewa although Kamanga (2007) found that analyzability did not affect idiom interpretation in adult native Cicewa speakers who interpreted both analyzable and non-analyzable idioms equally. Having looked at analyzability as a factor affecting children's interpretation of idioms it is now timely to turn to the internal structure of idioms.

6.3 Internal structure of idioms

Some studies on children's acquisition of idioms have shown that the internal structure of the idioms affect how children interpret and acquire the idioms especially when the idioms have unusual structures (Crutchley, 2007; Leung, 2011 and Vulchanova, Vulchanov & Stankova, 2011). Effect of idiom's internal structure on children's interpretation and acquisition of idioms was investigated in this study. Idioms with different internal structures N+Adj; N+AdjP; N(Infinitive)+N(base); N(derived)+N; V+N(base); V+N+Adj; V+N(Locative); V+N+N(Locative); V+N+Numeral and S(Simple) were presented to children in the story context, sentence context and out of context. Analysis of Variance (ANOVA) was conducted. When idioms were presented in story context in Experiment 1, the one-way between-groups Analysis of Variance (ANOVA Test) with internal structure as independent variable showed no significant difference between the responses on idioms with different internal structures ($F(9,390) = 1.553, p = .128$). This suggests that the internal structure of the idioms did not affect the

interpretation that children gave for the idioms with varying structures when the idioms were presented in the story context. However, the one-way between-groups Analysis of Variance (ANOVA Test) with internal structure as independent variable indicated significant difference between the responses on idioms with different internal structures when the idioms were presented in sentence context in Experiment 2 ($F(9,390) = 2.283, p = .017$). This suggests that the internal structure of the idioms affected children's interpretation of the idioms when the idioms were presented in sentence context. The one-way between-groups Analysis of Variance (ANOVA Test) with internal structure as independent variable also showed significant difference between the responses on idioms with different internal structures ($F(9,390) = 4.901, p < .0001$) when the idioms were presented out of context. These findings indicate that the internal structure of the idioms affected how the idioms were interpreted by children. This is consistent with the findings by Crutchley (2007); Leung (2011); Vulchanova, Vulchanov and Stankova (2011).

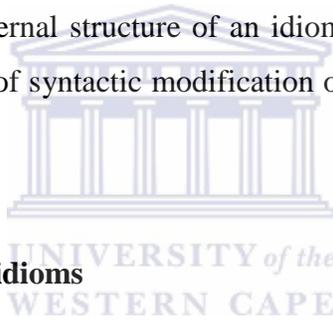
However, this analysis of idioms, from formal perspective, does not really tell us how Cicewa speaking children arrived at the interpretations they gave for some of the idioms. For instance, let us consider how children interpreted the following Cicewa verb phrase idioms with V+N(base) structure (the basic verb phrase structure in Cicewa), '*tsina khutu*' (pinch the ear = 'warn'); '*tsamila dzanja*' (lean on the hand = 'die'); '*taya madzi*' (throw away water = 'urinate'); '*khala maso*' (seat eyes = 'be alert') and '*uma mutu*' (dry the head 'be dull'). Among these idioms '*tsina khutu*', '*tsamila dzanja*' and '*taya madzi*' are all well-formed in as far as Cicewa grammatical rules are concerned. On the other hand, '*khala maso*' and '*uma mutu*' are ill-formed because they violate complement selection rule in Cicewa. Leung (2011) and Vulchanova, Vulchanov and Stankova (2011) observed that idioms with obsolete grammar were difficult for children to process when they involved children in idiom comprehension activities. In this case, one would assume that Cicewa speaking children would not find it difficult to interpret well-formed idioms in Cicewa and that they would find it difficult to interpret ill-formed idioms. However, the findings of this study indicate that this is not always the case because when the idioms listed above were presented in sentences and out of context, Cicewa speaking children aged 9 to 14 years were able to provide idiomatic meaning for '*uma mutu*' and failed to

interpret *'khala maso'* both ill-formed idioms. On the other hand, Cicewa speaking children were able to provide idiomatic meanings for *'taya madzi'* but found it difficult to interpret *'tsina khutu'* and *'tsamila dzanja'* which are all well-formed. In this context, it is difficult to predict, basing on the structure of the idioms, which idioms will cause problems to children when interpreting the idioms or which ones will not cause problems. Thus, it can be concluded that it is not only the structure that is critical here. For instance, let us consider *'tsamila dzanja'* a well-formed idiom in Cicewa. This idiom has both literal and figurative meanings but none of the children gave a literal interpretation for this idiom which suggests that children recognized the idiom as an instance of use that needed to be interpreted in a special context but they lacked knowledge of the context. For children to interpret this idiom figuratively, they needed to know how the Cewas bury each other. When one of the Cewas dies, they have the dead body lay sideways in the coffin when burying the person thereby resting on the arm. Therefore, children needed this cultural knowledge for them to interpret the idiom appropriately although the structure of the idiom did not pose problems. Thus, it can be concluded that the structure of the idiom did not help these children to arrive at the meaning of the idiom.

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On the other hand, all the children aged 9 –14 years and one 6-year old child interpreted the idiom *'uma mutu'* (dry the head 'be dull') appropriately even though it is ill-formed and lack literal meaning. This shows that the structure of the idiom did not hinder the children from appropriately interpreting the idiom although it is ill-formed because the children were able to recognize the idiom as a meaningful choice and using the sociocultural knowledge they were able to select the appropriate meaning of the idiomatic expression. These children were also able to appropriately interpret other ill-formed idioms like *'kupha phala'* (to kill porridge = drink beer a lot), *'ona nsana wanjila'* (see the back of the road = 'go back/return'), *'tsala madzi amodzi'* (remain one water = 'be about to die/caught) because they were aware of the sociocultural context within which the idioms are used. But where children failed to interpret ill-formed idioms like *'Khala maso'* (seat eyes = be alert), *'kadaunda madzi'* (it that piled water together = nsima (hard porridge)), *'malo oduka mphepo'* ('a place where the wind is cut' = a secluded place), it can be said that it was not due to the ill-formed structure but the children lacked

knowledge of the sociocultural context within which the idioms are consumed. Similarly, children failed to interpret some well-formed idioms like *'tsina khutu'* (pinch the ear = 'warn'), *'gwilitisa fuwa lamoto'* (cause to touch a hot rocky pot stand = 'cheat/fool someone'), *'gona pamphopo'* (sleeping where it's cold = 'not married') because of the same reason, lack of sociocultural knowledge guiding the use of the idioms. The structure of the idioms did not help the children to arrive at the appropriate meaning. Therefore, it can be concluded that children's ability to interpret the idioms does not solely depend on the structure of the idiom, although the structure affects idiom interpretation to some extent, but it is more dependent on children's knowledge of the sociocultural context within which the idioms are consumed. On this basis, the research assumption that idioms with simple structure are acquired first than idioms with complicated structure presented in Chapter One of this thesis can be rejected as the data have shown to the contrary. After looking at the effect of the internal structure of an idiom on its interpretation, it is also important to look at the effect of syntactic modification of an idiom on the interpretation of the idiom.



6.4 Syntactic modification of idioms

Many studies on children's acquisition of idioms have not tested if syntactic modification affects interpretation and acquisition of idioms in children. In this study, this factor was tested in 20 normally developing Cicewa speaking children aged 4 – 14 years in Experiment 5. It was tested using a set of sentences that contained syntactically modified idioms that were picked from the idioms that the children were exposed to in Phase I. The experimenter tested each child individually by reading aloud the sentences while the child aged 6 and below listened and that aged 9 and above followed on a printed version. After reading each sentence, the experimenter asked the child to say what the idiomatic expression meant in the sentence and the child had to provide the meaning of the idiomatic expression before the next sentence was read. No answers were provided by the experimenter for the child to choose from. The responses given by children in this experiment were compared with the responses children gave in Experiment 2 where the idioms were not modified. A paired-sample t-test indicated that there was no statistically

significant difference in children's responses on idioms that were not modified ($M = 3.7667$, $SD = 2.08530$) and idioms that were modified ($M = 3.5083$, $SD = 2.02088$), $t(119) = 1.751$, $p = .083$ (two – tailed)⁴. The mean decrease in responses on modification of idioms was .25833 with 95% confidence interval ranging from -.03388 to .55054. The eta square statistic (.025) indicated a small effect size. This shows that children were able to interpret both modified and non-modified idioms equally. For instance, all children aged 9 to 14 years interpreted '*taya madzi*' (throw away water = 'urinate') figuratively despite the modification. On the other hand, all the children failed to interpret '*ika kampeni kumphasa*' (put a small knife under a mat (made of reed) = 'plot against someone') except one 14-year old child when this idiom was modified and one 12-year old child and one 14-year old child when it was not modified. This suggests that modification did not affect children's interpretation of the idioms. If children are not aware of the sociocultural context in which the idiom is consumed they will fail to interpret it whether it is modified or not.

6.5 Summary of the chapter

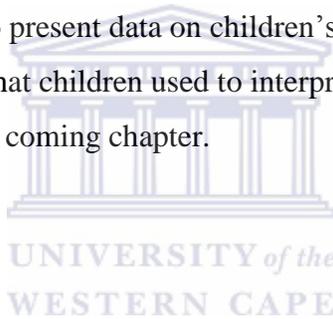
This chapter has presented the experiment results on whether linguistic context, analyzability of an idiom, idiom's internal structure and syntactic modification influence children's interpretation and acquisition of the idiom. In this chapter it has been demonstrated that although the results on linguistic context show that it facilitates the interpretation and acquisition of idioms among children, linguistic context is not enough to facilitate children's interpretation and acquisition of idioms because a child can have skills to use the contextual cues to deduce the meaning of an idiom and still fail to interpret the idiom if the child lacks the knowledge of the sociocultural context in which the idiom is consumed. The chapter has also demonstrated that children's interpretation and acquisition of idioms is not really dependent on analyzability and internal structure of the idioms although these may affect interpretation and acquisition to some extent. The idiom can be analyzable or can have a well-formed structure but children can still fail to interpret the idiom if they are not aware of the sociocultural context within which the

⁴ M = mean, SD = standard deviation, t = t-value

idiom is consumed. It has also demonstrated that idiom modification does not affect children's interpretation of idioms. Children are able to figuratively interpret both modified and non-modified idioms if they are aware of the sociocultural contexts in which the idioms are used. The chapter has argued that the sociocultural context within which the idioms are produced is central to the interpretation of the idioms.

In this chapter it has been established that there is a correlation between age and idiom interpretation and acquisition. Non-idiomatic responses decrease as the age increase. It has also been established that at the age 14 a child is still acquiring idioms although a child at this age is able to interpret most idioms figuratively.

Having identified the sociocultural contexts in which *Cicewa* idioms are used and need to be interpreted, it is important to present data on children's recognition of idiomatic expressions and the strategies that children used to interpret and acquire idiomatic expressions. This is done in the coming chapter.



Chapter Seven

Children's recognition of idiomatic expressions, strategies employed to interpret idioms and idiomatic expressions acquired at a specific age

7.0 Introduction

This chapter presents findings on children's recognition of idiomatic expressions, strategies children employed to acquire the figurative meanings of Cicewa idioms and the kinds of idiomatic expressions that children are able to acquire at a specific age. Just like in the previous chapter, this chapter also adopts Systemic Functional Linguistic (SFL) approach to establish the grammatical and sociocultural knowledge that play a role in idiom acquisition. Aspects of SFL such as social context, text, lexico-grammar and transitivity have been utilised. The chapter establishes the age at which Cicewa speaking children are able to recognize some idiomatic expressions as instances of use. It also demonstrates that there are some idiomatic expressions which cannot be easily recognized by children. It also presents the strategies that Cicewa speaking children use to interpret idioms. It argues that inference from the sociocultural knowledge is the only strategy that is successful in idiom interpretation and that children resort to other strategies when they realize that their knowledge of the cultural frames of reference is limited. The chapter also establishes that idiom acquisition develops in stages. There are certain idioms that can only be acquired when a child reaches a specific age. It establishes that idiom acquisition starts with idioms involving daily activities of human experience progressing to idioms with obsolete cultural frames of reference.

7.1 Children's recognition of idiomatic expressions

Research on idiom acquisition has focused on identifying the age at which children are able to comprehend/interpret idioms figuratively. Little research has been done to establish the age at which children are able to recognize idiomatic expressions as

instances of use. In this study, an experiment was carried out to investigate the age at which children start to recognize an idiomatic expression as an instance of use that needs to be interpreted in a marked context. This was done through a comprehension task in Experiment 4 in which 20 normally developing Cicewa speaking children aged 4 – 14 years were asked to provide a missing idiom part in 20 incomplete sentences. The sentences contained the same idiomatic expressions used in Phase I but in these sentences one word was omitted from the idioms. The experimenter read to each child individually the incomplete sentences while the child aged 6 and below listened and that aged 9 and above followed on a printed version. After reading each incomplete sentence, the experimenter asked the child to provide the missing word before the next incomplete sentence was read. No answers were provided for children to choose from. Frequencies of strategies were calculated and cross-tabulations were conducted.

The frequencies indicate that ‘missing idiom part’ 172 (43%) (a response in which children provided the word that was missing in the incomplete sentence) was the most common response followed by ‘irrelevant’ 81 (20.3%) (a response in which the provided word was not related to the content or sense of the sentence in general but it was grammatically suitable for the slot). The frequencies also indicate that ‘full idiom’ 63 (15.8%) (a response in which children gave an entire idiom as an answer instead of just providing the missing word) was also prevalent. The other responses provided by children were ‘figurative meaning of the idiom’ 28 (7%) (a response where children provided the figurative meaning of the idiom instead of providing the missing word), ‘no response’ 22 (5.5%) (where children did not give any answer), ‘part of idiom present plus missing word’ 11 (2.8%) (where children gave a missing word plus a segment of the part of the idiom provided), ‘missing word substitute plus idiom part present’ 11 (2.8%) (a response in which children gave a word whose meaning is very close to the meaning of the missing word plus a segment of the part of the idiom provided) and ‘missing word substitute’ 8 (2%) (where children gave a word whose meaning is very close to the meaning of the missing word). There were also other responses such as ‘idiom part present’ 2 (.5%) (where a child gave back the part of the idiom that was provided in the sentences) and ‘a word forming a different idiom’ 2 (.5%) (a response where children

gave a word that formed a different idiom when combined with the part of the idiom that was provided in the sentence). However, these last two types of responses were the least common (see Table 7.1 below).

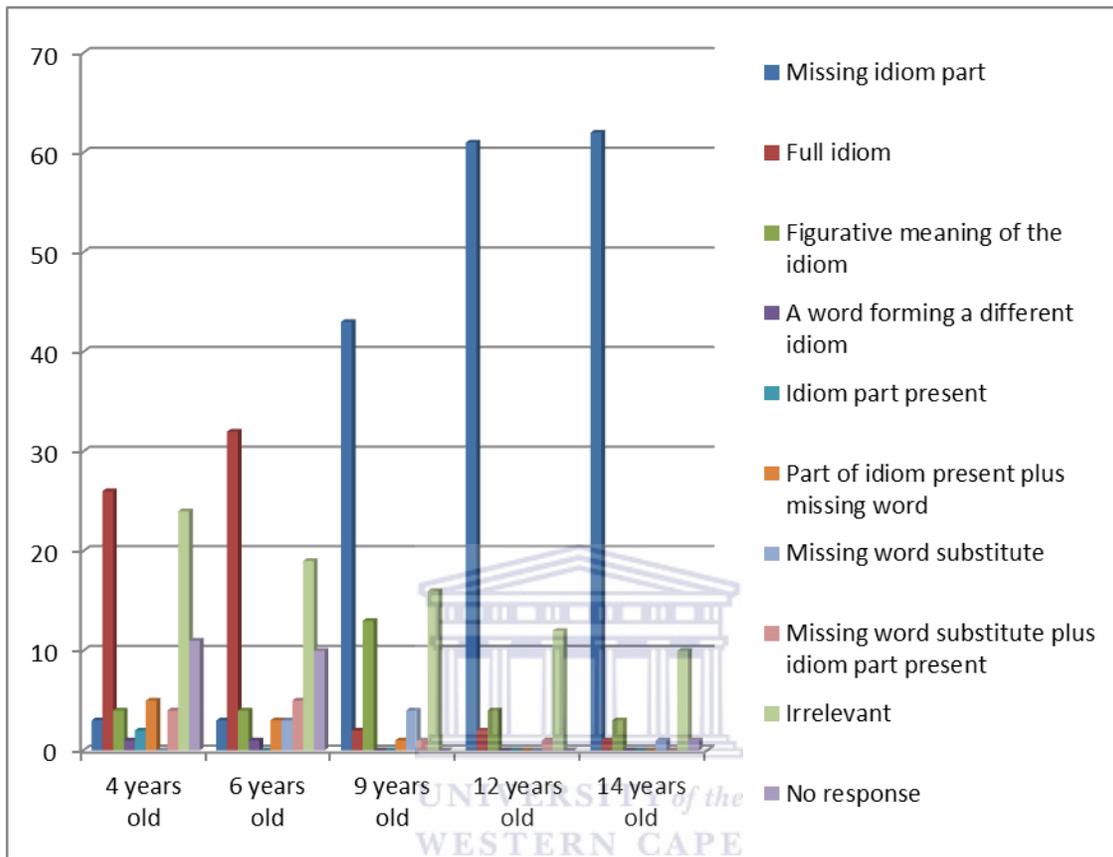
Table 7.1 Frequency of Response types in sentence completion

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Missing idiom part	172	43.0	43.0	43.0
Full idiom	63	15.8	15.8	58.8
Figurative meaning of the idiom	28	7.0	7.0	65.8
A word forming a different idiom	2	.5	.5	66.3
Idiom part present	2	.5	.5	66.8
Part of idiom present plus missing word	11	2.8	2.8	69.5
Missing word substitute	8	2.0	2.0	71.5
Missing word substitute plus idiom part present	11	2.8	2.8	74.3
Irrelevant	81	20.3	20.3	94.5
No response	22	5.5	5.5	100.0
Total	400	100.0	100.0	

The predominance of ‘missing idiom part’ 172 (43%) suggests that children were able to recognize an idiomatic expression as a text and provided the part that was missing in the text. The prevalence of ‘irrelevant’ responses 81 (20.3%) (a response in which the provided word was not related to the idiom or sense of the sentence in general but it was grammatically suitable for the slot) indicates that children could not identify the idiomatic expression as a single text but they had knowledge of the lexico-grammar and instead they provided the word that could fill the gap in the provided linguistic structure basing on the grammatical rules of the language. The response whereby children provided a ‘full’ idiom’ 63 (15.8%) (a response in which children gave an entire idiom as an answer instead of just providing the missing word) indicates that children were able to recognize

the idiomatic expression as a text that could not be segmented because it is a holistic unit and it has to appear as such. This is also the reason for giving 'part of idiom present plus missing word' 11 (2.8%) (where children gave a missing word plus a segment of the part of the idiom provided). The occurrence of 'figurative meaning of the idiom' 28 (7%) (a response where children provided the figurative meaning of the idiom instead of providing the missing word) shows that children recognized the idiomatic expression as a text and also they know how the text is used but they could not give the missing word instead they provided the meaning of the idiom to demonstrate their knowledge of the idiomatic expression. The occurrence of 'missing word substitute plus idiom part present' 11 (2.8%) (a response in which children gave a word whose meaning is very close to the meaning of the missing word plus a segment of the part of the idiom provided) and 'missing word substitute' 8 (2%) (where children gave a word whose meaning is very close to the meaning of the missing word) indicate that children were able to recognize the idiomatic expression as a text and possibly know what it means but they could not tell the exact word that was missing in the text instead they provided a word that has a meaning that is very close to the meaning of the missing word in the idiom. The cases where children gave 'no response' 22 (5.5%) (where children did not give any answer) suggest that children recognized the idiomatic expressions as texts but they could not provide the words to fill the gaps basing on their knowledge of the lexico-grammar possibly because they realized that the words would not form part of the texts in question. Because of the same reason, some children just gave back the 'idiom part present' 2 (.5%) (where a child gave back the part of the idiom that was provided in the sentences). Lastly, the responses in which children gave 'a word forming a different idiom' 2 (.5%) (a response where children gave a word that formed a different idiom when combined with the part of the idiom that was provided in the sentence) indicate that children were able to recognize an idiomatic expression as a text and without considering the context at hand they gave a word they thought was missing in the text in question thereby creating a different idiomatic expression. The 'response type' against 'age' cross-tabulation results presented in Figure 7.1 below show which age group produced which of these response types.

Figure 7.1 Response types against Age in sentence completion



The results show that 4-year old and 6-year old children gave ‘full idioms’ (a response in which children gave an entire idiom as an answer instead of just providing the missing word) more than the other age groups, 26 and 32 respectively. This indicates that Cicewa speaking children as young as 4 years were able to recognize an idiomatic expression as a text that could not be broken into separate parts because it is a holistic unit forming a single text in a specific sociocultural context of use. These children were able to give ‘*uma mutu*’ (be dull), ‘*temetsa nkhwangwa pamwala*’ (refuse sternly), ‘*tsina khutu*’ (warn), ‘*tsamila dzanja*’ (die), ‘*ika kampeni kumphasa*’ (plot against someone), ‘*pala moto kudambwe*’ (invite trouble/do something that puts you in trouble) in full when parts of these idioms were omitted in the presented sentences. The presence of other responses such as ‘part of idiom present plus missing word’ (where children gave a missing word plus a segment of the part of the idiom provided) and ‘missing idiom part’ (a response in

which children provided the word that was missing in the incomplete sentence) also indicate that 4-year old and 6-year old children were able to recognize the idiomatic expressions as texts. The predominance of ‘no response’ (where children did not give any answer) among 4-year old and 6-year old children also suggests that some of these children were able to recognize the idiomatic expressions as texts but they could not provide the words to fill the gaps basing on their knowledge of the lexico-grammar possibly because they realized that the words would not form part of the texts in question. Because of the same reason, some children just gave back the ‘idiom part present’ (where a child gave back the part of the idiom that was provided in the sentences) which also suggests that they recognized the idiomatic expression.

One 4-year old child and one 6-year old child gave ‘words forming a different idiom’ (where children gave a word that formed a different idiom when combined with the part of the idiom that was provided in the sentence) in trying to fill the gap in one of the presented sentences. This also indicates that these children were able to recognize an idiomatic expression as a text but they recognized a different idiom rather than the one in question. Without considering the context at hand, each of these children gave a word they thought was missing in the text in question thereby creating a different idiomatic expression. The 4-year old child gave ‘*nsana*’ (back) and the 6-year old child gave ‘*thupi*’ (body) when trying to fill the gap in the sentence ‘*Ine ndinalaphela kusukulu cifukwa ndine wowuma _____* (I could not proceed with school because I have dry _____). The combination of ‘*wowuma*’ (one with dry) and ‘*nsana*’ (back) produce a different idiomatic expression ‘*wowuma nsana*’ which means ‘someone who cannot bear children’. On the other hand, the combination of ‘*wowuma*’ and ‘*thupi*’ produced the idiomatic expression ‘*wowuma thupi*’ which means ‘a thin person’. This suggests that these children lack sociocultural knowledge in which the idioms are consumed despite being aware that these idioms exist as texts. Therefore, it can be concluded that children are able to recognize an idiomatic expression despite being ignorant of the sociocultural context in which it is consumed. It can also be suggested that children come to know the idiomatic expression as a text before they even understand the sociocultural context in which it is consumed.

The presence of ‘missing word substitute plus idiom part present’ (a response in which children gave a word whose meaning is very close to the meaning of the missing word plus a segment of the part of the idiom provided) among 4 and 6-year old children and ‘missing word substitute’ (where children gave a word whose meaning is very close to the meaning of the missing word) among 6-year old children also indicate that children were able to recognize an idiomatic expression as a text and possibly knew what it means but they could not tell the exact word that was missing in the text instead they provided a word that has a meaning that is very close to the meaning of the missing word in the idiom. This will be demonstrated using responses given by 9-year old children below.

The findings also show that 4-year old and 6-year old children produced more ‘irrelevant’ responses (a response in which the provided word was not related to the idiom or sense of the sentence in general but it was grammatically suitable for the slot) than the other age groups, 24 and 19 respectively. This suggests that children could not identify the idiomatic expressions as texts but they had knowledge of the lexico-grammar so they provided the words that could fill the gap in the provided linguistic structures basing on the grammatical rules of the language. For instance, when ‘*pamphepo*’ (where it’s cold) was omitted in the sentence ‘*Ine ndatopa kugona _____ naganiza zokwatila tsopano*’ (I am tired sleeping _____ I have decided to marry now) two 4-year old and one 6-year old children provided ‘*pabedi*’ (on the bed) as the missing word while one 4-year old and one 6-year old children provided ‘*pamphasa*’ (on a mat made of reed) and one 4-year old child provided ‘*kucipinda*’ (in the bedroom). These responses suggest that these children failed to recognize that the missing word was part of a text that was used in a specific sociocultural context. However, these children demonstrated their knowledge of the Verbal process of the Cicewa verb ‘*gona*’ (sleep) which is an intransitive verb, Material process and provided Circumstance: location as the missing element in the sentence.

Failure to recognize an idiomatic expression as text was also seen in the way children completed the sentence ‘*Chikondi anataya _____ mkalasi cifukwa aphunzitsi*

anamuletsa kutuluka' (Chikondi threw _____ in class because the teacher did not allow him/her to go out). In trying to fill the gap one 4-year old child gave '*kope*' (notebook) while three 6-year old children gave '*cakudya*' (food), '*kamba*' (a type of snack for children) and '*zokudya*' (foods). These children gave these responses basing on their daily activities and knowledge of the lexico-grammar. They recognized that '*taya*' is a Material process verb which calls for a nominal Goal hence they all provided a nominal. However, these children did not just select any other nominal; they selected a nominal that could make sense in the provided linguistic context. Thus, they were able to infer from the available linguistic context and selected a nominal of daily activities in the school environment.

The data also show that 9-year old children produced more 'missing idiom part' (a response in which children provided the word that was missing in the incomplete sentence) than 4 and 6-year old children but they produced less responses compared to 12 and 14-year old children which suggest that 9-year old children were able to recognize idiomatic expressions as texts and provided the parts that were missing in the texts. However, 9-year old children produced more 'figurative meaning of the idiom' (13) (a response where children provided the figurative meaning of the idiom instead of providing the missing word) than any other group. This suggests that 9-years old children recognized the idiomatic expression as a text and also they know how the text is used in appropriate context but they could not give the missing word instead they provided the figurative meaning of the idiom to demonstrate their knowledge of the idiomatic expression. The presence of 'irrelevant' words (a response in which the provided word was not related to the idiom or sense of the sentence in general but it was grammatically suitable for the slot) among 9-year old children indicates that they could not identify some idiomatic expressions as texts. Nine years old children also provided words that were 'missing word substitute' (where children gave a word whose meaning is very close to the meaning of the missing word) which indicates that these children were able to recognize the idiomatic expression as a text and possibly knew what it means but they could not tell the exact word that was missing in the text instead they provided a word that has a meaning that is very close to the meaning of the missing word in the idiom. For

instance, two children gave ‘*opanda*’ (without) and ‘*posapita*’ (where it does not pass) as missing words in ‘*Ife tinakumana pamalo _____ mphepo*’ (We met at a place _____ wind/air) instead of the word ‘*oduka*’ (is cut). The meanings of the words ‘*opanda*’ (without) and ‘*posapita*’ (where it does not pass) are closely related to the meaning of ‘*oduka*’ (is cut) when it is in the idiom. However, the presence of ‘*opanda*’ (without) and ‘*posapita*’ (where it does not pass) in the idiom made the expression to cease to be idiomatic. Thus, it can be said that although 9-year old children are able to recognize idiomatic expressions they do not realize that some idioms do not allow synonymy.

Twelve-year old and 14-year old children produced the highest number of ‘missing idiom part’ (a response in which children provided the word that was missing in the incomplete sentence), 61 and 62 respectively. This indicates these children were able to recognize idiomatic expressions as texts and provided the parts that were missing in the texts. Although, 12-year old and 14-year old children gave more ‘missing idiom part’, they also gave a good number of ‘irrelevant’ words (a response in which the provided word was not related to the idiom or sense of the sentence in general but it was grammatically suitable for the slot). This indicates that even 14-year old children could not identify some idiomatic expressions as texts. For instance, one 14-year old child provided the word ‘*mwana*’ (child) as a missing word in ‘*Apongozi anga anatsamila _____ ali ndi zaka makumi asanu*’ (My mother/father-in-law leaned on _____ when s/he was 50 years old). This shows that this child failed to recognize that the missing word was part of a text that was used in a specific sociocultural context and proceeded to provide the missing word using her knowledge of the lexico-grammar of Cicewa. She realized that ‘*tsamila*’ (lean on) is a Material process verb and she provided ‘*mwana*’ (child) as Goal. Another 14-year old child provided ‘*ndikukhala*’ (I’m sitting) as a missing word in ‘*Ine ndatopa kugona _____ ndaganiza zokwatila tsopano*’ (I am tired sleeping _____ I have decided to marry now). This child also failed to recognize that the missing word was part of a text that was used in a specific sociocultural context.

The findings presented above indicate that Cicewa speaking children are able to recognize some idiomatic expressions at the age of 4. However, there are certain idiomatic expressions that are not easily recognized by children, even 14-year old children can fail to recognize such idioms.

Having established the age at which Cicewa speaking children are able to recognize idiomatic expressions, it is also important to identify the strategies that these children employed to interpret and acquire Cicewa idioms. This is done in the following section.

7.2 Strategies employed by children to learn to interpret Cicewa idioms

Children employ a number of strategies to acquire the interpretation of idiomatic expressions. In this study, strategies employed by Cicewa speaking children to interpret and acquire Cicewa idioms were identified by qualitatively analysing responses that children gave in Experiment 2 and Experiment 3, described in section 5.6.1 in the methodology chapter above. Apart from testing children's ability to interpret idioms in sentence and out of context situations, these experiments were also set out to identify strategies that children employ to learn the meanings of the idioms. The responses given by children in these experiments were compared several times to identify patterns, differences and similarities that could give clue to the kinds of strategies that children employed. The identified strategies were named with reference to previous studies and Analysis of Variance (ANOVA) and cross-tabulation were conducted. The strategies used by children, responses generated by specific strategies and strategies used by a specific age group have been presented in the coming sections.

7.2.1 Strategies used by Cicewa speaking children

After comparing the responses that children gave in Experiments 2 and 3, a number of strategies were identified as being used by Cicewa speaking children to interpret and acquire Cicewa idioms. The frequencies of the identified strategies have been presented in Table 7.2 below.

Table 7.2 Frequency of strategies employed to interpret idioms

Strategy	Experiment 2		Experiment 3	
	Frequency	Percent	Frequency	Percent
Repeating the idiom	118	29.5	144	36
Inferring from linguistic context	34	8.5		
Using linguistic knowledge	15	3.8	35	8.8
Using world knowledge/experience	34	8.5	25	6.3
Inferring from sociocultural context	164	41	160	40
Reasoning	2	0.5		
Paraphrasing the idiom			4	1
Using linguistic context from experiment 1	9	2.3	14	3.5
Guessing	18	4.5	16	4
No response	6	1.5	2	0.5
TOTAL	400	100	400	100

As Table 7.2 shows, children employed a number of strategies to interpret and acquire Cicewa idioms. It shows that the most predominant strategies in both experiments were inferring from sociocultural context and repeating the idioms. Using world knowledge/experience was also common in both experiments. In Experiment 2, inference from linguistic context was also commonly used by children. Children also used their linguistic knowledge and context from Experiment 1 to interpret the idioms in both Experiments. There is also evidence of reasoning in Experiment 2 and paraphrasing the idiom in Experiment 3. Guessing was also evident in both experiments. There were also instances of non-response in both experiments hence no strategies were identified. Each one of these strategies has been discussed below following the order in the table.

7.2.1.1 Repeating the idiom

Repeating the idiom 118 (29.5%) in Experiment 2 and 144 (36%) in Experiment 3 was a strategy in which children gave back the same idiom without providing any interpretation. This strategy was also identified by Cooper (1999) in his study of second language learners of English. Children's repetition of the idioms suggests that the children recognized idioms as instances of language in use but they were not aware of the contexts in which the idioms were produced. They also realized that the literal interpretations were not appropriate in the contexts in question although they lacked knowledge of the contexts. For instance, when children were asked to provide meanings of idioms in both sentence context and out of context they gave back the following idioms *mwana alilenji* (lack nothing), *kupha phala* (to drink beer a lot), *malo oduka mphepo* (secluded place), *kadaunda madzi* (nsima) and *galu wakuda* (famine) without adding any morpheme. However, they repeated the verbal idioms as they are or with an infinitive *ku-* attached or with a subject marker or both subject and object markers attached or with subject marker and tense marker attached. For instance, the following idioms *tsamila dzanja* (die), *gona pamphepo* (not married), *khala maso* (be alert), *taya madzi* (urinate), *pala moto kudambwe* (invite trouble/do something that puts you in trouble), *onera pakhosi* (be seriously ill) were given back as they are or with the infinitive *ku-*. On the other hand, children gave back the following idioms *ona nsana wanjila* (go back or return back), *lowa mkanyumba komata* (be advised/receive advice/be counselled), *gwilitsa fuwa lamoto* (cheat/fool someone), *dyela masuku pamutu* (exploit someone) and *ika kampeni kumphasa* (plot against someone) with infinitive *ku-* attached or with both subject and object markers or with subject marker and tense marker. For example, children repeated *gwilitsa fuwa lamoto* (cheat/fool someone) as *kugwilitsa fuwa lamoto* (with infinitive *ku-*), or *andigwilitsa fuwa lamoto* (with *a-* as subject marker and *-ndi-* object marker) or *anandigwilitsa fuwa lamoto* (with *a-* as subject marker, *-na-* past tense marker and *-ndi-* object marker).

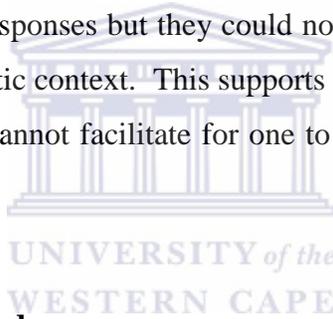
7.2.1.2 Inferring from linguistic context

Inferring from linguistic context 34 (8.5%) was mainly used in Experiment 2 where idioms were embedded in sentence context. This strategy involved use of contextual cues such as the topic in question and the situation in which the idiom was embedded to interpret an idiom. This strategy was also identified by Crutchley (2007) and Leung (2011). Cooper (1999) also identified this strategy among second language learners of English. This strategy was evident in the way children interpreted '*kadaunda madzi*' (nsima) in '*ife tadya kale kadaunda madzi*' (we have already eaten nsima). One 9-year old child interpreted '*kadaunda madzi*' as '*ndakhuta*' (I am full) while a 14-year old child interpreted it as '*cakudya*' (food). The interpretation '*ndakhuta*' (I am full) was arrived at by considering the situation provided in the sentence that someone has already eaten something which made the 9-year old child to conclude that the person in question is no longer hungry hence she interpreted '*kadaunda madzi*' (nsima) as '*ndakhuta*'. The interpretation '*cakudya*' (food) provided by the 14-year old child was arrived at by considering the same situation that someone has eaten something but this child focused on the thing that was eaten and she interpreted '*kadaunda madzi*' (nsima) as '*cakudya*' (food) because she could not tell what kind of food the person in question ate so she considered it safe not to mention a specific type of food.

Inferring from linguistic context can also be exemplified by the response that a 4-year old child gave when '*tsala madzi amodzi*' ('be about to die') was embedded in '*Nkhuku yanga yatsala madzi amodzi ili ndi citopa*' ('My chicken has remained one water it has Newcastle' = My chicken is about to die, it has Newcastle). This child interpreted '*tsala madzi amodzi*' as '*yagona*' (it's sleeping) because the sentence provided the information that the chicken had Newcastle and knowing what this entails the child concluded that this chicken must have been sleeping since it was unwell. Lastly, inferring from linguistic context can also be exemplified by the responses that children gave when '*gwilitsa fuwa lamoto*' (cause to touch a hot rocky pot stand = 'cheat/fool someone') was embedded in '*Atsibweni anandilonjeza feteleza koma andigwilitsa fuwa lamoto*' (My uncle promised me fertilizer but he made me touch a hot rocky pot stand = 'My uncle promised me fertilizer but he has fooled me). Two 9-year old children interpreted '*gwilitsa fuwa*

lamoto’ as *‘sanabweletse*’ (he didn’t bring), one 9-year old child interpreted it as *‘sanapange*’ (he didn’t do it) and two 12-year old children interpreted it as *‘andinamiza*’ (he lied to me). All these responses were arrived at because the sentence proposes that the person uttering the sentence was promised something and was looking forward to the fulfilment of the promise but something happened. We know that something happened because of the word *‘koma*’ (but) which indicates impossibility. With this situation in mind the children interpreted *‘gwilitsa fuwa lamoto*’ as *‘sanabweletse*’ (he didn’t bring), *‘sanapange*’ (he didn’t do it) and *‘andinamiza*’ (he lied to me), responses that suggest that something to the contrary happened.

All the responses that children gave based on their inference from linguistic context suggest that children were aware that literal interpretations were not appropriate and they attempted to give non-literal responses but they could not succeed because they failed to go beyond the provided linguistic context. This supports the claim by Casas and Campoy (1995) that linguistic context cannot facilitate for one to guess the meaning of an idiom unless it is very revealing.



7.2.1.3 Using linguistic knowledge

Use of linguistic knowledge involved semantic analysis of the idioms and building interpretation on one of the component words in the idiom. In some cases it also involved the analysis of the internal structure of the idioms like transitivity. This strategy was evident in the way children interpreted *‘malo oduka mphepo*’ (excluded place) in both Experiments 1 and 2. In trying to interpret this idiom children gave responses like *‘malo oti mphepo siyikubwelabwela*’ (a place which is not windy), *‘posapita mphepo*’ (where wind/air doesn’t pass), *‘malo opanda mphepo kwambili*’ (a place that is not very windy), *‘malo a pheee*’ (a quiet place), *‘posakhala mphepo*’ (where there is no wind/air). Looking at these responses one notes that these children paid special attention to the word *‘oduka*’ (that which is cut) and basing on this word they came up with all these different interpretations which are related and seem to be literal except *‘malo a pheee*’ (a quiet place) which seems more like figurative. Use of linguistic knowledge was also evident in

the way children interpreted '*khala maso*' (be alert) which was interpreted as '*kuyang'ana*' (to see) and '*osagona*' (wide awake). These interpretations suggest that children semantically analyzed the words in the idiom and provided these literal meanings.

Apart from the literal interpretations presented here, use of linguistic knowledge also generated some interpretations which were non-literal. For instance, some interpretations given for '*lowa m'kanyumba komata*' (be advised/receive advice or be counselled) demonstrate this. Two 12-year old children interpreted this idiom as '*malo obisalika*' (a hideout place) and '*malo a chinsinsi*' (a secret place). These interpretations suggest that children semantically analyzed the words in the idiom and derived the interpretations by focusing on the word '*komata*' (sealed/covered). If something is sealed or covered then you cannot see or tell what is inside thus children metaphorically extended this to arrive at the given meanings, '*malo obisalika*' (a hideout place) and '*malo a chinsinsi*' (a secret place). This kind of analysis was also evident in the way a 12-year old child interpreted '*kupha phala*'. This child interpreted this idiom as '*kuononga*' (to destroy/waste). For this child to arrive at this interpretation he considered the meaning of the verb '*kupha*' (to kill) and when this verb is combined with '*phala*' (porridge) there is anomaly as the expression '*kupha phala*' cannot be interpreted literally because '*phala*' (porridge) has no life hence it cannot die. The child realized that there was an internal conflict in the expression but because he was aware that the choice '*kupha phala*' was meaningful he was forced to metaphorically extend the expression '*kupha phala*' to mean '*kuononga*' (to destroy/waste). These non-literal responses suggest that these children were aware that the idioms are instances of use that need to be interpreted non-literally as a result they searched for non-literal meanings by metaphorically extending the meanings of some words in the idioms. However, the provided non-literal meanings were not appropriate because the children did not consider the sociocultural contexts in which the idioms were produced. On the other hand, the literal responses, presented above, derived through the use of linguistic knowledge show that the children did not realize that the expressions were instances of use to be interpreted in the context within which they were produced.

7.2.1.4 Using world knowledge and experience

Using world knowledge and experience 34 (8.5%) in Experiment 2 and 25 (6.3%) in Experiment 3 involved making inferences based on children's experience of the world and their knowledge about the world. This strategy was also identified in the studies by Crutchley (2007); Hsieh and Hsu (2010) and Vulchanova, Vulchanov and Stankova (2011). This strategy can be exemplified by the responses that children gave for '*lowa m'kanyumba komata*'. This idiom was interpreted as '*yosacedwa kugamuka*' (easy to fall off), '*analowa kubafa*' (entered the bathroom = pit latrine), '*yamaudzu*' (grass thatched), '*analowa kanyumba kakang'ono*' (they moved into a small house) and '*kucita cigololo*' (to have sex). The interpretation '*yosacedwa kugamuka*' (easy to fall off) was reached because the phrase '*m'kanyumba komata*' in the idiom suggests that the house in question is a temporary one since it is very small (inferred from '*kanyumba*') and it was constructed by covering some material like grass and reed with soil (inferred from '*komata*'). Children have experienced that temporary houses do not last long so inferring from this experience, the interpretation '*yosacedwa kugamuka*' (easy to fall off) was selected. If the second response '*analowa kubafa*' (entered the bathroom = pit latrine) is considered, one will also notice that it was arrived at basing on the experience that pit latrines are usually very small and temporary. Thus the child inferred that '*kanyumba komata*' must be a pit latrine. Unlike the first response, this response indicates that the child was aware that the idiomatic expression was an instance of use with a 'marked' interpretation as a result he provided a figurative meaning '*analowa kubafa*' (entered the bathroom = pit latrine) although it was not appropriate in the sociocultural context in which the idiom '*lowa m'kanyumba komata*' is consumed.

It can also be explained that the interpretation '*yamaudzu*' (grass thatched) was selected because the child has experienced that most temporary houses are grass thatched. On the other hand, the interpretation '*analowa kanyumba kakang'ono*' (they moved into a small house) was selected because the child inferred from '*komata*' that the house must be small because it was constructed by covering some material like grass and reed with soil

and none of the big houses are constructed in that way these days. Finally, it can be said that the child selected the interpretation '*kucita cigololo*' (to have sex) because the child knows '*kanyumba komata*' is a building that has been sealed to the extent that no one can tell what is happening inside. So the child inferred the meaning of the idiom '*lowa m'kanyumba komata*' as indulging in sexual act since sexual activities are done in secret. The interpretation '*kucita cigololo*' (to have sex) suggests that this child was aware that the idiomatic expression was an instance of use that needed to be interpreted in a special way as a result he searched for the figurative meaning although it was not appropriate.

Use of world knowledge and experience was also evident in the way children interpreted '*gona pamphopo*'. Children interpreted this idiom as '*gona osafunda*' (sleep without covering oneself) in both Experiments 2 and 3. This interpretation was selected based on their experience that if one does not cover himself or herself properly when sleeping, s/he feels cold at night. Use of world knowledge and experience was also evident in the way one 4 years old child kept interpreting '*galu wakuda*' (a black dog = 'famine') as '*Scoopy*' (a name of a specific dog). This child knows a specific dog that is black in color and its name is *Scoopy* so when the child was asked to interpret the idiom '*galu wakuda*' (a black dog = 'famine') in both Experiments 2 and 3, the child just mentioned the name of the dog with that color. This child did not realize that the expression was produced in a 'marked' context.

7.2.1.5 Inferring from sociocultural context

Inferring from sociocultural context, 164 (41%) in Experiment 2 and 160 (40%) in Experiment 3, is a strategy in which children considered the cultural frames of reference and the social situations guiding the use of idiomatic expressions in Cicewa. This strategy was evident in the way children interpreted '*pala moto kudambwe*' (get some fire from *dambwe* (secret meeting place of Nyau members) = 'invite trouble/do something that puts you in trouble'. Children figuratively interpreted the idiom as '*(ku)palamula*' (invite trouble/do something that puts you in trouble). For the children to arrive at this interpretation they first of all realized that the idiomatic expression was an instance of use

produced in the Cewa cultural context as such they inferred from their knowledge of the Cewa culture. Children know that the Cewa have indigenous religious beliefs and the ritual dance called *Gule Wamkulu* (the Big Dance) in which the dancers called *Zilombo* (animals) wear masks and at the time of performance *Zilombo* (masked dancers) are viewed as spirits of the dead who may act with impunity hence non-initiated members should stay away from *Zilombo*. The construction and wearing of masks takes place at 'Dambwe', a secret meeting place in the graveyard for members of the Nyau society. *Dambwe* is a protected area marked with warning signs such as red flag and only Nyau initiates are allowed around this place. If any non-initiate comes around the place is severely beaten and initiated by force, otherwise s/he will be killed. An initiated member of the Nyau is not supposed to reveal the Nyau secrets to non-initiated members. If the initiated member reveals the secret s/he is heavily punished and in the past it went as far as being killed. So '*kupala moto kudambwe*' (to get some fire from Dambwe) is as good as revealing the Nyau secrets which is punishable. Thus, inferring from this cultural knowledge children were able to provide the interpretation '*(ku)palamula*' (invite trouble/do something that puts you in trouble) in both Experiments 2 and 3, a figurative meaning of the idiom '*pala moto kudambwe*'

The strategy in which children inferred from the sociocultural knowledge was also evident in the way children interpreted '*mwana alilenji*' (why should a child cry = 'lack nothing'). One 9-year old child interpreted this idiom as '*pakhomo pabwino*' (a nice home) while 12-year old and 14-year old children interpreted it as '*posasowa kanthu*' (where nothing lacks or where everything is available) in both Experiments 2 and 3. These children considered a situation in which everything that one's child may desire is provided for such that the child has no reason to start crying for other people's things like other children do. Thus 12-year old and 14-year old children inferred from this situation and arrived at the figurative interpretation '*posasowa kanthu*' (where nothing lacks or where everything is available). A 9-year old child also inferred from the social situation at hand but he had little knowledge about it thus interpreted '*mwana alilenji*' as '*pakhomo pabwino*' (a nice home). This suggests that this child was aware that the expression at hand was an instance of use which needed to be interpreted within the

context in which it was produced hence he searched for a non-literal interpretation of the expression.

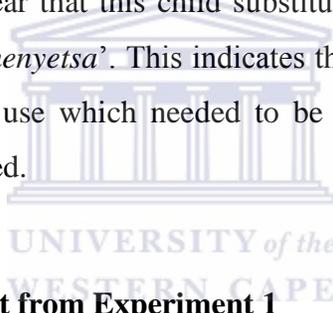
7.2.1.6 Reasoning

Reasoning 2 (.5%) was mainly employed in Experiment 2 although it was not common possibly because a child resorted to it after s/he had ran out of ideas in terms of how to arrive at the interpretation of an idiom. Reasoning strategy involved drawing of inferences and forming conclusions from the provided information in the sentence. This strategy was evident in the way one 9-year old child interpreted '*mwana alilenji*' when this idiom was contained in '*Banja la a Moyo ndi lamwana alilenji*' (Mr Moyo's family is why should a child cry = Mr Moyo's family lacks nothing). This child interpreted this idiom as '*ali ndi mwana*' (they have a child). This interpretation suggests that this child approached the idiom literally and basing on the literal meaning of the sentence he inferred and concluded that the family in question has a child hence the interpretation '*ali ndi mwana*' (they have a child). Reasoning was also evident in the way the same 9-year old child interpreted '*temetsa ngwangwa pamwala*' when it was embedded in '*Amfumu atametsa nkhwangwa pamwala kuti malilo amenewa sayikidwa mmudzi muno*' (The chief has hit an axe on the rock that the dead body will not be buried in this village = 'The chief has refused sternly that the dead body will not be buried in this village'). This child interpreted '*temetsa nkhwangwa pamwala*' as '*malilo asapangike*' (the funeral ceremony should not take place). For this child to arrive at the response he gave, he also inferred and concluded from the information provided in the sentence. A response which a 4-year old child gave as the meaning of '*taya madzi*' (urinate) also demonstrate that reasoning was at work when the idiom was embedded in '*Usamwe tiyi wambili ungavutike ndi kutaya madzi munjila*' (Don't drink a lot of tea you may be troubled throwing away water along the way' = Don't take a lot of tea you may need to urinate frequently along the way). The child interpreted '*taya madzi*' as '*utaye tiyi*' (throw away tea). This response also suggests that this child took into consideration what was stated in the sentence and concluded that the producer of the sentence wanted the addressee to throw away the remaining tea hence the response '*utaye tiyi*' (throw away tea).

The responses generated through reasoning suggest that the children who employed this strategy failed to realize that the idiomatic expressions were instances of use that needed to be interpreted within the sociocultural contexts in which they were produced.

7.2.1.7 Paraphrasing the idiom

Paraphrasing the idiom 4 (1%) was used in Experiment 3 only. This strategy involved giving back the idiom but with some words substituted. This strategy was also identified by Cooper (1999). This strategy was evident in the way a 6-year old child interpreted '*temetsa nkhwangwa pamwala*' (hit an axe on a rock = 'refuse sternly'). This child interpreted this idiom as '*amenyetsa nkhwangwa pamwala*' (S/he has hit an axe on the rock). In this response it is clear that this child substituted '*temetsa*' (hit) with another words with similar meaning '*menyetsa*'. This indicates that this child did not realize that the idiom was an instance of use which needed to be interpreted in the sociocultural context in which it was produced.



7.2.1.8 Using linguistic context from Experiment 1

Using linguistic context from Experiment 1, 9 (2.3%) in Experiment 2 and 14 (3.5%) in Experiment 3, involved inferring the meaning of an idiom from the linguistic context in which the idiom was embedded in Experiment 1. This was clear in the way children interpreted '*dyela masuku pamutu*' ('eat masuku (wild loquat/Uapaca kirkiana) from one's head' = exploit someone) in both Experiment 2 and 3. This idiom was interpreted as '*gwila nchito opanda malipilo*' (work without being paid), '*anadya ndalama zonse*' (he squandered all the money), '*kupanga cinthu opanda malipilo*' (do something without being paid), '*ndalama sanalandile*' (s/he did not receive money), '*kungokugwilitsa nchito*' (make you work without paying you), '*gwila nchito yaulere*' (work but without being paid), and '*anamudyela mnzake*' (he used his friends money). All these responses that children gave as meanings of '*dyela masuku pamutu*' ('eat masuku (wild loquat/Uapaca kirkiana) from one's head' = exploit someone) indicate that these children inferred the meanings from the story in which the idiom was embedded in Experiment 1

in which two boys did piece work together but one boy went behind his friend to collect the money and he used all the money without giving the other boy his share (see Appendix E).

Inference from linguistic context from Experiment 1 was also evident in the way children interpreted '*kupha phala*' (to kill porridge = 'to drink bear a lot'). This idiom was interpreted as '*kulima kwambili*' (to farm a lot) in both Experiments 2 and 3. To arrive at this interpretation, children inferred from the story in which the idiom was embedded in Experiment 1 in which one's uncle was presented as finding a lot of profit from farming but people could not see it because whenever he finds money he goes drinking (see Appendix E). Children's use of this strategy suggests that children acquire idioms within the context in which they are used and they would always refer to that specific context in attempt to interpret the idiom if they come across the idiom again.

7.2.1.8 Guessing

Guessing constituted 18 (4.5%) in Experiment 2 and 16 (4%) in Experiment 3. Some scholars have observed that speakers guess the meanings of idiomatic expressions from context, literal meaning, background information and sometimes by creating mental images of the situations concerned (Kamanga, 2007). However, in this study, it is not clear how children guessed the idiomatic meanings in question. The researcher could not tell how really the children guessed the interpretations presented in this section. Thus, the kind of guessing discussed in this section should not be understood as involving inference from context, literal meaning, background information or mental images. For instance, when '*kupha phala*' (to kill porridge = 'to drink bear a lot') was embedded in '*Apongozi anga sangatukuke cifukwa amakonda kupha phala*' (My mother/father-in-law cannot develop because s/he likes to drink bear a lot) was interpreted as '*kuyendayenda*' (moving about), '*sangawine*' (can't win) and '*samapeza zambili*' (doesn't find a lot). All these responses are not linked to the idiom in any way. The same idiom was interpreted as '*amatama*' (s/he is pompous), '*anawanamiza*' (s/he was told lies), '*osapeza kanthu*

(could not find anything) when it was presented out of context. These responses are also not related to the idiom in question.

Although the strategies presented above have been discussed in isolation, in some cases they worked hand in hand for a child to arrive at a particular interpretation. Table 7.2 also indicates that there were also instances of ‘no response’ in which children did not give any response. This suggests that the children recognized the idiomatic expressions as instances of use but they had no clue in terms of what the meanings could be. Having discussed the strategies that children employed, it is important now to turn to the kinds of responses that these strategies generated.

7.2.2 Type of responses generated by specific strategies

The strategies discussed above generated specific types of responses. Presented in Table 7.3 below are the total responses that each of the strategy generated in Experiments 2 and 3.

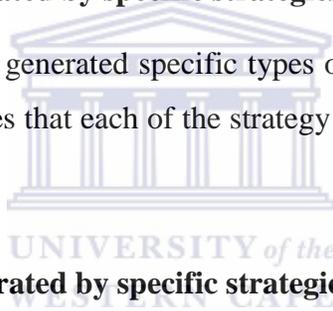


Table 7.3 Response type generated by specific strategies

Strategy employed	Response type Generated					
	Idiomatic	Literal	Associative	Related to idiomatic meaning	Same idiom	Irrelevant
Repeating the idiom					262	
Inferring from linguistic context		6	26			
Using linguistic knowledge		42	1			7
Using world knowledge		2	1			56
Inferring from sociocultural context	274			50		
Paraphrasing the idiom		4				

Reasoning			1			1
Using linguistic context from Experiment 1		2				20
Guessing						34

Table 7.3 above shows that idiomatic interpretations (274) were generated by one strategy only, inferring from sociocultural context. This suggests that if one lacks knowledge of the sociocultural context in which the idiom is consumed s/he cannot interpret the idiom. Inferring from sociocultural context also generated interpretations that were related to idiomatic meaning. This could be the case because the sociocultural knowledge was partial as a result it could not generate the interpretation that was intended. This supports the claim by Casas and Campoy (1995) who stated that a full understanding of idioms comes only with a full understanding of the cultural environment they belong to. The table also shows that ‘repeating the idiom’ generated responses in which children gave back the same idiom (262) without providing any interpretation. This could be the case because the children recognized the idioms as texts that needed to be interpreted in the sociocultural context in which they were produced but the children did not have knowledge of the sociocultural context in question. To avoid interpreting the idioms literally, these children gave back the idioms without any attempt to interpret them. The table also shows that inferring from linguistic context mainly generated ‘associative’ interpretations (26). These were interpretations that were related to part of the sentence or part of the idiom. Therefore, it can be concluded that inferring from context alone is not enough for one to interpret an idiomatic expression. On the other hand, using linguistic knowledge generated literal responses (42). These were responses based on the literal meanings of the words in the idiom. This shows that using linguistic knowledge is not a successful strategy in idiom acquisition. The table also shows that ‘using world knowledge’ generated ‘irrelevant’ responses (56). These responses were not related, in any way, to the sentence containing the idiomatic expression or the idiomatic expression in question. ‘Irrelevant’ responses were also generated by other strategies such as ‘using linguistic context from Experiment 1 and guessing which produced 20 and 34 irrelevant responses respectively. These findings suggest that knowledge of the sociocultural context in which the idiomatic expressions are consumed is critical in idiom

interpretation since all the strategies that did not take into consideration the sociocultural context in which the idiomatic expressions are used were not successful. The one-way between-groups Analysis of Variance (ANOVA Test) with strategy employed as independent variable showed that the responses based on the strategy employed were significantly different ($F(7,386) = 288.227, p < .0001$) in Experiment 2 and ($F(7,392) = 213.052, p < .0001$) in Experiment 3. This takes us to the strategies that were used by specific age groups.

7.2.3 Strategies used by specific age groups

Having identified the strategies that children employed to interpret idioms and the response types that each strategy generated, it is timely to establish which strategies were employed by specific age groups. Presented in Figure 7.2 are the strategies that each age group employed in attempt to interpret the idioms.

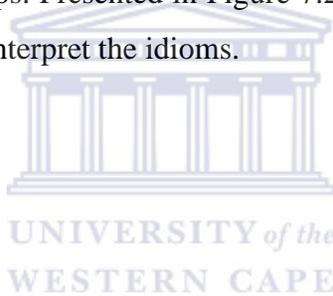


Figure 7.2 Strategies employed by specific age groups

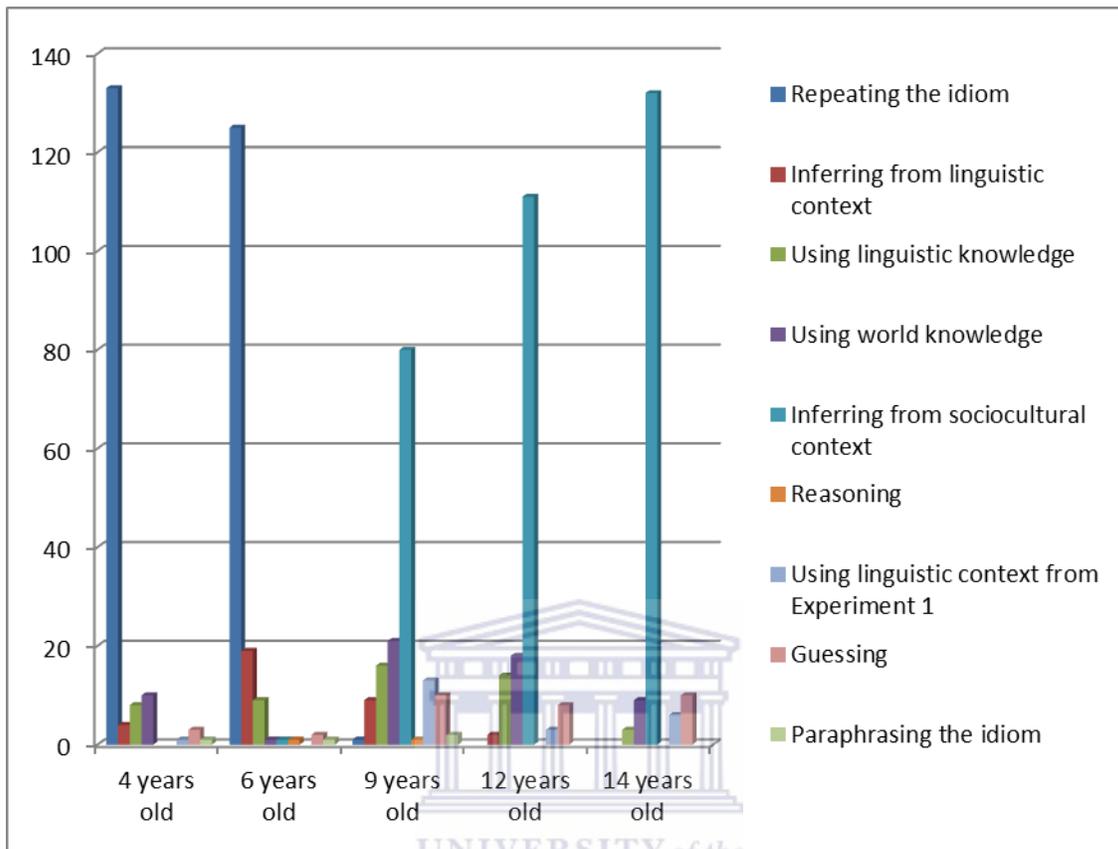


Figure 7.2 shows that ‘repeating the idiom’ was mainly used by 4 and 6-year old children. This suggests that these children recognized idiomatic expressions as texts to be interpreted within a certain context but they lacked knowledge of this context. The figure also shows that 6-year old children ‘inferred from linguistic context’ more than any other age group. This indicates that at age 6 the ability to infer meaning using contextual cues has already developed. It also suggests that at age 6 a child has already started searching for non-literal interpretations of idioms but fails to succeed because s/he cannot go beyond linguistic context. The figure also shows that children between the ages 9 to 14 are able to infer the meanings of idiomatic expressions from the sociocultural context within which the idioms were produced. This explains why children of these ages are able to interpret idiomatic expressions even when they are presented out of context. However, children of these ages also use other strategies such as ‘using linguistic knowledge’, ‘using world knowledge’, ‘using linguistic context from Experiment 1’ and

‘guessing’ which suggest that they do not have sociocultural knowledge guiding the use of all the idioms to infer from as a result they employ other strategies when they realize that their knowledge of the cultural frames of reference is wanting. The figure also shows that 9-year old children employ the strategies ‘using world knowledge’ and ‘using linguistic knowledge’ more than any other age group. This might be the case because children of this age have developed sensitivity towards contextual information (Levorato, 1993; Levorato & Cacciari, 2002) so they always look for linguistic information to deduce the meaning of the idiom. Where the information provided by the linguistic context is not enough they infer from their world knowledge.

7.3 Idioms acquired at a specific age

In this thesis it has been demonstrated that children as young as four years were able to interpret some idioms when the idioms were embedded in context that was biased towards an idiomatic interpretation. However, it has not been established what kind of idioms children were able to interpret at this age and which ones they could not. At the same time it has not been established what kind of idioms could not be interpreted by all the participant children. Therefore, this section aims at establishing the idioms that were easy to interpret that even the youngest children were able to interpret and the idioms that caused problems which could not be interpreted even by the older children, 14 years old.

Individual analysis of the idioms indicated that some 4-year old children were able to figuratively interpret ‘*mwana alilenji*’ (lack nothing) and ‘*tsala madzi amodzi*’ (be about to die or to be caught) when these idioms were presented in context biased towards an idiomatic interpretation while 6-year old children were able to figuratively interpret ‘*ona nsana wanjila*’ (return/go back), ‘*mwana alilenji*’ (lack nothing), ‘*uma mutu*’ (be dull), ‘*ika kampeni kumphasa*’ (plot against someone), ‘*onela pakhosi*’ (be seriously ill), ‘*tsala madzi amodzi*’ (be about to die or to be caught), ‘*galu wakuda*’ (famine), ‘*tsamila dzanja*’ (die) and ‘*kupha phala*’ (to drink beer a lot). These idioms were also figuratively interpreted by children aged 9, 12 and 14. Six-year old children’s ability to interpret these idioms cannot be attributed to idioms internal structure or analyzability as the mentioned

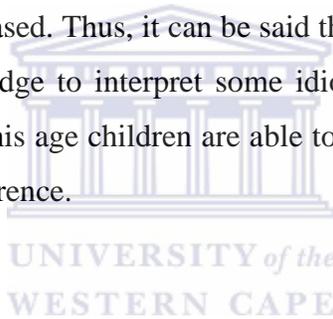
idioms constitute analyzable and non-analyzable, well-formed (congruent) and ill-formed (metaphor) idioms. For instance, *'mwana alilenji'* (lack nothing), *'tsala madzi amodzi'* (be about to die or to be caught), *'ona nsana wanjila'* (return/go back), *'uma mutu'* (be dull), *'ika kampeni kumphasa'* (plot against someone) and *'onela pakhosi'* (be seriously ill) are analyzable while *'galu wakuda'* (famine), *'tsamila dzanja'* (die) and *'kupha phala'* (to drink beer a lot) are non-analyzable (Kamanga, 2007). On the other hand, *'mwana alilenji'* (simple sentence), *'ika kampeni kumphasa'* (V+N+N(Locative)), *'galu wakuda'* (N+Adj) and *'tsamila dzanja'* (V+N(base)) are well-formed while *'tsala madzi amodzi'* (V+NP(N+Numeral)), *'ona nsana wanjila'* (V+NP(N+Adj)), *'uma mutu'* (V+N(base)), *'onela pakhosi'* (V+N(Locative)) and *'kupha phala'* (N(Infinitive)+N(base)) are ill-formed. Critical examination of the idioms shows that these idioms involved daily activities in which these children take part or things which the children have experienced. For instance, children see drunkards every day; they hear of deaths and some have actually been affected by it; they are always walking to and from school using dusty footpaths; some do not do well at school and some experience food problems in their homes. The daily activities in which 6-year old children take part and their experiences made it easy for these children to infer the meanings from the linguistic contexts which favored figurative meanings. This is not strange as Vulchanova, Vulchanov and Stankova (2011) observed that children could figuratively interpret idioms that are based on human experiences as they form part of everyday discourse. However, when the same idioms were presented in sentence context and out of context, these children could not interpret the idioms. Thus, it can be concluded that 6-year old children are able to figuratively interpret idioms of daily activities involving human experience only when the idioms are embedded in supportive contexts. It can be suggested that the linguistic context facilitate for the memory of cultural frames of reference as knowledge of these is just starting to develop at this age. On the basis of this discussion we can also reject the research assumption that idioms with simple structure are acquired first than idioms with complicated structure presented in Chapter One of this thesis. We can also reject the research assumption that idiom acquisition starts with simple transparent idioms and progresses to complicated non-transparent idioms presented in Chapter One of this thesis.

Apart from the idioms listed above, 9-year old children were also able to figuratively interpret ‘*taya madzi*’ (urinate), ‘*malo oduka mphepo*’ (secluded place), ‘*gona pamphepo*’ (not married), ‘*temetsa nkhwangwa pamwala*’ (refuse sternly), ‘*tsina khutu*’ (warn), ‘*kadaunda madzi*’ (nsima), ‘*dyela masuku pamutu*’ (exploit someone), and ‘*pala moto kudambwe*’ (invite trouble/do something that puts you in trouble) when these idioms were presented in context biased towards an idiomatic interpretation. This could be because at age 9 knowledge of the cultural frames of reference has started emerging so with the help of context children were able to recall the cultural frames of reference involved. However, when these idioms were presented in sentence context and out of context, 9-year old children could only figuratively interpret ‘*taya madzi*’, ‘*ona nsana wanjila*’, ‘*uma mutu*’, ‘*kupha phala*’, ‘*pala moto kudambwe*’ and ‘*onela pakhosi*’. This could be because these idioms involve daily activities of human experience and form part of daily discourse as such children of this age have developed knowledge of the cultural frames of reference guiding the use of these idioms. Nine-year old children could not figuratively interpret ‘*malo oduka mphepo*’ (secluded place) ‘*gona pamphepo*’ (not married), ‘*temetsa nkhwangwa pamwala*’ (refuse sternly), ‘*tsina khutu*’ (warn), ‘*dyela masuku pamutu*’ (exploit someone), ‘*kadaunda madzi*’ (nsima), ‘*galu wakuda*’ (famine), ‘*tsala madzi amodzi*’ (be about to die or to be caught), ‘*mwana alilenji*’ (lack nothing), ‘*ika kampeni kumphasa*’ (plot against someone), and ‘*tsamila dzanja*’ (die) possibly because some of these idioms involve actions in which only grown up children take part or the activities in question involve adults only or the idioms are based on obsolete cultural frames of reference. This made it difficult for 9-year old children to interpret the idioms figuratively because the idioms involve practices that are unfamiliar to the children therefore, the children lacked knowledge of the cultural frames of reference for the concerned idioms. Vulchanova, Vulchanov and Stankova (2011) have also observed that children find it difficult to interpret idioms that involve practices that are unfamiliar to children. In this light, it can be concluded that 9-year old children are able to interpret idioms involving daily activities of human experience when the idioms are presented even without supporting context.

In addition to the idioms discussed above, 12-year old and 14-year old children were also able to figuratively interpret '*khala maso*', (be alert), '*gwilitsa fuwa lamoto*' (cheat/fool someone), '*lowa mkanyumba komata*' (be counselled/receive advice) when these idioms were presented in supportive context. However, when the idioms were presented out of context 12-year old children could only figuratively interpret '*mwana alilenji*' (lack nothing), '*tsala madzi amodzi*' (be about to die or to be caught), '*temetsa nkhwangwa pamwala*' (refuse sternly), '*galu wakuda*' (famine), '*tsamila dzanja*' (die), '*lowa mkanyumba komata*' (be counselled/receive advice) in addition to the idioms that 9-year old children were able to interpret out of context. Twelve years old children were able to interpret these idioms because they involve activities in which children of this age take part and also the idioms have clear cultural frames of reference such that children could easily relate the idiom to the cultural practice involved. The 12-year old children could not interpret '*khala maso*' (be alert), '*malo oduka mphepo*' (secluded place), '*gona pamphapo*' (not married), '*ika kampeni kumphasa*' (plot against someone), '*dyela masuku pamutu*' (exploit someone), '*kadaunda madzi*' (nsima), '*tsina khutu*' (warn) and '*gwilitsa fuwa la moto*' (cheat/fool someone) when these idioms were presented out of context. This could be the case because some of the idioms involve activities of adults only which are unfamiliar to the children while some of the idioms are based on obsolete cultural frames of reference. In this case 12-year old children found it difficult to interpret the idioms because they had no sociocultural knowledge guiding the use of the idioms. Hence, it can be concluded that 12-year old children are able to figuratively interpret idioms that have clear cultural frames of reference and those that involve activities in which children of this age take part in addition to idioms involving daily activities of human experience.

Although all the other age groups could not interpret '*khala maso*' (be alert), '*malo oduka mphepo*' (secluded place), '*gona pamphapo*' (not married), '*ika kampeni kumphasa*' (plot against someone), '*tsina khutu*' (warn), '*dyela masuku pamutu*' (exploit someone), '*gwilitsa fuwa la moto*' (cheat/fool someone) and '*kadaunda madzi*' (nsima), 14-year old children were able to interpret these idioms out of context except '*kadaunda madzi*' (nsima) and '*dyela masuku pamutu*' (exploit someone). This suggests that 14-year old

children are able to interpret idioms that are based on obsolete cultural frames of reference and also those that involve adult activities. This might be the case because among the Cewa 14-year old children are considered adults because at this age the child has already undergone initiation so the child is allowed to participate in most cultural activities. Therefore, 14-year old children have wide sociocultural knowledge to infer from when interpreting idioms. However, failure to interpret ‘*kadaunda madzi*’ (nsima) and ‘*dyela masuku pamutu*’ (exploit someone) suggests that children aged 14 still lack knowledge of the cultural frames of reference guiding the use of certain idioms. Failure to interpret ‘*kadaunda madzi*’ (nsima) and ‘*dyela masuku pamutu*’ (exploit someone) by 14-year old children could be due to lack of exposure to the cultural frames of reference guiding the use of these idioms. Vulchanova, Vulchanov and Stankova (2011) have observed that some children might not get sufficiently rich input to infer the meanings of the idioms that are culturally based. Thus, it can be said that at 14 years children have not yet acquired sufficient knowledge to interpret some idioms that are based on obsolete cultural practices although at this age children are able to interpret most idioms based on obsolete cultural frames of reference.



7.4 Chapter summary

In this chapter the age at which children are able to recognize idiomatic expressions as instances of use has been established. The chapter has also presented the following strategies; repeating the idiom, inferring from linguistic context, using linguistic knowledge, using world knowledge and experience, inferring from sociocultural context, reasoning, paraphrasing the idiom, using linguistic context from experiment 1 and guessing as used by Cewa speaking children to interpret idioms. It has argued that inference from the sociocultural context is the only strategy that is successful in idiom interpretation and that children resort to other strategies when they realize that their knowledge of the cultural frames of reference is wanting. The chapter has also established that idiom acquisition develops in stages. There are certain idioms that can only be acquired when a child reaches a specific age. It has also established that idiom acquisition starts with idioms of daily activities of human experience progressing to

idioms with obsolete cultural frames of reference. The next chapter will present children's ranking of the language constraints leading to the employed strategies and the idiom acquisition patterns alluded to in this chapter.



Chapter Eight

Children's reranking of constraints in idiomatic meaning acquisition in Cicewa

8.0 Introduction

This chapter demonstrates how children discover constraint ranking in the acquisition of idiomatic meanings. To demonstrate this, the chapter adopts Optimality Theory described in Chapter Three of this thesis. It also draws from aspects of Systemic Functional Linguistics such as social context and transitivity. The chapter presents constraint ranking adopted in this study to account for the acquisition of Cicewa idiomatic meanings. It also demonstrates how Cicewa speaking children rerank constraints in the acquisition of idiomatic meanings. It also proposes the ranking of constraints at the initial state of idiomatic meaning acquisition. It also establishes which constraint is demoted first and which constraint is demoted last in the process of acquiring idiomatic meanings. The chapter also clarifies on the conflicting findings regarding the development of idiomatic meaning acquisition in children. It establishes the age at which children are able to recognize idiomatic expressions. It also establishes the age at which idiomatic meaning acquisition starts in children and also the age at which children's knowledge of idiomatic expressions starts to resemble that of adults. Lastly, the chapter proposes and describes five developmental stages in idiomatic meaning acquisition.

8.1 Constraint ranking in Cicewa

Optimality Theory (OT) assumes that all constraints are universal and that a grammar is the ranking of universal constraints. Each language has its own ranking for these constraints. The constraints assess the form of a candidate and its relationship to the input. For a given input, the Generator generates the candidate set which is subjected to Evaluator where the candidates are compared by applying a hierarchy of violable constraints to determine the optimal member of the output candidates. However, the form of OT used in semantics/pragmatics is different from the form of OT used in phonology,

morphology and syntax. In the latter case OT takes the point of view of the speaker (production) whereas in the former case the point of view of the hearer is taken (comprehension perspective) (Blutner, 2000). In production the speaker selects the optimal form for expressing a given meaning while in comprehension the hearer selects the optimal interpretation for a given form. Further, the bidirectional OT (two-dimensional optimal interpretation), the version of OT Comprehension that is adopted in this thesis to account for idiomatic meaning acquisition, takes the speaker direction as well as the hearer direction (i.e. production and interpretation). It recognizes that hearers do not only consider their own hearer's perspective but also take into account the speaker's perspective and speakers do not only proceed from their own speaker's perspective but also take into account the hearer's perspective. Thus, forms and meanings are not considered separately and what we have is a pair consisting of a form and a content (meaning). In this case, it is the form-meaning pair $\langle f, m \rangle$ that has to be optimal. van Rooy (2003: 2) states that in bidirectional OT 'the form-meaning pair $\langle f, m \rangle$ is optimal if and only if it satisfies both the S principle (i.e. is optimal for the speaker) and the H principle (i.e. is optimal for the hearer)'. In this vein, Kamanga (2007; 2007/8) has identified some constraints that interact in the interpretation of Cicewa idiomatic expressions to determine the optimal form-meaning pairs. She has identified *Relevance Principle*, *Avoid Contradiction*, *Well-formedness Condition* (a syntactic condition), **BLOCK* (a meta-linguistic constraint), *S Principle* and *H Principal* as violable constraints that assess the form-meaning pairs in the interpretation of idiomatic expressions. She has also proposed the ranking of the constraints as follows:

*BLOCK >> Relevance Principle >> Avoid Contradiction >> Well-formedness Condition

It is this ranking of constraints that will form the basis of our explanation of how children rerank constraints in idiomatic meaning acquisition in Cicewa. However, Kamanga ranked *S Principle* and *H Principal* as dominated by *Relevance Principle* but she did not rank them in relation to *Avoid Contradiction* and *Well-formedness Condition*. To fully account for idiomatic meaning acquisition *S Principle* and *H Principal* will be ranked in

relation to *Avoid Contradiction* and *Well-formedness Condition*. In addition, additional constraints playing a role in Cicewa idiom interpretation will be identified and included in the proposed ranking. The constraints listed above will be defined as we demonstrate how Cicewa speaking children learn the constraints interacting in the interpretation of Cicewa idiomatic expressions.

8.2 Children's learning of constraints

Optimality Theory assumes that children are born with a universal set of constraints which needs to be reranked and that the primary duty of the language learner is to determine the dominance ranking of these constraints which is particular to the target language (Tesar & Smolensky, 1993). Reranking involves demotion of constraint rather than promotion of constraint. When the learner detects the difference between his/her output and the output of the target adult grammar, s/he lowers the rankings of the constraints that favor his/her own output in favor of the constraints that favor the output of the target adult grammar one constraint at a time. Reranking stops when the outputs of the developing grammar and those of the target adult grammar are identical. With this in mind let us now see how Cicewa speaking children rerank constraints in the acquisition of Cicewa idiomatic meaning.

8.2.1 Constraint reranking in the acquisition of idiomatic expressions with both literal and idiomatic meanings

In Cicewa there are some idioms that are well formed which have literal meanings as well as idiomatic meanings. These two meanings are used in different contexts. The literal meanings are used in unmarked contexts while the idiomatic meanings are used in marked contexts. When the literal meaning is used in the marked context, the meaning becomes inappropriate. Similarly, when the marked meaning is used in the unmarked context, the meaning becomes inappropriate. However, it is not known how children learn the idiomatic meanings of such idioms. Therefore, this section discusses how

children rerank constraints in the acquisition of idiomatic expressions with both literal meanings and idiomatic meanings.

The first idiomatic expression to be considered will be '*taya madzi*' (throw away water = 'urinate'). The expression '*taya madzi*' (throw away water = 'urinate') can be literally interpreted as 'throw water away' or idiomatically interpreted as 'urinate'. This gives us two form-meaning pairs $\langle f, m \rangle = \text{'throw water away'}$ and $\langle f', m' \rangle = \text{'urinate'}$. The form-meaning pair $\langle f, m \rangle = \text{'throw water away'}$ is unmarked while the form-meaning $\langle f', m' \rangle = \text{'urinate'}$ is marked. A marked form cannot be associated with unmarked meaning because the unmarked meaning cannot convey the intended sense. Similarly, unmarked form cannot be associated with a marked meaning for the same reason. However, in the literal meaning 'throw water away', the words '*taya*' (lose or throw away) and '*madzi*' (water) contribute their meanings to the unmarked interpretation of the expression '*taya madzi*'. In the idiomatic meaning 'urinate' the words '*taya*' (lose or throw away) and '*madzi*' (water) do not contribute their meanings to the marked interpretation of the expression '*taya madzi*'. Thus, the marked form-meaning pair $\langle f', m' \rangle = \text{'urinate'}$ does not satisfy the constraint called *Full Interpretation* (FULL-INT) which demands that lexical items must contribute to the interpretation of a structure (Legendre, 2001). However, this form-meaning pair satisfies a syntactic condition called *Well-formedness Condition* which requires structures to satisfy the syntactic rules. This form-meaning pair also satisfies another constraint called *Avoid Contradiction* which demands us not to produce contradictory utterances.

When the idiomatic expression '*taya madzi*' was presented in the story context, sentence context and out of context, only the idiomatic meaning 'urinate' was selected by 9 to 14 years old children although it violated *Full Interpretation*. These children arrived at the interpretation 'urinate' by considering the relevance of the form-meaning pairs $\langle f', m' \rangle = \text{'urinate'}$, $\langle f', m \rangle = \text{'throw water away'}$ and $\langle f', m'' \rangle = \text{drink thobwa (sweet beer)}$ in the sociocultural context in which the idiomatic expression '*taya madzi*' is consumed. Water and urine share the characteristic liquid and also there is similarity in the way someone gets rid of dirty water from a container and what happens when a male person dispenses

urine. Basing on these similarities, the word ‘*madzi*’ (a liquid which can only be contained in a bucket or container) in the idiomatic expression ‘*taya madzi*’ is metaphorically extended to ‘urine’ (a liquid which can only be contained in an individual or some animal). Therefore, in this sociocultural context the form-meaning pair $\langle f', m' \rangle =$ ‘urinate’ is the only form-meaning pair that is appropriate thereby satisfying the *Relevance Principle* which requires that sentences should be interpreted as relevantly as possible. Wilson and Sperber (2004) state that a proposition is optimally relevant to an audience if and only if it is relevant enough to be worth the audience’s processing effort and it is the most relevant one compatible with communicator’s abilities and preferences. In this case, the hearer assumes that the speaker has succeeded to be relevant and the hearer selects the most ‘optimally relevant’ proposition from all the propositions that the utterance could express. The *Relevance Principle* in this regard is different from Grice’s (1961; 1989) maxim of relevance which is a qualitative condition in the notion of implicature and it does not allow different interpretations to be compared with one another to see how far they are relevant. Sperber and Wilson’s relevance replaces Grice’s notion of implicature and it is ‘a two-stage process in which the addressee recovers first an explicature—an inference or series of inferences, which enrich the under-determined form of the utterance to a full propositional form, and then an implicature—an inference which provides the addressee with the most relevant interpretation of the utterance’ (Grundy 2000:105).

Although the form-meaning pair $\langle f', m' \rangle =$ ‘urinate’ is relevant in the sociocultural context in which the idiomatic expression ‘*taya madzi*’ is consumed, it was not consistent with the linguistic context provided by the story. In this case, the form-meaning pair $\langle f', m' \rangle =$ ‘urinate’ violated the constraint *CONSISTENT* which demands us to be consistent with the context (...). Despite violating the constraint *CONSISTENT* the form-meaning pair $\langle f', m' \rangle =$ ‘urinate’ was still optimal in the sociocultural context in question for both the speaker and the hearer, thus, satisfying *S Principle* (which demands that an expression should be optimal for the speaker) and *H Principle* (which demands that an expression should be optimal for the hearer). On the other hand, the form-meaning pair $\langle f', m'' \rangle =$ drink thobwa (sweet beer) satisfied the constraint *CONSISTENT* but it was not

appropriate in the sociocultural cultural context in question hence it violated the *Relevance Principle*. This form-meaning pair also violated S Principle although it satisfied H Principle because it is not what the speaker intended to communicate. In the interpretation of ‘*taya madzi*’, 9 to 14 years old children also avoided selecting the form-meaning pair $\langle f', m \rangle =$ ‘throw water away’ when this expression was presented in the story context, sentence context and out of context. This was the case because the form-meaning pair $\langle f', m \rangle =$ ‘throw water away’ was not consistent with the linguistic context at hand and also it was not appropriate in the sociocultural context in which the idiomatic expression ‘*taya madzi*’ is consumed, therefore, the form-meaning pair $\langle f', m \rangle =$ ‘throw water away’ violated both *Relevance Principle* and *CONSISTENT*. The form-meaning pair $\langle f', m \rangle =$ ‘throw water away’ was also not optimal for the speaker because it could not communicate what the speaker intended to communicate, therefore it violated *S Principle*. In this case it can be suggested that the constraint *Relevance Principle* dominates constraints *CONSISTENT* and *S Principle*, *H Principle*, *Full Interpretation* and *Well-formedness Condition* in 9 to 14 years old children. This explains why children in the age range 9 – 14 years mainly employed the strategy ‘inferring from sociocultural context’ described in section 7.2.1.5 in Chapter Seven. It can also be said that *S Principle* and *H Principle* dominate *CONSISTENT* which dominate *Full Interpretation*.

In Cicewa the constraints *S Principle*, *H Principle*, the *Relevance Principle*, *CONSISTENT*, *Well-formedness Condition*, *Full Interpretation* and *Avoid Contradiction* interacting in the interpretation of idioms can be said to be ranked as follows:

Relevance Principle >> S Principle, H Principle >> Avoid Contradiction >>
 CONSISTENT >> Full Interpretation >> Well-formedness Condition

The discussion on how children aged 9 to 14 years interpreted the idiomatic expression ‘*taya madzi*’ in the story context, sentence context and out of context is summarized in Tableau (1) below. Only the form-meaning pairs with a marked form have been considered. The constraints are ranked across the top right, going from highest ranked on the left to lowest ranked on the right. The top left-hand cell shows the input. Candidates

show up in the leftmost column, with bidirectionally optimal candidate indicated by the symbol \mathfrak{U} . The candidate with minimal violations is the bidirectionally optimal candidate. Violations are indicated by asterisks (*).

1.

Taya madzi	RELEVANCE	S PRINCIPLE	H PRINCIPLE	AVOID C	CONSISTENT	FULL INT	WELLFORMED
\mathfrak{U} a.[urinate] ($\langle f', m' \rangle$)					*	*	
b.[throw water away] ($\langle f', m \rangle$)	*	*			*		
c.[drink thobwa (sweet beer)] ($\langle f', m'' \rangle$)	*	*				*	

Note: RELEVANCE short for Relevance Principle, AVOID C short for Avoid Contradiction, FULL INT short for Full Interpretation and WELLFORMED for Well-formedness Condition.

The tableau shows that only the form-meaning pair $\langle f', m' \rangle$ is bidirectionally optimal because it has minimal violations and also it violates low ranked constraints (*CONSISTENT* and *Full Interpretation*) and satisfies highly ranked constraints (*Relevance Principle*, *S Principle* and *H Principle*). The other form-meaning pairs $\langle f', m \rangle$ and $\langle f', m'' \rangle$ have been ruled out completely because they have high number of violations and also they violate highly ranking constraints (*Relevance Principle*, *S Principle* and *H Principle*). However, the form-meaning pair $\langle f', m'' \rangle$ = drink *thobwa* (sweet beer) was selected by 4-year old and 6-year old children when the idiomatic expression ‘*taya madzi*’ was presented in the story context. This shows that the ranking of constraints by 4-year old and 6-year old children is different from the way 9 to 14-year old children rank constraints. For instance, the form-meaning pair $\langle f', m'' \rangle$ = drink *thobwa* (sweet beer) was

optimal in the story context for 4-year old and 6-year old children because it was consistent with the linguistic context provided in the story thus it satisfied the constraint *CONSISTENT*. This form-meaning pair also satisfied *H Principle* because it was optimal for the hearer. This suggests that *CONSISTENT* dominates *Relevance Principle* in 4-year old and 6-year old children. This explains why 4-year old and 6-year old children selected more ‘filler’ responses (a response that showed that the global meaning of the story is not grasped although the literal meaning is recognized as inappropriate) when the idioms were presented in the story context in Experiment 1. It also explains why 6-year old children employed the strategy ‘inferring from linguistic context’ more than any other age group. Therefore, the following ranking of constraints can be proposed for 4 to 6-year old children:

CONSISTENT >> Relevance Principle >> S Principle, H Principle >> Avoid Contradiction >> Full Interpretation >> Well-formedness Condition

The discussion on how 4-year old and 6-year old children interpreted ‘*taya madzi*’ in the story context is summarize in Tableau (2) below.

2.

Taya madzi	CONSISTENT	RELEVANCE	S PRINCIPLE	H PRINCIPLE	AVOID C	FULL INT	WELLFORMED
a.[urinate] (<f',m'>)	*					*	
b.[throw water away] (<f',m>)	*	*	*				
c.[drink thobwa (sweet beer)] (<f',m''>)		*	*			*	

The tableau shows that the form-meaning pair $\langle f',m'' \rangle$ is the only bidirectionally optimal pair because it satisfies the highly ranking constrain *CONSISTENT* although it has more violations. The form-meaning pair $\langle f',m' \rangle$ has been ruled out because it violates the highly ranking constrain *CONSISTENT* although it has minimal violations. The form-meaning pair $\langle f',m \rangle$ has been completely ruled out because it has more violations and at the same time it violates highly ranking constraint *CONSISTENT*. However, when the idiomatic expression ‘*taya madzi*’ was presented in sentence context and out of context 4-year old and 6-year old children could not interpret it instead they gave back the words in the idiomatic expression as its meaning. These children gave ‘*taya madzi*’ as the meaning of the expression thereby deriving form-meaning pair $\langle f',m'' \rangle = \text{taya madzi (idiom)}$. Children aged 4 and 6 years gave ‘*taya madzi*’ (idiom) although it was not consistent with the linguistic context in sentence context. This could be the case because they realized that ‘*taya madzi*’ was a marked expression that calls for a marked meaning but they could not interpret it idiomatically because, as already pointed out in this thesis, knowledge of the cultural frames of reference guiding the use of the idiom has not yet developed at this age. Therefore, the meta-linguistic constraint that acts as a block mechanism termed **BLOCK* by Beaver & Lee (2003), which is the highest ranking constraint in Cicewa (Kamanga 2007; 2007/8) blocked the other form-meaning pairs $\langle f',m' \rangle$ and $\langle f',m \rangle$ thereby making the form-meaning pair $\langle f',m'' \rangle = \text{taya madzi (idiom)}$ optimal. Beaver (2004: 39) states that ‘a form-meaning pair may not be dominated by a bidirectionally optimal candidate in either direction of optimization in the tableau consisting of all constraints except **BLOCK*’. Thus **BLOCK* is still a highest ranking constraint in 4-year old and 6-year old children. This explains why 4-year old and 6-year old children employed the strategy ‘repeating the idiom’ when idioms were presented in sentence context and out of context. Therefore, the following ranking of constraints can be proposed for 4-year old and 6-year old children.

**BLOCK* >> *CONSISTENT* >> Relevance Principle >> S Principle, H Principle
 >> Avoid Contradiction >> Full Interpretation >> Well-formedness Condition

The discussion on how 4-year old and 6-year old children interpreted ‘*taya madzi*’ in the sentence context and out of context has been summarized in Tableau (3) below.

3.

Taya madzi	*BLOCK	CONSISTENT	RELEVANCE	S PRINCIPLE	H PRINCIPLE	AVOID C	FULL INT	WELLFORMED
a.[urinate] (<f',m'>)	*	*					*	
b.[throw water away] (<f',m>)	*	*	*	*				
✓c.[taya madzi (idiom)] <f',m'''>		*	*	*			*	

The tableau shows that only the form-meaning pair <f',m'''> is bidirectionally optimal because it satisfies the highest ranking constraint (*BLOCK) although it incurs more violations. The form-meaning pairs <f',m'> has been ruled out although it has minimal violations because it violates highly ranking constraints (*BLOCK and CONSISTENT). The form-meaning pair <f',m> has been completely ruled out because it has more violations and at the same time it violates highly ranking constraints (*BLOCK and CONSISTENT).

Children’s ranking of constraints can also be demonstrated through the way children interpreted the idiomatic expression ‘*gona pamphopo*’ (sleep where it’s cold = ‘not married’). This idiom can be interpreted literally as ‘sleep at a cold place’ or idiomatically as ‘not married’. This gives us two form-meaning pairs, the unmarked form-meaning pair <f,m> and the marked form-meaning pair <f',m'>. However, just like in ‘*taya madzi*’ the marked form cannot be associated with unmarked meaning because the unmarked meaning cannot convey the intended sense and also the unmarked form cannot be associated with the marked meaning for the same reason. In the unmarked form-

meaning pair $\langle f, m \rangle$ the meaning can be derived compositionally while in the marked form-meaning pair $\langle f', m' \rangle$ it cannot. This means the form-meaning pair $\langle f', m' \rangle =$ 'not married' violates the constraint *Full Interpretation* although it satisfies constraints *Well-formedness Condition* and *Avoid Contradiction*.

When the idiomatic expression '*gona pamphepo*' was presented in the story context all 14-year old children idiomatically interpreted it as 'not married' because this interpretation was the most appropriate in the marked context in which the expression '*gona pamphepo*' is consumed although the expression was not consistent with the provided linguistic context. In this case, the form-meaning pair $\langle f', m' \rangle =$ 'not married' violated the constraint *CONSISTENT* but satisfied the constraint *Relevance Principle*. The form-meaning pair $\langle f', m' \rangle =$ 'not married' also satisfied *S Principle* and *H Principle* in the marked context. Only two 12-year old children and two 9-year old children were able to idiomatically interpret '*gona pamphepo*' in the story context. Children aged 14 were also able to idiomatically interpret '*gona pamphepo*' when it was presented in the sentence context and out of context while 12-year old and 9-year old children could not.

The discussion on how 14-year old and some 12-year old and 9-year old children arrived at the idiomatic interpretation 'not married' in the story context has been summarized in Tableau (4) below.

4.

Gona pamphepo	RELEVANCE	S PRINCIPLE	H PRINCIPLE	AVOID C	CONSISTENT	FULL INT	WELLFORMED
a.[not married] (⟨f',m'⟩)					*	*	
b.[sleep at a cold place] (⟨f',m⟩)	*	*			*		
c.[bad behaviour] (⟨f',m''⟩)	*	*				*	

The tableau shows that the form-meaning pair ⟨f',m'⟩ is the only bidirectionally optimal candidate as it has minimal violations and also it satisfies the highly ranked constraints (*Relevance Principle*, *S Principle* and *H Principle*). The form-meaning pairs ⟨f',m⟩ and ⟨f',m''⟩ have been ruled out completely because they violate the highly ranked constraints (*Relevance Principle*, *S Principle* and *H Principle*). These form-meaning pairs are also ruled out because they have more violations. However, the form-meaning pair ⟨f',m⟩ = ‘sleep at a cold place’ was selected by two 12-year old children, one 9-year old child and three 6-year old children when the idiomatic expression ‘gona pamphepo’ was presented in the story context. The form-meaning pair ⟨f',m⟩ = ‘sleep at a cold place’ was favored by these children possibly because it was the only form-meaning pair that could be compositionally interpreted and it satisfied the constraint *Full Interpretation* although it violated *CONSISTENT* and *S Principle*. These children avoided the form-meaning pair ⟨f',m''⟩ = ‘bad behavior’ possibly because it could not be compositionally derived from the individual words in the idiomatic expression although it was consistent with the provided linguistic context. The form-meaning pair ⟨f',m'⟩ = ‘not married’ was also not preferred by these children because it could also not be derived compositionally and at the same time these children could not see the relevance of this meaning because they lack knowledge of the sociocultural context in which the idiomatic expression is

consumed. In this case, it can be said that the constraint *Full Interpretation* dominates *Relevance Principle*, *CONSISTENT* and *S Principle* in some 12-year old children, 9-year old children and 6-year old children. This could explain why children aged 12 years and below produced more literal responses than 14-year old children with 9-year old children producing the highest number when the idioms were presented in the story context, sentence context and out of context. Therefore, the following ranking can be proposed for 9 and 12-year old children.

Full Interpretation >> Relevance Principle >> S Principle, H Principle >> Avoid Contradiction >> CONSISTENT >> Well-formedness Condition

For 6-year old children the following ranking can be proposed.

Full Interpretation >> CONSISTENT >> Relevance Principle >> S Principle, H Principle >> Avoid Contradiction >> Well-formedness Condition

The discussion on how 9 and 12-year old children interpreted ‘*gona pamphopo*’ in the story context has been summarized in Tableau (5) below and for 6-year old children in Tableau (6) below.

5.

Gona pamphepo	FULL INT	RELEVANCE	S PRINCIPLE	H PRINCIPLE	AVOID C	CONSISTENT	WELLFORMED
a.[not married] ⟨f',m'⟩	*					*	
b.[sleep at a cold place] ⟨f',m⟩		*	*			*	
c.[bad behaviour] ⟨f',m''⟩	*	*	*				

The tableau shows that the form-meaning pair ⟨f',m'⟩ has been ruled out although it has the lowest number of violations because it violates a highly ranking constraint (*Full Interpretation*). The form-meaning pair ⟨f',m''⟩ has been completely ruled out because it violates the highly ranking constraints (*Full Interpretation, Relevance Principle and S Principle*) and also it has a high number of violations. The tableau shows that the form-meaning pair ⟨f',m⟩ is the only bidirectionally optimal pair because it satisfies a highly ranked constraint (*Full Interpretation*) although it has more violations than the form-meaning pair ⟨f',m'⟩. However, in Tableau (6) below the story is different.

6.

Gona pamphepo	FULL INT	CONSISTENT	RELEVANCE	S PRINCIPLE	H PRINCIPLE	AVOID C	WELLFORMED
a.[not married] ⟨f,m'⟩	*	*					
♫b.[sleep at a cold place] ⟨f,m⟩		*	*	*			
c.[bad behaviour] ⟨f,m''⟩	*		*	*			

The tableau shows that the form-meaning pair ⟨f,m⟩ is the only bidirectionally optimal pair because it satisfies a highly ranked constraint (*Full Interpretation*) despite incurring more violations than what the form-meaning ⟨f,m'⟩ incurs. The form-meaning pair ⟨f,m'⟩ has been completely ruled out because it violates highly ranked constraints (*Full Interpretation* and *CONSISTENT*) although it has the lowest number of violations. The form-meaning pair ⟨f,m''⟩ has also been ruled out because it violates a highly ranking constraint (*Full Interpretation*).

Although the form-meaning pair ⟨f,m''⟩ = ‘bad behavior’ was completely ruled out in the way 14-year old, 12-year old, 9-year old and 6-year old children interpreted the idiomatic expression ‘*gona pamphepo*’ it was preferred by 4-year old children when this idiomatic expression was presented in the story context. The form-meaning pair ⟨f,m''⟩ = ‘bad behavior’ was preferred by 4-year old children possibly because it was consistent with the linguistic context at hand thereby satisfying *CONSISTENT*. Although this interpretation satisfied *CONSISTENT*, it violated *Relevance Principle* because it was not appropriate in the marked context in which the expression ‘*gona pamphepo*’ is consumed. This form-meaning pair also violated *S Principle* because it was not optimal

for the speaker. The summary on how 4-year old children interpreted ‘*gona pamphepo*’ in the story context is given in Tableau (7) below.

7.

Gona pamphepo	CONSISTENT	RELEVANCE	S PRINCIPLE	H PRINCIPLE	AVOID C	FULL INT	WELLFORMED
a.[not married] (<f,m’>)	*					*	
b.[sleep at a cold place] (<f,m>)	*	*	*				
✓c.[bad behaviour] (<f,m’’>)		*	*			*	

The tableau shows that the form-meaning pair <f,m’> is ruled out although it has low violations because it violates a highly ranking constraint (*CONSISTENT*). The form-meaning pair <f,m> is completely ruled out because it has more violations and at the same time it violates a highly ranking constraint (*CONSISTENT*). The form-meaning pair <f,m’’> is the only bidirectionally optimal pair because it satisfies a highly ranking constraint (*CONSISTENT*) although it has more violations than what the form-meaning pair <f,m’> has.

The discussion on how children interpreted the idiomatic expressions ‘*taya madzi*’ and ‘*gona pamphepo*’ reveal that the constraint *CONSISTENT* is highly ranked in 4 years old and 6 years old children dominating *Relevance Principle*, *S Principle*, *H Principle* and *Avoid Contradiction*. However, by the age 12 the constraint *CONSISTENT* is demoted and rerank below the constraint *Avoid Contradiction*. The discussion has also revealed that the ranking of the constraint *Full Interpretation* is not yet fixed by the age 12 as there was variation in the way 9-year old and 12-year old children interpreted the idiomatic expressions ‘*taya madzi*’ and ‘*gona pamphepo*’. For instance, 9-year old children, 12-

year old children and 14-year old children idiomatically interpreted the idiomatic expression ‘*taya madzi*’ as ‘urinate’ in the story context, sentence context and out of context. In the interpretation of the idiomatic expression ‘*taya madzi*’ the constraint *Full Interpretation* was dominated by the constraint *Avoid Contradiction*. However, this was not the case with 9-year old and 12-year old children when it came to interpreting ‘*gona pamphepo*’. Some 9-year old and 12-year old children literally interpreted ‘*gona pamphepo*’ as ‘sleep at a cold place’ an interpretation that indicated that *Full Interpretation* dominated a highly ranking constraint *Relevance Principle*. This suggests that there is variation in the way 9-year old and 12-year old children rank the constraint *Full Interpretation*. In one situation the constraint *Full Interpretation* can dominate *Relevance Principle* and in the other situation *Full Interpretation* is dominated by *Relevance Principle*. These rankings proposed that the constraint *Full Interpretation* is highly ranked in young children at the initial stage of idiomatic meaning acquisition and that it is demoted as children grow older. Now, to explain the variation in the ranking of the constraint *Full Interpretation* in 12-year old children, it can be suggested that the ranking of the constraint *Full Interpretation* is not yet fixed in children aged 12. At the age 12 the constraint *Full Interpretation* is floating and its ranking is dependent on the nature of the idiomatic expression in question. If the sociocultural context in which the idiomatic expression is consumed is familiar to the children, like it is the case with the idiomatic expression ‘*taya madzi*’, the constraint *Full Interpretation* can be demoted and be rerank below the constraint *Avoid Contradiction*. But if the sociocultural context in which the idiomatic expression is consumed is not familiar to the children, like it is the case with the idiomatic expression ‘*gona pamphepo*’, the constraint *Full Interpretation* remains in its original position dominating *Relevance Principle*. This could explain why 12-year old children still produce literal responses of idiomatic expressions. Therefore, two constraint rankings can be proposed for 12-year old children.

Relevance Principle >> S Principle, H Principle >> Avoid Contradiction >>
 CONSISTENT >> Full Interpretation >> Well-formedness Condition

in which the constraint *Full Interpretation* is demoted and reranked below *CONSISTENT* and

Full Interpretation >> Relevance Principle >> S Principle, H Principle >> Avoid Contradiction >> *CONSISTENT* >> Well-formedness Condition

in which the constraint *Full Interpretation* occupies its original position and dominates *Relevance Principle* as it is in 6-year old children. However, the discussion on how children interpreted idiomatic expressions ‘*taya madzi*’ and ‘*gona pamphopo*’ indicates that the ranking of the constraint *Full Interpretation* is fixed in 14-year old children and it is demoted and reranked below *CONSISTENT*. Basing on this finding, it can be proposed that *Full Interpretation* actually dominates *Relevance Principle* in 9-year old children.

The discussion on how children interpreted idiomatic expressions ‘*taya madzi*’ and ‘*gona pamphopo*’ has also shown that *Full Interpretation* is high ranking in children aged 6 years, dominating *Relevance Principle* and that it gets demoted and reranked below *Relevance Principle* when children are growing up. However, this discussion has not established whether the ranking of the constraint *CONSISTENT* is already fixed in 9-year old children. It was also not established whether the constraint *Full Interpretation* dominates the constraint *CONSISTENT* in 4-year old children. It is hoped that this will be established in the discussion on how children learn to interpret idiomatic expressions that do not have literal meanings presented in the coming section.

8.2.2 Constraint reranking in the acquisition of idiomatic expressions without literal meaning

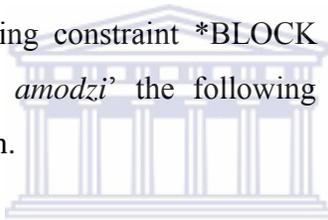
In Cicewa there are some idiomatic expressions that do not have literal meanings. These idiomatic expressions are not well formed because they either violate syntactic rules or they are semantically anomalous to be interpreted. Although these idiomatic expressions cannot be literally interpreted, Cicewa speakers still attach meanings to them, idiomatic meanings. However, it is not known how children learn the meanings attached to such

expressions. Thus, this section demonstrates how children rerank constraints in the process of acquiring idiomatic meanings of ill-formed idiomatic expressions.

The first ill-formed idiomatic expression to be considered is ‘*tsala madzi amodzi*’ (remain one water = ‘be about to die’). The idiomatic expression ‘*tsala madzi amodzi*’ has no literal meaning because its literal meaning (remain one water) contradicts with our world knowledge since it is not possible to count water. The verb ‘*tsala*’ (remain) is an intransitive Material Process which is supposed to occur with Circumstance: location but in the idiomatic expression ‘*tsala madzi amodzi*’ the verb ‘*tsala*’ occurs with a noun ‘*madzi amodzi*’ as Range. In this case, the idiomatic expression ‘*tsala madzi amodzi*’ is ill-formed and uninterpretable hence the form-meaning pair $\langle f, m \rangle =$ ‘remain one water’ violates *Well-formedness Condition* and *Avoid Contradiction*. Although the idiomatic expression ‘*tsala madzi amodzi*’ cannot be literally interpreted, it is possible to idiomatically interpret the expression ‘*tsala madzi amodzi*’ in Cicewa. Cicewa speakers believe that water is a source of life and they equate water with life. So when they hear the expression ‘*tsala madzi amodzi*’ they visualize a bucket/basin containing very little water in it and if the water evaporates no water will remain in the bucket/basin since there is already very little water. With this picture in mind and the knowledge that speakers have that water is a source of life they arrive at the idiomatic meaning ‘be about to die’.

When the idiomatic expression ‘*tsala madzi amodzi*’ was presented in the story context, all 6-year old, 9-year old, 12-year old and 14-year old children idiomatically interpreted it as ‘be about to die’. Only one 4-year old child interpreted it idiomatically and the other three 4-year old children interpreted it literally as ‘remain one water’. Children aged 6 to 14 years interpreted ‘*tsala madzi amodzi*’ as ‘be about to die’ because it was the most appropriate in the sociocultural context in question although it was not consistent with the linguistic context provided by the story. Thus, the form-meaning pair $\langle f', m' \rangle$ violated the constraint *CONSISTENT* and satisfied a high ranking constraint *Relevance Principle*. This form-meaning pair also satisfied constraints *S Principle* and *H Principle* because it was optimal for both the speaker and the hearer. The finding that all 6-year old children idiomatically interpreted the idiomatic expression ‘*tsala madzi amodzi*’ as ‘be about to

die' in the story context suggests that the constraint *CONSISTENT* was ranked below *Relevance Principle*, *S Principle* and *H Principle*. This indicates that the constraint *CONSISTENT* is floating in 6-year old children in that its ranking is not yet fixed. In one context it can remain in its original position dominating *Relevance Principle*, *S Principle* and *H Principle* (as seen in how 6-year old children interpreted 'taya madzi' and 'gona pamphopo' in the story context) and in another context the constraint *CONSISTENT* can be demoted and be reranked below *Relevance Principle*, *S Principle* and *H Principle* as in the way 6 years old children interpreted 'tsala madzi amodzi' in the story context. Although the form-meaning pair ⟨f',m'⟩ = 'be about to die' satisfied the constraints *Relevance Principle*, *S Principle* and *H Principle* it was still ruled out by a highly ranking constraint *Full Interpretation* which dominates *Relevance Principle*, *S Principle* and *H Principle* in 6 years old children. However, the form-meaning pair ⟨f',m'⟩ = 'be about to die' satisfied the highest ranking constraint *BLOCK which made it optimal. In the interpretation of 'tsala madzi amodzi' the following ranking of constraints can be proposed for 6-year old children.



*BLOCK >> Full Interpretation >> Relevance Principle >> S Principle, H Principle >> Avoid Contradiction >> CONSISTENT >> Well-formedness Condition

A summary of how 9 to 14-year old children idiomatically interpreted 'tsala madzi amodzi' is provided in Tableau (8) below and for 6-year old children in Tableau (9) below.

8.

Tsala madzi amodzi	RELEVANCE	S PRINCIPLE	H PRINCIPLE	AVOID C	CONSISTENT	FULL INT	WELLFORMED
a.[be about to die] (⟨f',m'⟩)				*	*	*	*
b.[remain one water] (⟨f',m⟩)	*	*		*	*		*
c.[be seriously injured] (⟨f',m''⟩)	*	*		*		*	*

The tableau indicates that the form-meaning pair ⟨f',m'⟩ is bidirectionally optimal because it has minimal violations and also it satisfies highly ranking constraints (*Relevance Principle, S Principle and H Principle*). The form-meaning pairs ⟨f',m⟩ and ⟨f',m''⟩ have been ruled out completely because they have more violations and also they violate highly ranking constraints (*Relevance Principle, S Principle and H Principle*). As discussed above, the form-meaning pair ⟨f',m'⟩ = 'be about to die' was also optimal for 6-year old children although it satisfied a different constraint as Tableau (9) below indicates.

9.

Tsala madzi amodzi	*BLOCK	FULL INT	RELEVANCE	S PRINCIPLE	H PRINCIPLE	AVOID C	CONSISTENT	WELLFORMED
a.[be about to die] (⟨f',m'⟩)		*				*	*	*
b.[remain one water] (⟨f',m⟩)	*		*	*	*	*	*	*
c.[be seriously injured] (⟨f',m''⟩)	*	*	*	*	*	*		*

The tableau shows that the form-meaning pair ⟨f',m'⟩ is the only bidirectionally optimal candidate because it satisfies the highest ranking constraint (**BLOCK*) although it is ruled out by a high ranking constraint *Full Interpretation*. This form-meaning pair also has the least number of violations. Although the form-meaning pair ⟨f',m⟩ satisfies a highly ranking constraint *Full Interpretation*, it is ruled out by the highest ranking constraint **BLOCK*. The form-meaning pair ⟨f',m''⟩ has been completely ruled out because it violates all high ranking constraints and also it incurs more violations. Despite being ruled out by the constraint **BLOCK*, the form-meaning pair ⟨f',m⟩ = ‘remain one water’ was optimal for 4-year old children in the story context. This might be the case because, as already pointed out in this thesis, 4-year old and 6-year old children have full knowledge of the lexico-grammar but knowledge of metaphor has not yet developed at this age, therefore, they could not realize that selection of metaphor was a meaningful choice that called for non-compositional meaning. As such, the only form-meaning pair that was plausible in the story context was ⟨f',m⟩ = ‘remain one water’ because it could be compositionally derived hence it was selected by 4-year old children although it was not consistent with the linguistic context provided by the story and contradicted our world knowledge. The form-meaning pair ⟨f',m⟩ = ‘remain one water’ satisfied the constraint *Full Interpretation* but it violated the constraint *CONSISTENT*. Therefore, it can be

suggested that the constraint *Full Interpretation* dominates the constraint *CONSISTENT* in 4-year old children. In this light, the following constraint ranking can be proposed for 4-year old children. It can also be suggested that it is this constraint ranking that is present at the initial state in idiomatic meaning acquisition.

Full Interpretation >> CONSISTENT >> Relevance Principle >> S Principle, H Principle >> Avoid Contradiction >> Well-formedness Condition

The discussion on how 4-year old children interpreted ‘*tsala madzi amodzi*’ in the story context is summarized in Tableau (10) below.

10.

Tsala madzi amodzi	FULL INT	CONSISTENT	RELEVANCE	S PRINCIPLE	H PRINCIPLE	AVOID C	WELLFORMED
a.[be about to die] (⟨f',m'⟩)	*	*				*	*
☞b.[remain one water] (⟨f',m⟩)		*	*	*		*	*
c.[be seriously injured] (⟨f',m''⟩)	*		*	*		*	*

The tableau indicates that the form-meaning pair ⟨f',m⟩ is bidirectionally optimal pair because it satisfies the highly ranking constrain (*Full Interpretation*) although it has incurred high number of violations. The form-meaning pair ⟨f',m''⟩ has been ruled out because it violates a highly ranking constraint (*Full Interpretation*) and also it has high number of violations. The form-meaning pair ⟨f',m'⟩ has been ruled out completely because it violates highly ranking constraints (*Full Interpretation* and *CONSISTENT*) although it has incurred minimal violations.

When the idiomatic expression ‘*tsala madzi amodzi*’ was presented in sentence context and out of context 4-year old and 6-year old children could not idiomatically interpret ‘*tsala madzi amodzi*’. In the sentence context, two 6-year old children interpreted ‘*tsala madzi amodzi*’ as ‘it has Newcastle’ because this interpretation was consistent with the linguistic context provided by the sentence. The other two 6 years old children and all 4-year old children gave the words in the idiomatic expression ‘*tsala madzi amodzi*’ as its meaning in both sentence context and out of context although the form-meaning pair $\langle f, m''' \rangle$ ‘*tsala madzi amodzi* (idiom)’ was not consistent with linguistic context in the sentence. This could be the case because they realized that ‘*tsala madzi amodzi*’ was a marked expression that calls for a marked meaning but they could not interpret it idiomatically because knowledge of the cultural frames of reference guiding the use of the idiomatic expression has not yet developed at this age. So, the meta-linguistic constraint **BLOCK* blocked the other form-meaning pairs $\langle f, m \rangle$ = ‘remain one water’ and $\langle f, m' \rangle$ = ‘be about to die’ in favor of the form-meaning pair $\langle f, m''' \rangle$ ‘*tsala madzi amodzi* (idiom)’. The summary on how 4-year old and 6-year old children interpreted the idiomatic expressions ‘*tsala madzi amodzi*’ is given in Tableau (11) below.

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11.

Tsala madzi amodzi	*BLOCK	FULL INT	CONSISTENT	RELEVANCE	S PRINCIPLE	H PRINCIPLE	AVOID C	WELLFORMED
a.[be about to die] ($\langle f, m' \rangle$)	*	*	*				*	*
b.[remain one water] ($\langle f, m \rangle$)	*		*	*	*		*	*
✓c.[<i>tsala madzi amodzi</i> (idiom) $\langle f, m''' \rangle$		*	*	*	*		*	*

The tableau shows that the form-meaning pair ⟨f',m'⟩ is completely ruled out although it has minimal violations because it violates highly ranking constraints (**BLOCK*, *Full Interpretation* and *CONSISTENT*). The form-meaning pair ⟨f',m⟩ has also been ruled out because it has more violations and also it violates the highest ranking constraint (**BLOCK*). The form-meaning pair ⟨f',m'''⟩ has more violations but it is the only bidirectionally optimal pair because it satisfies the highest ranking constraint (**BLOCK*).

Children's ranking of constraints can also be demonstrated through the way children interpreted 'ona nsana wanjila' ('see the back of the road' = go back/return). The idiomatic expression 'ona nsana wanjila' ('see the back of the road' = go back/return) has no literal meaning because it contradicts with our world knowledge. The idiomatic expression 'ona nsana wanjila' is also ill-formed in that it contains a verb of Mental Process 'ona' (see) with an object which has no front or back '(njira)' (road/footpath) as Phenomenon. 'Njira' cannot be perceived as having a back as this contradicts our world knowledge. In this case, the form-meaning pair ⟨f',m'⟩ = go back/return violates *Avoid Contradiction* in that it presents contradicting information. This form-meaning pair also violates *Well-formedness Condition* because it is ill-formed. However, Chichewa speakers still assign an idiomatic meaning to the idiomatic expression 'ona nsana wanjila' despite being ill-formed and contradictory because when someone is walking back to where s/he came from, s/he (re)traces the route s/he used when coming and in the rural areas of Malawi there are mostly footpaths that have no tarmac. Thus, the person can actually see her/his footprints s/he made when coming. The part of the road that one actually sees, with the footprints, is perceived as its back hence the interpretation 'go back/return'.

When the idiomatic expression 'ona nsana wanjila' was presented in the story context all 12-year old and 14-year old children interpreted it idiomatically as 'go back/return'. Two 6-year old children and two 9-year old children also interpreted it idiomatically. These children arrived at the interpretation go back because the form-meaning pair ⟨f',m'⟩ = go back/return was appropriate in the sociocultural context in which the idiomatic expression 'ona nsana wanjila' is consumed thereby satisfying the constraint *Relevance*

Principle. This interpretation also satisfied *S Principle* apart from satisfying *H Principle* despite being inconsistent with the provided linguistic context and violating *Full Interpretation*. A summary on how 12-year old and 14-year old children idiomatically interpreted ‘*ona nsana wanjila*’ in the story context is provided in Tableau (12) below

12.

Ona nsana wanjila	RELEVANCE	S PRINCIPLE	H PRINCIPLE	AVOID C	CONSISTENT	FULL INT	WELLFORMED
☞ a.[go back/return] (⟨f',m'⟩)				*	*	*	*
b.[see the back of the road/footpath] (⟨f',m⟩)	*	*	*	*	*	*	*
c.[they suffered in town] (⟨f',m''⟩)	*	*	*	*		*	*

The tableau shows that the form-meaning pair ⟨f',m'⟩ is the only bidirectionally optimal pair because it satisfies the highly ranked constraints (*Relevance Principle*, *S Principle* and *H Principle*). The form-meaning pairs ⟨f',m⟩ and ⟨f',m''⟩ have been completely ruled out because they have more violations and also they violate highly ranking constraints (*Relevance Principle*, *S Principle* and *H Principle*). However, all 4-year old children, two 6-year old children and two 9-year old children preferred the form-meaning pair ⟨f',m''⟩ = ‘they suffered in town’ in the story context. This interpretation was consistent with the provided linguistic context thus the form-meaning pair ⟨f',m''⟩ satisfied the constraint *CONSISTENT*. The form-meaning pair ⟨f',m''⟩ also satisfied *H Principle* despite violating *S Principle*. However, this form-meaning pair was not appropriate in the marked context

in which the idiomatic expression ‘*ona nsana wanjila*’ is consumed thus it violated *Relevance Principle*. The finding that 9-year old children interpreted ‘*ona nsana wanjila*’ as ‘they suffered in town’ in the story context, an interpretation that satisfied the constraint *CONSISTENT*, suggests that the ranking of the constraint *CONSISTENT* is not determinate in 9-year old children. The constraint *CONSISTENT* is floating and that depending on children’s knowledge of the cultural frames of reference guiding the use of the idiomatic expression, the constraint *CONSISTENT* can be demoted and be reranked below *Relevance Principle*, *S Principle*, *H Principle* and *Avoid Contradiction*. Where 9-year old children lack knowledge of the cultural frames of reference guiding the use of the idiomatic expression, the constraint *CONSISTENT* remains in its original position in the ranking where it dominates *Relevance Principle*, *S Principle*, *H Principle* and *Avoid Contradiction*. This could be the reason why 9-year old children produced more ‘irrelevant responses’ and ‘responses related to idiomatic meaning’ when idioms were presented in sentence context and out of context. It could also explain why 9-year old children employed the strategies ‘using world knowledge and experience’ and ‘using linguistic knowledge’ (described in sections 7.2.1.4 and 7.2.1.3 in Chapter Seven respectively) more than any other age group. The discussion on how 4-year old children, 6-year old children and 9-year old children interpreted the idiomatic expression ‘*ona nsana wanjila*’ in the story context has been summarized in Tableau (13) below.

13.

Ona nsana wanjila	FULL INT	CONSISTENT	RELEVANCE	S PRINCIPLE	H PRINCIPLE	AVOID C	WELLFORMED
a.[go back/return] (⟨f',m'⟩)	*	*				*	*
b.[see the back of the road/footpath] (⟨f',m⟩)	*	*	*	*		*	*
c.[they suffered in town] (⟨f',m''⟩)	*		*	*		*	*

The tableau shows that all form-meaning pairs ⟨f',m'⟩, ⟨f',m⟩ and ⟨f',m''⟩ violate a highly ranking constraint (*Full Interpretation*) and they have all been ruled out by this constraint. However, the constraint *CONSISTENT* which is also high ranking but dominated by *Full Interpretation* makes the form-meaning pair ⟨f',m''⟩ bidirectionally optimal and rules out the form-meaning pairs ⟨f',m'⟩ and ⟨f',m⟩.

When the idiomatic expression ‘*ona nsana wanjila*’ was presented in sentence context and out of context situations 12-year old children and 14-year old children were able to idiomatically interpret the expression in both sentence context and out of context. Two 9-year old children interpreted ‘*ona nsana wanjila*’ as ‘follow the road/footpath to where you are going’ in out of context situation. This interpretation makes the form-meaning pair ⟨f',m''⟩ = ‘follow the road/footpath to where you are going’ violate *Relevance Principle* as it is not appropriate in the sociocultural context in which the idiomatic expression ‘*ona nsana wanjila*’ is consumed. However, these children provided this interpretation because they do not have enough knowledge of the social cultural context in which the expression ‘*ona nsana wanjila*’ is used and the presence of the marked interpretation ‘follow the road/footpath to where you are going’ made the constraint

**BLOCK* to block the other form-meaning pairs $\langle f',m' \rangle =$ ‘go back/return’ and $\langle f',m \rangle =$ ‘see the back of the road/footpath’. This suggests that the constraint **BLOCK* is highest ranking in 9-year old children. This could explain why 9-year old children produced more ‘irrelevant responses’ and meanings ‘related to idiomatic meaning’ than any other age group when the idioms were presented in the story context and out of context. The discussion on how 9-year old children interpreted ‘*ona nsana wanjila*’ is summarized in Tableau (14) below.

14.

Ona nsana wanjila	* <i>BLOCK</i>	FULL INT	RELEVANCE	S PRINCIPLE	H PRINCIPLE	AVOID C	CONSISTENT	WELLFORMED
a.[go back/return] $\langle f',m' \rangle$	*	*				*	*	*
b.[see the back of the road/footpath] $\langle f',m \rangle$	*		*	*		*	*	*
c.[follow the road/footpath to where you are going] $\langle f',m'' \rangle$		*	*	*		*		*

The tableau shows the form-meaning pair $\langle f',m'' \rangle$ as bidirectionally optimal because it satisfies the highest ranking constraint **BLOCK* although it has high number of violations. The form-meaning pair $\langle f',m \rangle$ has been ruled out because it has the highest number of violations and also it violates the highest ranking constraint **BLOCK*. The form-meaning pair $\langle f',m' \rangle$ has the least number of violations but it has been ruled out because it violates the highest ranking constraint **BLOCK*.

In the sentence context and out of context, 4-year old and 6-year old children gave back the idiomatic expression as its interpretation although the form-meaning pair $\langle f', m''' \rangle = \text{'ona nsana wanjila'}$ was not consistent with the linguistic context provided by the sentence. This could be the case because, as already explained' these children realized that the expression *'ona nsana wanjila'* is marked and calls for a marked meaning but they could not interpret it idiomatically because knowledge of the cultural frames of reference guiding the use of the idiomatic expression has not yet developed at this age. As such, the constraint **BLOCK* blocked the form-meaning pairs $\langle f', m \rangle = \text{'see the back of the road/footpath'}$ and $\langle f', m' \rangle = \text{'go back/return'}$ in favor of the form-meaning pair $\langle f', m''' \rangle = \text{'ona nsana wanjila (idiom)'}$. This discussion is summarized in Tableau (15) below.

15.

Ona nsana wanjila	*BLOCK	FULL INT	CONSISTENT	RELEVANCE	S PRINCIPLE	H PRINCIPLE	AVOID C	WELLFORMED
a.[go back/return] ($\langle f', m' \rangle$)	*	*	*				*	*
b.[see the back of the road/footpath] ($\langle f', m \rangle$)	*		*	*	*		*	*
c.[ona nsana wanjila (idiom) $\langle f', m''' \rangle$		*	*	*	*		*	*

The tableau indicates that the form-meaning pair $\langle f', m''' \rangle$ is bidirectionally optimal pair although it has more violations because it satisfies a highest ranking constraint **BLOCK*. The form-meaning pairs $\langle f', m' \rangle$ and $\langle f', m \rangle$ have been ruled out completely because they violate a highest ranking constraint **BLOCK*.

In this discussion, it has been established that at the initial state in the acquisition of idiomatic meaning, at age 4, the constraints *Full Interpretation* and *CONSISTENT* are highly ranked and that these are demoted one by one as children grow older and acquire the idiomatic meaning. It has also been established that these constraints are still highly ranked at the age 6 years. The constraint *CONSISTENT* is demoted first and it is reranked below the constraint *Avoid Contradiction* by the age 12. The ranking of the constraint *CONSISTENT* is not yet determinate in 9 years old hence it is floating. The constraint *CONSISTENT* also occasionally floats in 6-year old children. It has also been established that the last constraint to be demoted is *Full Interpretation* which is reranked below the constraint *CONSISTENT* by the age 14.

Basing on the rankings proposed in this section and on the findings presented in chapters six and seven, in the next section we propose the developmental patterns in idiomatic meaning acquisition in Cicewa.

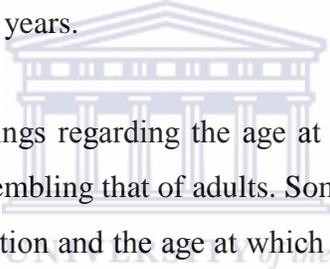
8.3 Developmental patterns of idiomatic meaning acquisition in Cicewa

This section clarifies on the conflicting findings regarding the development of idiomatic meaning acquisition in children. In this section we propose the idiom acquisition age and the developmental stages in idiomatic meaning acquisition.

8.3.1 Idiom acquisition age

There are conflicting findings regarding the age at which the acquisition of idiomatic meaning starts in children. Some scholars propose that idiom acquisition starts between 6 and 7 years of age (Prinz, 1983; Vulchanova, Vulchanov & Stankova, 2011) while others propose between 7 and 11 years of age (Levorato & Cacciari, 1992, 1995). Research findings by Gibbs (1987, 1991) and Strand and Fraser (1979) indicate that children as young as 5 years old can understand idiomatic expressions. However, research findings of this study indicate that idiom acquisition starts with recognition of idiomatic expressions at around the age of 4 years. Children aged 4 years are able to recognize idiomatic expressions, especially those involving daily activities of human experience.

Four years old children can recognize idiomatic expressions when presented in both context and out of context. These children can also idiomatically interpret some idiomatic expressions though sparingly when presented in supportive context. Although 4-year old children can recognize idiomatic expressions involving daily activities of human experience and idiomatically interpret some idiomatic expressions it cannot be concluded that acquisition of idiomatic meaning starts at this age because the findings showed that there was no pattern in the way 4-year old children idiomatically interpreted the idioms and it was mostly by chance. However, the case is different when it comes to 6-year old children. Six-year old children are able to recognize most idiomatic expressions and idiomatically interpret idiomatic expressions involving daily activities of human experience in supportive context. The findings showed a clear pattern in the way these children interpreted idiomatic expressions and it can be concluded that idiomatic meaning acquisition starts at the age of 6 years.



There are also conflicting findings regarding the age at which children's knowledge of idiomatic expressions starts resembling that of adults. Some studies propose that age 10 is a turning point in idiom acquisition and the age at which children's idiomatic knowledge starts resembling the adult's knowledge (Ackerman, 1982; Vicker, 2002; Vulchanova, Vulchanov & Stankova, 2011) while other studies provide evidence that children's idiomatic knowledge resembles the adult's knowledge at age 11 (Cacciari and Levorato, 1999; Kempler, Lancker, Marchman and Bates, 1999). However, the findings of this study indicate that children's knowledge of idiomatic meaning starts to resemble that of adults when a child gets to 14 years old. At this age a child has developed awareness of the cultural frames of reference guiding the use of idiomatic expressions and also knowledge of metaphor has reached maturation as such a child is able to realize that the selection of metaphor is a meaningful choice and deduce the dimensions of reality being talked about. Although this is the case, at 14 years the child still fails to achieve 100% because idiom acquisition is still taking place. This takes us to the developmental stages in the acquisition of idiomatic meaning.

8.3.2 Stages that children go through in idiomatic meaning acquisition

The acquisition of idiomatic meaning does not take place haphazardly in children. Acquisition of idiomatic meaning takes place in a systematic pattern that can be described. Basing on the rankings proposed in section 8.2 above and the results of the experiments reported in chapters six and seven of this thesis, we propose the following five stages in the development of idiomatic meaning.

Stage 1: 4 – 5 years

In Stage 1 of idiomatic meaning development a child is able to recognize an idiomatic expression as an instance of use. A child who is in this stage is able to recognize an idiomatic expression even when the expression is incomplete in a sentence. In this stage, a child treats an idiomatic expression as a single text in a specific sociocultural context of use that cannot be broken into separate parts. In this stage, a child has knowledge of the lexico-grammar and is able to use the information provided by the linguistic context to interpret linguistic expressions. When idioms are presented in supportive context, a child who is in this stage is able to realize that a literal meaning is in conflict with the linguistic context within which an idiom is embedded but s/he fails to go beyond the linguistic context because knowledge of the cultural frames of reference guiding the use of idiomatic expressions has not yet started developing in this stage. Thus, in this stage, a child avoids interpreting idiomatic expressions literally and chooses interpretations that are consistent with the provided linguistic context even if the interpretations are irrelevant in the sociocultural context in which the idiomatic expressions are consumed. When idioms are presented out of context, children in this stage fail to provide an interpretation of the idiomatic expression instead they just repeat the idiomatic expression. This stage is characterized by the strategy ‘repeating the idiom’ described in section 7.2.1.1 in Chapter 7 of this thesis. This stage is the Initial Stage in idiomatic meaning acquisition in which the language constraints *Full Interpretation* and *CONSISTENT* dominate the constraint *Relevance Principle*. The data in this study indicate that children are in this stage at around the age of 4 to 5 years.

Stage 2: 6 – 8 years

Stage 2 of idiomatic meaning development is characterized by the strategy ‘inferring from linguistic context’ described in section 7.2.1.2 in Chapter 7. Children who are in this stage treat an idiomatic expression as a single text that cannot be broken into separate parts so they are able to recognize an idiomatic expression even when the expression is incomplete in a sentence. In this stage, children have knowledge of the lexico-grammar and the ability to infer meaning using contextual cues has already developed hence they search for non-literal interpretation of an idiomatic expression when an idiom is presented in supportive context. A Child who is in this stage starts to realize that a meaning does not always need to be consistent with the provided linguistic context. Consequently, the child starts to realize that an idiomatic expression as a text needs to be interpreted within the sociocultural context in which it was produced. Children who are in this stage are able to idiomatically interpret idioms of daily activities involving human experience only when the idioms are embedded in supportive contexts. This is the case because in this stage awareness of cultural frames of reference guiding the use of idiomatic expressions has already started so the supportive context facilitates for the memory of the cultural frames of reference and the children are able to deduce the dimensions of reality being talked about. However, children who are in this stage still repeat the idiomatic expressions when the idioms are presented out of context because they fail to deduce the dimension of reality being talked about. In this stage, knowledge of metaphor has not yet developed so children who are in this stage find it difficult to realize that the selection of metaphor is a meaningful choice although they have knowledge of the lexico-grammar hence they rule out some idiomatic expressions as ungrammatical and uninterpretable and when they meet such an expression they repeat the idiom instead of interpreting it. In this stage, the constraints *Full Interpretation* and *CONSISTENT* still dominate the constraint *Relevance Principle* although in this stage the child has started to realize the need to demote the constraint *CONSISTENT* which occasionally floats and be reranked below the constraint *Avoid Contradiction*. The data in this study indicate that children arrive at Stage 2 at around the age of 6 to 8 years.

Stage 3: 9 – 11 years

Stage 3 is a transitional stage in the development of idiomatic meaning. It is a stage in which a child is able to recognize an incomplete idiomatic expression and provide the missing part when the idiom is presented in a sentence. However, in this stage a child does not realize that idioms do not allow synonymy. A child who is in this stage has acquired some knowledge of cultural frames of reference in which the idioms are rooted and is able to deduce the dimensions of reality being talked about even when the idioms are presented out of context. In this stage knowledge of metaphor also starts to develop and children are aware that the selection of metaphor is a meaningful choice even though the text may seem ungrammatical and lack a literal interpretation hence they look for contextual information to understand the meaning of an expression. Children who are in this stage realize that a meaning does not always need to be consistent with the provided linguistic context. Children in this stage always look for both linguistic information and sociocultural information to deduce the meaning of an idiom that would be relevant in the sociocultural context at hand. Children who are in this stage are able to interpret idioms involving daily activities of human experience when the idioms are presented even without supporting context. These children are also able to interpret idioms that do not involve daily activities of human experience that have clear cultural frames of reference when the idioms are presented in supportive contexts. In this stage, the constraints CONSISTENT has no fixed ranking. This constraint is either ranked below the constraint *Avoid Contradiction* or it remains in its original position as in the initial state where it dominates *Relevance Principle*. This stage is characterized by the strategies ‘using world knowledge and experience’ and ‘using linguistic knowledge’ described in Chapter 7 in sections 7.2.1.4 and 7.2.1.3 respectively. The data in this study indicate that children arrive at Stage 3 at around the age of 9 to 11 years.

Stage 4: 12 – 13 years

In Stage 4 a child is able to recognize an incomplete idiomatic expression in a sentence and is able to provide the missing part. The child also realizes that idioms do not allow synonymy. In this stage, a child has acquired increased knowledge of metaphor and cultural frames of reference guiding the use of idiomatic expressions and is able to figuratively interpret idioms involving daily activities of human experience and those which have clear cultural frames of reference even when the idioms are presented out of context. A child who is in this stage is also able to interpret idioms with obsolete cultural frames of reference when they are presented in supportive context. In this stage, a child fails to interpret idioms with obsolete cultural frames of reference when presented out of context. In this stage, a child has developed awareness that a meaning does not always need to be consistent with the provided linguistic context. Thus, a child has demoted the constraint *CONSISTENT* and reranked it below the constraint *Avoid Contradiction*. In this stage a child has also started to realize that it is not always the case that lexical items in an expression will contribute to its meaning and floats the constraints *Full Interpretation* which can now either dominate the *Relevance Principle* like in the initial stage in idiomatic meaning acquisition or can be dominated by *Relevance Principle* and be reranked below *CONSISTENT*, like a ranking in adults. The data in this study indicate that children arrive at Stage 4 at around the age of 12 to 13 years.

Stage 5: 14 years and above

In this stage the child's idiomatic knowledge is close to adults' knowledge but it is not yet exactly like adults knowledge of idiomatic meaning. In this stage, a child has acquired vast knowledge of cultural frames of reference guiding the use of idiomatic expressions and is able to idiomatically interpret almost all idiomatic expressions when presented in supportive context. The child is able to idiomatically interpret idioms involving daily activities of human experience, idioms with clear cultural frames of reference and some idioms with obsolete cultural frames of reference even when the idioms are presented out of context. However, in this stage the child still has problems to idiomatically interpret

some idioms based on obsolete cultural frames of reference when presented out of context. A child in this stage has developed awareness that it is not all times that lexical items in an expression contribute to its meaning hence the child has demoted the constraints *Full Interpretation* and reranked it below the constraint *CONSISTENT*, like a ranking in adults. The data in this study indicate that children arrive at Stage 5 at around the age of 14 years

8.4 Chapter summary

This chapter has demonstrated how Cicewa speaking children rerank constraints in the acquisition of Cicewa idiomatic meanings. It has presented the constraint ranking adopted in this study to account for the acquisition of idiomatic meaning in Cicewa. It has also proposed the ranking of constraints at the initial state of idiomatic meaning acquisition. It has also established which constraint is demoted first and which constraint is demoted last in the process of acquiring idiomatic meanings. It has also clarified on the conflicting findings regarding the developmental patterns in idiomatic meaning acquisition in children. It has reported the age at which children are able to recognize idiomatic expressions as texts. It has also reported the age at which idiomatic meaning acquisition starts in children. It has also reported the age at which child's knowledge of idiomatic expressions starts to resemble that of adults. Lastly, the chapter has proposed and described five developmental stages that children go through in idiomatic meaning acquisition. The coming chapter will provided a summary of the findings reported in this thesis and highlight the arguments made in this thesis.

Chapter Nine

Summary and Conclusion

9.0 Introduction

This chapter summarizes the findings of the study and highlights the conclusions drawn in this thesis. It revisits the research aim and objectives of this study. In order to determine to what extent these have been achieved the chapter provides a summary of research findings in relation to each of the research objectives. It also points out the contribution that the study has made in the field of figurative language acquisition and the development of linguistic theory. Lastly, it suggests areas that need further investigation.

9.1 Research aim and objectives revisited

As stated in Chapter One, the main aim of this study was to find out how native Cicewa speaking children learn to interpret Cicewa idioms. Specific objectives were to:

- i. identify the age at which idiom acquisition starts.
- ii. identify the age at which children's idiomatic knowledge resembles adult's knowledge.
- iii. investigate factors that affect children's learning of idiomatic meaning.
- iv. identify strategies that children employ to learn the interpretation of Cicewa idioms.
- v. describe the nature of the idioms learnt at a particular stage.
- vi. establish how children rerank language constraints in the acquisition of idiomatic meaning
- vii. identify and describe the stages that children go through when they are learning to interpret Cicewa idioms.

The findings on each of these research objectives are summarized in the coming section.

9.2 Summary of findings

As pointed out in Chapter One, research findings on idiom acquisition are conflicting in many aspects. This was attributed to the way in which idiom acquisition has been approached. Little attention has been paid to the social cultural context in which idioms are produced and consumed yet idioms are social semiotic. In this light, the current study took into consideration the sociocultural context in which Cicewa idioms are produced and consumed as it investigated how native Cicewa speaking children acquire the interpretation of Cicewa idioms. It was hoped that this would help to resolve the existing contradictions regarding idiom acquisition. Thus, summarized below are the findings shedding more light on what goes on in idiom acquisition. The findings have been summarized in relation to the research aim and objectives of this study to ascertain to what extent the objectives have been achieved.

Objective (i): To identify the age at which idiom acquisition starts

Regarding the age at which idiom acquisition starts, the findings of the study reported in chapters six, seven and eight indicated that idiom acquisition starts with idiom recognition as an instance of use at around the age of 4 years and that actual idiomatic interpretation starts at around the age of 6 years with a child interpreting idiomatic expressions involving daily activities of human experience in supportive context.

Objective (ii): To identify the age at which children's idiomatic knowledge resembles adult's knowledge

Through the study findings reported in chapters six, seven and eight the thesis has established the age of 14 years as the age at which the child's idiomatic knowledge starts to resemble adult's knowledge although at this age acquisition of idiomatic meaning is still taking place.

Objective (iii): To investigate factors that affect children’s learning of idiomatic meaning

With regards to factors that affect children’s learning of idiomatic meaning, the study tested the following factors; linguistic context, semantic analyzability of the idiom, idiom’s internal structure and syntactic modification of the idiom. The findings reported in chapters six and seven indicated that linguistically supportive context helps young children to infer the figurative meaning of an idiom and learn the meaning of the idiom. Children produced more idiomatic interpretations when the idioms were presented in stories than when the idioms were presented in sentences and out of context. The linguistically supportive context triggered idiomatic responses even in the youngest children, 4 years old and 6 years old children who failed to provide any idiomatic interpretation when the idioms were presented in sentences and out of context. However, the findings reported in chapters six and seven also suggested that linguistic context is not enough to facilitate children’s interpretation and acquisition of idioms. Children, even 4 years old and 6 years old children, avoided literally interpreting idioms in supportive context which suggested that these children have skills to use the contextual cues to deduce the meaning of an idiom but they still failed to idiomatically interpret the idioms because they could not go beyond the linguistic context. These children lacked knowledge of the sociocultural context in which the idioms are consumed. On the basis of these findings, the thesis argues that idioms are texts produced within a specific sociocultural context and this sociocultural context, within which the idioms were produced, is central to the interpretation and acquisition of the idioms.

Regarding semantic analyzability of idioms, the results of the one-way between-groups Analysis of Variance (ANOVA Test) reported in chapter six showed no significant difference between the way children interpreted analyzable idioms and non-analyzable idioms when the idioms were presented in the stories and sentences. However, the one-way between-groups Analysis of Variance (ANOVA Test) showed significant differences between the way children interpreted analyzable idioms and non-analyzable idioms when idioms were presented in out of context. On the other hand, cross tabulation of response

type in relation to analyzability of the idioms showed that children produced more literal responses in analyzable idioms than in non-analyzable idioms and more irrelevant responses in non-analyzable idioms than in analyzable idioms when the idioms were presented in both sentence context and out of context. On the basis of these findings, the thesis concludes that children's interpretation and acquisition of idioms is not fully dependent on analyzability although this may affect the idiom's interpretation and acquisition to some extent. The idiom can be analyzable but children can still fail to interpret the idiom if they are not aware of the sociocultural context within which the idiom is consumed.

With regards to idiom's internal structure, the results of the one-way between-groups Analysis of Variance (ANOVA Test) reported in chapter six showed no significant difference between the way children interpreted idioms with different internal structures when idioms were presented in story context but it showed significant difference when the idioms were presented in sentence context and out of context. However, individual analyses of the idioms showed that children were able to idiomatically interpret some ill-formed idioms whose cultural frames of reference were familiar to the children and the same children failed to interpret simple well-formed idioms whose cultural frames of reference were not familiar to them. The structure of the ill-formed idioms did not hinder children from idiomatically interpreting the idioms and also the structure of simple well-formed idioms did not help the children to arrive at the idiomatic interpretation of the idioms. On the basis of these findings, the thesis concludes that children's ability to interpret idioms does not solely depend on the structure of the idiom, although the structure affects idiom interpretation to some extent, but it is more dependent on children's knowledge of the sociocultural context within which the idioms are produced and consumed. The thesis also rejects the research assumption that idioms with simple structure are acquired first than idioms with complicated structure presented in Chapter One of this thesis.

In relation to syntactic modification of the idiom, the results of a paired-sample t-test reported in chapter six indicated that there was no statistically significant difference in children's interpretation of idioms that were not modified and idioms that were modified. Children were able to interpret both modified and non-modified idioms equally. In relation to these findings, the thesis concludes that modification does not affect children's interpretation of the idioms. If children are not aware of the sociocultural context in which the idiom is consumed they will fail to interpret the idiom regardless of whether it is modified or not.

The findings reported in chapters six, seven and eight indicated that there is a correlation between age and idiom interpretation and acquisition. Non-idiomatic responses decreased as the age increased.



Objective (iv): To identify strategies that children employ to learn the interpretation of Cicewa idioms.

Regarding the strategies that children employ to interpret and acquire idioms, the findings of the study reported in chapter seven indicated that children employ a number of strategies as follows: repeating the idiom, inferring from linguistic context, using linguistic knowledge, using world knowledge and experience, inferring from sociocultural context, reasoning, paraphrasing the idiom, using linguistic context from experiment 1 and guessing. The findings showed that 'inferring from sociocultural context' and 'repeating the idioms' were the most predominant strategies used by children. The findings also showed that 'repeating the idiom' was mainly employed by 4 years old and 6 years old children while 'inferring from sociocultural context' was employed by children between the ages 9 to 14 years. The findings also showed that, 'inferring from sociocultural context' was the only strategy that generated idiomatic meanings. With respect to these findings, the thesis argues that 'inferring from the sociocultural context' is the only strategy that is successful in idiom interpretation and

that children resort to other strategies when they realize that their knowledge of the cultural frames of reference is wanting.

Objective (v): To describe the nature of the idioms learnt at a particular stage

With regards to the nature of the idioms learnt at a particular stage, the findings reported in chapter seven in this thesis showed that children learn first idioms that involve daily activities of human experience then idioms with clear cultural frames of reference. The findings also showed that idioms with obsolete cultural frames of reference are learned last. In relation to these findings the thesis rejects the research assumption that idiom acquisition starts with simple transparent idioms and progresses to complicated non-transparent idioms presented in Chapter One of this thesis.

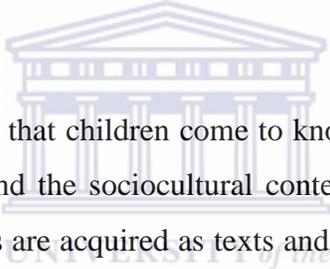
Objective (vi): To establish how children rerank language constraints in the acquisition of idiomatic meaning

With respect to children's reranking of language constraints in the acquisition of idiomatic meaning, on the basis of the findings reported in chapters six and seven, in chapter eight the ranking of constraints in the initial state in idiom acquisition has been proposed in which the constraints *Full Interpretation* and *CONSISTENT* are highly ranked dominating *Relevance Principle*. It has also been proposed that *CONSISTENT* is demoted first and *Full Interpretation* is demoted last in the process of acquiring idiomatic meanings.

Objective (vii): To identify and describe the stages that children go through when they are learning to interpret Cicewa idioms

The stages that children go through when they are learning to interpret idioms have been identified and described in chapter nine basing of the findings reported in chapters six, seven and eight. Five stages have been proposed as follows; Stage 1: 4 – 5 years, an initial stage in the development of idiomatic meaning in which a child is able to

recognize idiomatic expressions as instances of use; Stage 2: 6 – 8 years, a stage in which a child is able to idiomatically interpret idioms of daily activities involving human experience when presented in supportive context; Stage 3: 9 – 11 years a transitional stage in the development of idiomatic meaning in which a child is able to idiomatically interpret idioms involving daily activities of human experience when presented even without supporting context; Stage 4: 12 – 13 years, a stage in which a child is able to idiomatically interpret idioms involving daily activities of human experience and those with clear cultural frames of reference when presented without supportive context and Stage 5: 14 years and above, a stage in which the child's idiomatic knowledge is close to adults' knowledge and also the child is able to interpret idioms involving daily activities of human experience, idioms with clear cultural frames of reference and idioms with obsolete cultural frames of reference when presented without supportive context.



In general, the thesis concludes that children come to know an idiomatic expression as a text before they even understand the sociocultural context in which it is produced and consumed. It argues that idioms are acquired as texts and they are acquired together with the sociocultural context in which they are produced and consumed and the sociocultural context forms part of the idioms.

9.3 Contribution to the field of study

As was noted in Chapter One, there is a lot of conflicting research findings concerning how idioms are acquired. The current study has made positive contribution to the idiom acquisition debate in that it has shed some light regarding the idiom acquisition age and the age when child's knowledge of idioms resembles that of adults. It has also identified and described developmental stages in idiomatic meaning acquisition.

The study has also added freshness to the existing literature on idioms since most of the studies that have tried to account for idiom interpretation and acquisition have been done in the West and mainly have studied the acquisition of English. This study focused on

how idiom interpretation is acquired by Cicewa speaking children thereby adding a new dimension to the literature mainly because it approached idioms as social semiotic in the meaning-making process which need to be interpreted and acquired within the social and cultural context in which they are produced.

The study has integrated Optimality Theory (OT) with Systemic Functional Linguistics in its account for idiomatic meaning acquisition. This eclectic mix of theoretical frameworks is novel and thus offers a new perspective of theorizing never done before. SFL was used to identify the sociocultural contexts in which Cicewa idioms are consumed and OT was used to explain how different pieces of information integrate to enable children to rerank language constraint and acquire idiomatic meaning. Thus, the study has contributed to the development of linguistic theory, from both SFL and OT perspectives.

9.4 Suggestions for future research

This study did not recruit children of all ages ranging from 4 years to 14 years. Some ages were skipped as a result the study has failed to establish the transitions that take place in idiom acquisition in children between the ages 4 - 6 years, 6 - 9 years, 9 - 12 years and 12 - 14 years because of the age gaps between the selected participant children. Thus, there is need to replicate the study on a larger group of children where all ages in the range 4 - 14 years should be studied to establish the transition that takes place in children when acquiring idioms.

This study has failed to establish the termination stage in idiomatic meaning acquisition because it did not recruit older children above the age of 14. Thus there is need to carry out a study that recruits older children above 14 years to establish the termination stage in idiomatic meaning acquisition.

This study also only concentrated on idiom interpretation. To fully explain the stages that children go through in idiom acquisition, there is also need to focus on how children produce idiomatic expressions.

9.5 Chapter Summary

This chapter has provided a summary of the findings of the study in relation to the aim and objectives of the study. It has highlighted the conclusions drawn in this thesis. It has also pointed out the contribution that the study has made in the field of figurative language acquisition and the development of linguistic theory. Finally, it has suggested areas that need further investigation.



References

- Abkarian, G.G., Jones, A., & West, G. 1992. Young Children's Idiom Comprehension: Trying to Get the Picture. *Journal of Speech and Hearing Research* 35: 580 – 587.
- Abrahamsen, E.P. & Smith, R. 2000. Facilitating Idiom Acquisition in Children with Communication Disorders: Computer vs Classroom. *Child Language Teaching and Therapy* 16: 227 – 239.
- Ackerman, B.P. 1982. On Comprehending Idioms: Do the Children Get the Picture? *Journal of Experimental Child Psychology* 33: 439 – 454.
- Aissen, J. 2003. Differential Coding, Partial Blocking and Bidirectional OT. In P. Nowak and C. Yoquelet (eds.) *BLS* 29: 1 - 16 Extracted from http://people.ucsc.edu/~aissen/bls_aissen.pdf. 16 June 2005.
- Al Hamdany, H. 2012. The Usefulness of Systemic Functional Grammar and Its Impact on Students' Communicative Skills in ESL Context. *European Scientific Journal* 8, 11: 1857 – 7881.
- Archangeli, D. 1997. Optimality Theory: An Introduction to Linguistics in the 1990s. In D. Archangel & D.T. Langendoen (eds.). *Optimality Theory: An overview*. Massachusetts: Blackwell Publishers Inc., 1-32.
- Ballas, M.E. 2008. Icing on the Cake: Idiom Curriculum for Deaf and Hard of Hearing. Unpublished MSc in Deaf Education Dissertation, Washington University.
- Barlow, J.A. & Gierut, J.A. 1999. Optimality Theory in Phonological Acquisition. *Journal of Speech, Language and Hearing Research* 42: 1482 – 1498.

- Beaver D.I. 2004. The Optimization of Discourse Anaphora. *Linguistics and Philosophy*, 27, 1: 3-56.
- Beaver, D.I. & Lee, H. 2003. Form-Meaning Asymmetries and Bidirectional Optimization. In J. Spenader, A. Eriksson and O. Dahl (eds.) *Variation within Optimality Theory*. University of Stockholm, 138-148. Extracted from <http://www.stanford.edu/~dib/> 16 June 2005
- Beaver, D.I. & Lee, H. 2004. Input-Output Mismatch in OT. In R. Blutner & H. Zeevat (eds.) *Optimality Theory and Pragmatics*. Palgrave: Macmillan, 112 – 153.
- Bialystok, E. & Swain, M. 1978. Methodological Approaches to Research in Second Language Learning. *McGill Journal of Education* 8: 137 – 144.
- Bílková, I. 2000. *Czech and English Idioms of Body Parts: A View from Cognitive Semantics*. Unpublished MPhil Dissertation, University of Glasgow.
- Blutner, R. 2000. Some Aspects of Optimality in Natural Language Interpretation. *Journal of Semantics* 17: 189-216.
- Blutner, R. & Strigin, A. 2011. Bidirectional Grammar and Bidirectional Optimization. In B. Anton & J. Matthausch (eds.) *Bidirectional Optimality Theory*. Amsterdam: Benjamins, 221 – 248.
- Blutner, R. & Zeevat, H. 2004. Editor's Introduction: Pragmatics in Optimality Theory. In R. Blutner & H. Zeevat (eds.) *Optimality Theory and Pragmatics*. Palgrave: Macmillan, 37 – 53.
- Bobrow, S. & Bell, S. 1973. On Catching on to Idiomatic Expressions. *Memory and Cognition* 1: 343 – 346.

- Boersma, P. & Hayes, B. 2001. Empirical Tests of the Gradual Learning Algorithm. *Linguistic Inquiry* 32: 45 -86.
- Boersma, P. & Levelt, C. 2003. Optimality Theory and Phonological Acquisition. *Annual Review Language Acquisition* 3: 1-50.
- Bulut, T. & Çelik-Yazici, İ. 2004. Idiom Processing in L2: Through Rose-colored Glasses. *The Reading Matrix* 4, 2: 105 –116. Extracted from http://www.readingmatrix.com/articles/bulut_yazici/articlepdf 16 June 2005
- Cacciari, C. 1993. The Place of Idioms in a Literal and Metaphorical World. In Cacciari C. & Tabossi, P. *Idioms: Processing, Structure and Interpretation*. Hillsdale NJ: Lawrence Erlbaum, 27 – 56.
- Cacciari, C. & Levorato, M.C. 1989. How Children Understand Idioms in Discourse. *Journal of Child Language* 16: 387 – 405
- Cacciari, C. & Levorato, M.C. 1998. The Effect of Semantic Analyzability of Idioms in Metalinguistic Tasks. *Metaphor and Symbol* 13, 3: 159 – 177.
- Cacciari, C., Padovani, R. & Corradini, P. 2007. Exploring the Relationship Between Individuals' Speed of Processing and their Comprehension of Spoken Idioms. *European Journal of Cognitive Psychology* 19, 3: 417 – 445.
- Cacciari, C. & Tabossi, P. 1988. The Comprehension of Idioms. *Journal of Memory and Language* 27: 668 – 683.
- Cain, K., Oakhill, J. & Lemmon, K. 2005. The Relation Between Children's Reading Comprehension Level and their Comprehension of Idioms. *Journal of Experimental Child Psychology* 90: 65 – 87.

- Casas, R.M. & Campoy, J.M.H. 1995. A Sociolinguistic Approach to the Study of Idioms: Some Anthropological Sketches. *Guadernos de Filologia Inglesa* 4: 43 – 61.
- Chafe, J. 1970. *Meaning and the Structure of Language*. Chicago: The University of Chicago Press.
- Christie, F. & Unsworth, L. 2000. Developing Socially Responsible Language Research. In Unsworth, L. (ed) *Researching Language in Schools and Communities: Functional Linguistic Perspective*. London and Washington: Cassell, 1 – 26.
- Chunke, Z. 2011. Measuring the Impact of Cultural Context on Chinese ESL University Learners' Comprehension and Memorization of Figurative Idioms. University Essay, Kristianstad University, Sweden.
- Coffin, C. & Donohue, J.P. 2012. Academic Literacies and Systemic Functional Linguistics: How do They Relate? *Journal of English for Academic Purposes* 11: 64 – 75.
- Cook, V. 1986. Experimental Approach to Second Language Learning. In V. Cook (ed) *Experimental Approaches to Second Language Learning*. Oxford: Pergamon, 3 – 21.
- Cooper, T. 1999. Processing of Idioms by L2 Learners of English. *TESOL Quarterly* 33, 2: 232 – 262.
- Cowie, A.P., Mackin, R. & McCaig, I.R. 1983. *The Oxford Dictionary of Current Idiomatic English. Volume II: Phrase, Clause and Sentence Idioms*. Oxford: Oxford University Press.

Crutchley, A. 2007. Comprehension of Idiomatic Verb + particle Constructions in 6 –to – 11year-old Children. *First Language* 27, 3: 203 – 226.

Davidson, L., Jusczyk, P. & Smolensky, P. 2004. The Initial and Final States: Theoretical Implications and Experimental Explorations of Richness of the Base. In R. Kagaer, R. Peter, J. & Zonneveld, W. (eds.) *Fixing Priorities: Constraints in Phonological Acquisition*. Cambridge and England: CUP, 321 – 368.

Dekker, P. & van Rooy, R. 2000. Bi-directional Optimality Theory: An Application of Game Theory. *Journal of Semantics* 17: 217-242.

Derewianka, B. & Jone, P. 2010. From Traditional Grammar to Functional Grammar: Bridging the Divide. *Systemic Functional Linguistics NALDIC Quarterly* 8, 1: 6 - 7.

Di Sciullo, A. M. & Williams, E. 1987. *On the Definition of Word*. Cambridge MA: The MIT Press.

Dörnyei, Z. 2007. *Research Methods in Applied Linguistics*. Oxford: Oxford Univ. Press

Eggins, S. 2004. *An Introduction to Systemic Functional Linguistics*. 2nd Ed. New York and London: Continuum.

Erbach, G. 1992. Head-driven Lexical Representation of Idioms in HPSG. In *Proceedings of the International Conference on Idioms*, 1 –15. Tilburg (NL). Extracted from <http://wwwdfki.de/~gor/pub/idioms92/erbarch-idioms92.pdf>. 17 April 2005.

Ettlinger, M. 2002. What's the Deal with Idioms? Extracted from <http://ist-socrates.berkeley.edu/~marce/ling/Papers/220.pdf>. 8 March 2005.

- Fadlon, J., Horvath, J., Siloni, T. & Wexler, K. 2013. The Acquisition of Idioms: Stages and Theoretical Implications. Poster Presentation, Generative Approaches to Language Acquisition, The University of Oldenburg, Oldenburg, Germany.
- Fawcett, R.P. 2008. *Invitation to Systemic Functional Linguistics: The Cardiff Grammar as an Extension and Simplification of Halliday's Systemic Functional Grammar*. 2nd ed. Cardiff: Centre for Language and Communication, Cardiff University
- Fazly, A., Cook, P. & Stevenson, S. 2009. Unsupervised Type and Token Identification of Idiomatic Expressions. *Computational Linguistics* 35, 1: 61 – 103.
- Filho, P.H.L. 2004. Systemic Functional Grammar: A Tool to Investigate the Lexicogrammatical Complexification of Advanced Portuguese-EFL Interlanguage. Extracted from <https://periodicos.ufsc.br/index.php/desterro/article/view/7405>. 24 April 2013.
- Fillmore, C.J. & O'connor, M.C. 1997. Regularity and Idiomaticity in Grammatical Constructions: The case of **let alone**. In Paul Kay (ed.) *Words and the Grammar of Context*. Stanford: CSLI Publications, 1- 48.
- Gallardo, B. C. 2006. Analysis of a Literary Work Using Systemic-Functional Grammar. In *Proceedings of 33rd International Systemic Functional Congress*, 735 – 762.
- Gibbs, R.W. 1980. Spilling the Beans on Understanding and Memory for Idioms in Context. *Memory and Cognition* 8: 149 – 156.
- Gibbs, R.W. 1987. Linguistic Factors in Children's Understanding of Idioms. *Journal of Child Language* 14: 569 – 586.
- Gibbs, R.W. 1991. Semantic Analyzability in Children's Understanding of Idioms.

- Journal of Speech and Hearing Research* 34: 613 – 620.
- Gibbs, R.W. 1994. *The Poetics of Mind: Figurative Thought, Language and Understanding*. Cambridge: Cambridge Univ. Press
- Gibbs, R.W. 1995. Idiomaticity and Human Cognition. In E. Everaert, E.J. Van der Linden, A. Schenk & R. Schreuder, *Idioms: Structural and Psychological Perspectives*. Hillsdale, NY: Lawrence Erlbaum, 97 – 116.
- Gibbs, R.W., Bogdanovich, J.M., Sykes, J. R. & Barr, D. J. 1997. Metaphor in Idiom Comprehension. *Journal of Memory and Language* 37: 141 – 154.
- Gibbs, R.W. & Nayak, N. P. 1989. Psycholinguistic Studies on the Syntactic Behaviour of Idioms. *Cognitive Psychology* 21: 100 – 138.
- Gibbs, R.W., Nayak, N. P. & Cutting, C. 1989. How to Kick the Bucket and Not Decompose: Analyzability and Idiom Processing. *Journal of Memory and Language* 28: 576 – 593.
- Glucksberg, S.1993. Idiom Meanings and Allusional Content. In Cacciari C. and Tabossi, P. *Idioms: Processing, Structure and Interpretation*. Hillsdale NJ: Lawrence Erlbaum, 3 – 26.
- Grice, P.H. 1961. The Causal Theory of Perception. *Proceedings of the Aristotelian Society, Supplementary Volume* 35: 83 – 112.
- Grice, P.H. 1989. *Studies in the Way of Words*. Cambridge MA: Harvard University Press.
- Grundy, P. 2000. *Doing Pragmatics*. London: Arnold.

- Guthrie, M. 1967-71. *Comparative Bantu*. Farnsbourough: Gregg International Publishers.
- Halliday, M.A.K. 1985. *An Introduction to Functional Grammar*. London: Edward Arnold.
- Halliday, M.A.K. 2009a. Methods – Techniques – Problems. In Halliday, M.A.K. and Webster, J.J. (eds) *Continuum Companion to Systemic Functional Linguistics*. New York and London: Continuum, 59 – 86.
- Halliday, M.A.K. 2009b. *The Essential Halliday*. Webster, J.J. (ed). New York and London: Continuum.
- Halliday, M.A.K. & Hasan, R. 1989. *Language, Context and Text: Aspects of Language in a Social-semiotic Perspective*. Oxford: Oxford Univ. Press.
- Halliday, M.A.K. & Matthiessen, C.M.I.M. 2004. *An Introduction to Functional Grammar*. 3rd Ed. London: Edward Arnold.
- Hamblin, J. L. & Gibbs, R. W. 1999. Why You Can't Kick the Bucket as You Slowly Die: Verbs in Idiom Comprehension. *Journal of Psycholinguistic Research* 28, 1: 25 – 39.
- Haratyan, F. 2011. Halliday's SFL and Social Meaning. In 2nd *International Conference on Humanities, Historical and Social Sciences, IPEDR* 17: 260-264
- Harvey, A. 2004. Charismatic Business Leader Rhetoric: From Transaction to Transformation. In Young, L. & Harrison, C. (eds) *Systemic Functional Linguistics and Critical Discourse Analysis: Studies in Social Change*. London and New York: Continuum, 247 - 263

- Hasan, R. 2004. Analysing Discursive Variation. In Young, L. & Harrison, C. (eds) *Systemic Functional Linguistics and Critical Discourse Analysis: Studies in Social Change*. London and New York: Continuum, 15 – 52.
- Hasan, R. 2009. The Place of Context in a Systemic Functional Model. In Halliday, M.A.K. & Webster, J.J. (eds) *Continuum Companion to Systemic Functional Linguistics*. New York and London: Continuum, 166 – 189.
- Hendriks, P. & de Hoop, H. 2001. Optimality Theoretic Semantics. *Linguistics and Philosophy*, 24:1-32.
- Hendriks, P. & Spenader, J. 2005/2006. When Production Precedes Comprehension: An Optimal Approach to the Acquisition of Pronouns. *Language Acquisition* 13:319-348.
- Hillert, D. & Swinney, D. 2001. The Processing of Fixed Expression during Sentence Comprehension. In Cienki, A., Luka, B.J. and Smith, M.B. (eds.) *Conceptual and Discourse Factors in Linguistic Structure*. Stanford CA: CSLI Publications, 107 – 121.
- Hoeks, J.C.J. & Hendriks, P. 2011. Optimality Theory and Human Sentence Processing: Towards a Cross-Modular Analysis of Coordination. *Journal of Cognitive Science* 12: 83 – 128.
- Hsieh, S.C. & Hsu, C.N. 2010. Idiom Comprehension in Mandarin-speaking Children. *Journal of Psycholinguistic Research* 39, 6: 505 – 522.
- Huber-Okraïnee, J., Blaser, S.E. & Dennis, M. 2005. Idiom Comprehension Deficits in Relation to Corpus Callosum Agenesis and Hypoplasia in Children with Spina Bifida Meningomyelocele. *Brain and Language* 93: 349 – 368.

- Ifill, T. 2002. Seeking the Nature of Idioms: A Study in Idiomatic Structure. Haverford College. Extracted from <http://www.swarthmore.edu/socsci/Linguistics/papers/2003/ifill.pdf>. 17 April 2005.
- Irujo, S. 1986. Don't Put Your Leg in Your Mouth: Transfer in the Acquisition of Idioms in a Second Language. *TESOL Quarterly* 20, 2:287 – 304.
- Itô, J., Mester, A. & Padgett, J. 1995. Licensing and Underspecification in Optimality Theory. *Linguistic Inquiry* 26: 571 – 613.
- Jäger. G. 2002. Gradient Constraints in Finite State OT: The Unidirectional and the Bidirectional Case. In I. Kaufmann & B. Stiebels (eds.) *More than Words A Festschrift for Dieter Wunderlich*. Akademie Verlag, Berlin, 299-325.
- Janyan, A. & Andonova, E, 2000. The Role of Mental Imagery in Understanding Unknown Idioms. *Proceedings of the 22nd Annual Conference of Cognitive Science Society*: 693 – 698.
- Kager, R. 2004. *Optimality Theory*. Cambridge: CUP.
- Kamanga, M. 2007. The Semantics of Chichewa Idioms: Towards an Optimality Theoretic Account. Unpublished MA Dissertation, University of Malawi.
- Kamanga, M. 2007/8. Interpretation of Chichewa Idioms: An Optimality Theoretic Account. *Journal of Humanities* 21:46 – 71.
- Kamanga, M. 2012. The Recognition and Interpretation of Chichewa Idioms. In B. Kalua (ed) *University Research and Progress: Windows on Malawi. Proceedings of the University of Malawi, Chancellor College Research Conference*. Blantyre: Assemblies of God Press, 267 – 284.

- Kamwendo, G.H. 2002. A SWOT Analysis of the Harmonisation of Malawian and
Zambian Languages' Orthographies. In F. Banda (ed) *Language Across Borders*.
Cape Town: CASAS, 103 - 116.
- Kamwendo, G.H. 2006. Sociolinguistic Research and Academic Freedom in Malawi:
Past and Current Trends. *Southern Africa Review of Education*. 12, 1: 3 -14.
- Kamwendo, G.H. 2010. Denigrating the local, glorifying the foreign: Malawian language
policies in the era of African Renaissance. *International Journal of Africa
Renaissance Studies – Multi-, Inter-, and Transdisciplinarity*. 5, 2: 270 – 282.
- Karuppali, S. and Bhat, J. 2013. Understanding of Idiomatic Expressions in Children
between 11 – 14 years. *International Journal of English and Education* 2, 1: 1-10.
- Kayambazinthu, E. 1998. The Language Planning Situation in Malawi. *Journal of
Multilingual and Multicultural Development*. 19, 5: 369 – 439.
- Kemper, S. 1986. Inferential Processing and the Comprehension of Idioms. *Metaphor
and Symbolic Activity* 1, 1: 43 – 55.
- Kempler, D., Van Lancker, D., Marchman, V. & Bates, E. 1999. Idiom Comprehension
in Children and Adults with Unilateral Damage. *Developmental Neuropsychology*
15, 3: 327 – 349.
- Kiango, J. 2003. Syntactic Classification of Swahili Verbal Expressions. *Africa & Asia*.
3: 20 – 40.
- Lacroix, A., Aguert, M., Dardier, V., Stojanovik, V. & Laval, V. 2010. Idiom
Comprehension in French-speaking Children and Adolescents with Williams'
Syndrome. *Research in Developmental Disabilities* 31: 608 – 616.

- Laval, V. 2003. Idiom Comprehension and Metapragmatic Knowledge in French Children. *Journal of Pragmatics* 35: 723 -739.
- Laval, V. & Bernicot, J. 2002. Tucs Dans la Lune: Understanding Idioms in French Speaking Children and Adults. *Pragmatics* 12, 4: 399 – 413.
- Lavid, J., Arús, J. & Zamorano-Mansilla, J.R. 2010. *Systemic Functional Grammar of Spanish: A Contrast Study with English* Volume 1. New York and London: Continuum
- Legendre, G. 2001. An Introduction to Optimality Theory in Syntax. In Legendre, G., Grimshaw, J. & Vikner, S (eds) *Optimality Theoretic-Syntax*. Cambridge: MIT Press, 1 – 28
- Lennon, P. 1998. Approaches to the Teaching of Idiomatic Language. *International Review of Applied Linguistics in Language Teaching (IRAL)* 36, 1: 1 –11.
- Leung, T.T. 2011. Effect of Linguistic Context and Transparency on the Comprehension of Idioms in Cantonese-speaking Children. Unpublished BSc dissertation, The University of Hong Kong.
- Levorato, M.C. 1993. The Acquisition of Idioms and Development of Figurative Competence. In Cacciari, C. & Tabossi, P. (eds) *Idioms: Processing, Structure and Interpretation*. Hillsdale, NJ: Laurence Erlbaum Associates, 105 – 128.
- Levorato, M.C. and Cacciari, C. 1992. Children's Comprehension and Production of Idioms: the Role of Context and Familiarity. *Journal of Child Language* 19: 415 – 433.
- Levorato, M.C. & Cacciari, C. 1995. The Effects of Different Tasks on the Comprehension and Production of Idioms in Children. *Journal of Experimental*

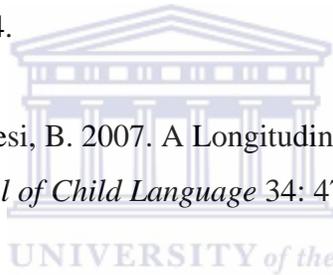
Child Psychology 60: 261 – 283.

Levorato, M.C. & Cacciari C. 1999. Idiom Comprehension in Children: Are the Effects of Semantic Analysability and Context Separable? *European Journal of Cognitive Psychology* 11, 1: 51 – 66.

Levorato, M.C. & Cacciari, C. 2002. The Creation of New Figurative Expressions: Psycholinguistic Evidence in Italian Children, Adolescents and Adults. *Journal of Child Language* 29: 127 – 150.

Levorato, M.C., Nesi, B. & Cacciari, C. 2004. Reading Comprehension and Understanding Idiomatic Expressions: A Developmental Study. *Brain and Language* 91: 303 – 314.

Levorato, M.C., Roch, M. & Nesi, B. 2007. A Longitudinal Study of Idiom and Text Comprehension. *Journal of Child Language* 34: 473 – 494.



Libben, M. R. & Titone, D. 2008. The Multidetermined Nature of Idiom Processing. *Memory and Cognition* 36, 6: 1103 – 1121.

Liontas, J.I. 2001. That's all Greek to me! The Comprehension and Interpretation of Modern Greek Phrasal Idioms. *The Reading Matrix* 1, 1: 1 –31.

Lirola, M.M. 2005. A Systemic Functional Approximation to the Use of Cleft Sentences and Reversed Pseudo-cleft Sentences in English in a Narrative Sample Written by the South African Writer Alan Paton. *Working Papers 10*. Universidad de Alicante, Departamento de Filología Inglesa.

Lodge, D. & Leach, E. 1975. Children's Acquisition of Idioms in the English Language. *Journal of Speech and Hearing Research* 18: 521 – 529.

- Martin, J.R. & Rose, D. 2003. *Working with Discourses: Meaning Beyond the Clause*. London and New York: Continuum.
- Martin, J.R. 2009. Discourse Studies. In Halliday, M.A.K. & Webster, J.J. (eds) *Continuum Companion to Systemic Functional Linguistics*. New York and London: Continuum, 154 – 165.
- Mateu, J. & Espinal, M.T. 2004. Argument Structure and Compositionality in Idiomatic Constructions. *Paper presented at 34th Linguistic Symposium on Romance Languages*. University of Utah, Utah. Extracted from <http://seneca.uab.es/ggt/Reports/GGT-04-7.pdf>. 17 April 2005.
- Matiki, A. 2001. The social significance of English in Malawi. *World Englishes* 20, 2: 201 – 218.
- Matthiessen, C.M.I.M., Teruya, K. & Lam, M. 2010. *Key Terms in Systemic Functional Linguistics*. New York and London: Continuum.
- Matthiessen, C.M.I.M. & Halliday, M.A.K. 1997. *Systemic Functional Grammar: A First Step into the Theory*. Available online: http://minerva.ling.mq.edu.au/resource/VirtuallLibrary/Publications/sfg_firststep/SFG%20intro%20New.html
- McCarthy, J.J. 2002. *A Thematic Guide to Optimality Theory*. Cambridge: CUP.
- McCarthy, J.J. 2008. *Doing Optimality Theory: Applying Theory to Data*. Malden, MA, Oxford and Victoria: Blackwell.
- McGinnis, M. 2002). On the Systematic Aspect of Idioms. *Linguistic Inquiry* 33, 4: 665 – 672.

- Mchombo, S. 2004. *The Syntax of Chichewa*. Cambridge: Cambridge Univ. Press
- Nida, E.A. 1975. *Componential Analysis of Meaning: An Introduction to Semantic Structures*. Paris: Mouton.
- Nippold, M.A. & Martin, S. 1989. Idiom Interpretation in Isolation Versus Context: A Developmental Study with Adolescents. *Journal of Speech and Hearing Research* 32: 58 – 66.
- Nippold, M.A., Moran, C. & Schwarz, I.E. 2001. Idiom Understanding in Preadolescents: Synergy in Action. *American Journal of Speech and Language Pathology* 10: 169 – 179.
- Nippold, M.A. & Rudzinski, M. 1993. Familiarity and Transparency in Idiom Explanation: A Developmental Study of Children and Adolescents. *Journal of Speech and Hearing Research* 36: 728 – 237.
- Nippold, M.A. & Taylor, C.L. 1995. Idiom Understanding in Youth: Further Examination of Familiarity and Transparency. *Journal of Speech and Hearing Research* 45: 384 – 391.
- Nippold, M.A. & Taylor, C.L. 2002. Judgments of Idiom Familiarity and Transparency: A Comparison of Children and Adolescent. *Journal of Speech, Language and Hearing Research* 45: 384 -391.
- Nunberg, G., Sag, I.A. & Wasow, T. 1994. Idioms. *Language* 70, 3:491 – 538.
- Painter, C. 2000. Researching First Language Development in Children. In Unsworth, L. (ed) *Researching Language in Schools and Communities: Functional Linguistic Perspective*. London and Washington: Cassell, 65 – 86.

- Painter, C. 2009. Language Development. In Halliday, M.A.K. & Webster, J.J. (eds) *Continuum Companion to Systemic Functional Linguistics*. New York and London: Continuum, 87 – 103.
- Pallant, J. 2011. *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS*. 4th Ed. Crows Nest NSW: Allen Unwin.
- Papagno, C. & Caporali, A. 2007. Testing Idiom Comprehension in Aphasic Patients: The Effects of Task and Idiom Type. *Brain and Language* 100: 208 – 220.
- Prince, A. & Smolensky, P. 1991. Optimality. Talk given at Arizona Phonology Conference 3, University of Arizona, Tucson.
- Prince, A. and Smolensky, P. 1993. *Optimality Theory: Constraint Interaction in Generative Grammar*. RuCCs Technical Report #2.
- Prince, A. & Smolensky, P. 2004. *Optimality Theory: Constraint Interaction in Generative Grammar*. Oxford MA: Blackwell Publishing.
- Prince, A. 2002. Arguing Optimality. In Coetzee, Andries, Angela Carpenter & Paul de Lacy (eds.) *Papers in Optimality Theory II*. GLSA, UMass. Extracted from Rutgers Optimality Archives. <http://roa.rutgers.edu/view.php3?id=742>. 17 April 2005.
- Prinz, P. M. 1983. The Development of Idiomatic Meaning in Children. *Language Speech* 26, 3: 263 – 272.
- Pulman, S. 1993. The Recognition and Interpretation of Idioms. In C. Cacciari & P. Tabossi. (eds) *Idioms, Processing, Structure and Interpretation*: New Jersey: Laurence, Earlbaum Cognitive Science Monographs, 249-270.

- Ravelli, L. 2000. Getting Started with Functional Analysis of Texts. In Unsworth, L. (ed) *Researching Language in Schools and Communities: Functional Linguistic Perspective*. London and Washington: Cassell, 27 – 64.
- Riehemann, S. 2001. *A Constructional Approach to Idioms and Word Formation*. Unpublished PhD Dissertation, Stanford University.
- Schnell, Z. 2007. Metaphor Processing and the Acquisition of Idioms: A Mentalistic Model. *Acta Linguistica Hungarica* 54, 1: 73 – 104.
- Schweigert, W.A. 1986. The Comprehension of Familiar and Less familiar idioms. *Journal of Psycholinguistic Research* 15: 33 – 45.
- Schweigert, W.A. & Cronk, B.C. 1992/93. Ratings of the Familiarity of Idioms' Figurative Meanings and the Likelihood of Literal Meanings among U.S. College Students. *Current Psychology* 11, 4: 323-345.
- Spector, C.C. 2005. About idioms. (Part of Ph D. Dissertation. University of Toronto)
Extracted from
<http://www.thinkingpublications.com/langconfo5/PDFs/spector.pdf>. 17 April 2005
- Strand, K. & Fraser, B. 1979. The Comprehension of Verbal Idioms by Young Children. Paper Presented at the Boston University Language Development Conference, Boston.
- Swinney, D.A & Cutler, A. 1979. The Access and Processing of Idiomatic Expressions. *Journal of Verbal Learning Behavior* 18: 523 – 534.
- Teich, E. 1999. *Systemic Functional Grammar in Natural Language Generation:*

- Linguistic Description and Computational Representation*. London and New York: Cassell.
- Tesar, B. 1995. Computational Optimality Theory. Doctorial Dissertation, Department of Computer Science, University of Colorado, Boulder. ROA-90.
- Tesar, B. 1997. An Iterative Strategy for Learning Metrical Stress in Optimality Theory. In *Proceedings of the 21st Annual Boston University Conference on Language Development*. Eds. Elizabeth Hughes, May Hughes & Annabal Greenhill. Somerville, MA: Cascadilla Press, 299-325.
- Tesar, B & Smolensky, P. 1993. *The Learnability in Optimality Theory: An Algorithm and Some Basic Complexity Results*. CU-CS-678-93. http://digitool.library.colostate.edu//exlibris/dtl/d3_1/apache_media/L2V4bGlicmlzL2R0bC9kM18xL2FwYWNoZV9tZWRpYS8xNjc1MDE=.pdf
- Tesar, B & Smolensky, P. 1996. *Learnability in Optimality Theory* (long version) Technical Report JHU-CogSci-94. Department of Cognitive Science, John Hopkins University, Baltimore.
- Tesar, B. & Smolensky, P. 1998. Learnability in Optimality Theory. *Linguistic Inquiry* 29: 229-268.
- Tesar, B & Smolensky, P. 2000. *Learnability in Optimality Theory*. Massachusetts: MIT Press.
- Timpunza Mvula, E. S. 1995. Talk on National Language Policy in Malawi. Zomba: University of Malawi, Chancellor College.
- Titone, D.A. & Connine, C.M. 1994. Descriptive Norms for 171 Idiomatic Expressions: Familiarity, Compositionality, Predictability, and Literality. *Metaphor & Symbol*

- 9, 4: 247-270.
- Titone, D.A. & Connine, C.M. 1999. On the Compositional and Noncompositional Nature of Idiomatic Expressions. *Journal of Pragmatics* 31: 1655 – 1674.
- Titone, D., Holzman, P.S. & Levy, D.L. 2002. Idiom Processing in Schizophrenia: Literal Implausibility Saves the Day for Idiom Priming. *Journal of Abnormal Psychology* 111, 2: 313 - 320.
- Van Deemter, K. 2004. Towards a Probabilistic Version of Bidirectional OT Syntax and Semantics. *Journal of Semantics* 21, 3: 251-280.
- Van der Linden, E. & Kraaij, W. 1990. Ambiguity Resolution and the Retrieval of Idioms: Two Approaches. *Proceedings of the 13th Conference on Computational Linguistics*: 245-250.
- Van Rooy, R. 2003. Relevance and Bidirectional OT. In R. Blutner & H. Zeevat (eds) *Pragmatics in Optimality Theory*. Macmillan, Palgrave, 173-210.
- Vega-Moreno, R.E. 2001a. Representing and Processing Idioms. *UCL Working Papers in Linguistics* 13: 73 – 107.
- Vega-Moreno, R.E. 2001b Idioms and Idiomatic Variants: A Relevance-theoretic Account. In A.I. Moreno & V. Colwell (eds.) *Perspectivas Recientes Sobre el Discurso*. Secretariado de Publicaciones, Universidad de Leon.
- Vicker, B. 2002. Building Competency with Figurative Language One Idiom at a Time. BBB Autism; Printable article #62. <http://www.bbbautism.com/pdf/article62buildingcompetencywithfigurative%20language> 3 August 2008.

- Vikner, S. 2001. The Interpretation of Object Shift and Optimality Theory. In G. Müller & W. Sternefeld (eds.) *Competition in Syntax*. Berlin: Mouton de Gruyter, 321-340.
- Vulchanova, M., Vulchanov, V. & Stankova, M. 2011. Idiom Comprehension in the First Language: A Developmental Study. *Vigo International Journal of Applied Linguistics* 8: 207 – 234.
- Wattles, I. & Radić Bojanić, B. 2007. The Analysis of an Online Debate- The Systemic Functional Grammar Approach. *Linguistics and Literature* 5, 1:47 – 58.
- Webster, J.J. 2009. Introduction. In Halliday, M.A.K. & Webster, J.J. (eds) *Continuum Companion to Systemic Functional Linguistics*. New York and London: Continuum, 1 – 11.
- Wilson, D. & Sperber D. 2004. Relevance Theory. In G.Ward & L. Horn (eds) *Handbook of Pragmatics*. Oxford: Blackwell, 607-632.
- Wray, A. & Bloomer A. 2006. *Projects in Linguistics: A Practical Guide to Researching Language*. London: Hodder Education
- Zwarts, J., Hendriks, P. & de Hoop, H. 2005. Comparative Paths to an Optimal Interpretation. In E. Maier, C. Bary and J. Huitink (eds.) *Proceedings of Sinn und Bedeutung* 9: 553-563 extracted from www.ru.nl/ncs/sub9 16 July 2005

Appendices

Appendix A: Letter of Introduction



FACULTY OF ARTS

Linguistics Department

Cell: 082 362 1100
Email: fbanda@uwc.ac.za

13 August 2013

Private Bag X17, Bellville, 7535
South Africa
Tel: +27 (021) 959-2978/2380
Fax: +27 (021) 959-1212
Website: www.uwc.ac.za

DATA COLLECTION IN MALAWI

This is to confirm that **Ms Mervis Kamanga** is one of my students currently pursuing a PhD in Linguistics under my supervision. Her thesis is provisionally entitled **An Optimality Theoretic Account and Systemic Functional Analysis of the Acquisition of Chichewa Idiom Interpretation by Chichewa Speaking Children in Malawi**.

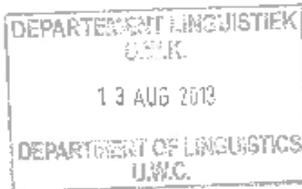
She is currently in Malawi as part of her fieldwork to collect research data for the thesis. Any assistance rendered to her will be highly appreciated.

Should you require further clarification, do not hesitate to contact me.

Sincerely

Professor Felix Banda (PhD)

HOD, Supervisor and Postgraduate Coordinator: Linguistics Department



UNIVERSITY of the
WESTERN CAPE



UNIVERSITY of the
WESTERN CAPE

A place of quality, a place to grow, from hope to action through knowledge

Appendix B: Information Sheet

Appendix B (i): Information Sheet in English



FACULTY OF ARTS
Linguistics Department
University of the Western Cape

Private Bag X17, Bellville, 7535
South Africa
Tel: +27 (021) 959-2978/2380
Fax: +27 (021) 959-1212
Website: www.uwc.ac.za

Cell: 082 362 1100

Email: fbandai@uwc.ac.za

2 April 2013

Information Sheet: Cicerwa Idiom Interpretation Experiments on native Cicerwa speaking children

I, Mervis Kamanga, am a PhD student in the Department of Linguistics, at the University of the Western Cape, South Africa. For this degree, I am investigating how native Cicerwa speaking children learn to interpret Cicerwa idioms figuratively.

The main aim of my research will be to find out how native Cicerwa speaking children learn to interpret Cicerwa idioms figuratively. To understand developmental aspects of idioms, strategies employed by children to learn idioms and effect of syntactic structure on idiom interpretation will be investigated. Developmental stages that children go through in acquisition of idiom will be identified. The study is geared towards achieving the following:

- (a) To identify idiom acquisition age.
- (b) To describe the stages that children go through when they are learning to interpret idioms.
- (c) To identify the strategies that children employ to learn the interpretation of Cicerwa idioms.
- (d) To determine if the syntax of an idiom affects the learning of its interpretation.

My supervisor is Professor Felix Banda in the Department of Linguistics, University of the Western Cape, South Africa. He can be contacted at +27 21 959 2380 or fbanda@uwc.ac.za.

My contact details are as follows: Mervis Kamanga, Linguistics Dept., UWC; phone: 27 84 710 8020 or amervie@gmail.com.

This information sheet is for you to keep so that you can be aware of the purpose of the experiments. With your signature on the attached document, you indicate that you understand the purpose of the exercise.

Yours truly,

A handwritten signature in black ink, appearing to read 'Mervis Kamanga'.

Mervis Kamanga (3372051)

Appendix B (ii): Information Sheet in Cicewa



FACULTY OF ARTS Linguistics Department University of the Western Cape

Private Bag X17, Bellville, 7535
South Africa
Tel: +27 (021) 959-2978/2380
Fax: +27 (021) 959-1212
Website: www.uwc.ac.za

Cell: 082 362 1100

Email: fbanda@uwc.ac.za

2 April 2013

Kalata yofotokeza za ine komanso kafukufukuyu: Maekisiqelinenti a Momiwe Ana Ontwe Ciyankhulo Cawo Coyamba ndi Cicewa Ananthawuzila Zining'a za mu Cicewa

Ine, Mervis Kamanga, ndine wophuzila wa PhD ku Dipatimenti ya Linguistics, ku Yuniivesite ya Western Cape ku South Africa. Kukhuzana ndi digil. ineneyi, ndikupanga kafukufuka wafufuza momwe ana omwe ciyankhulo cawo coyamba ndi Cicewa anaphuzizila kutanthawuzila zining'a za mu Cicewa malondola.

Chitiga ceniceri ca kafukufuka wanga ndi kafufuza momwe ana omwe ciyankhulo cawo coyamba ndi Cicewa anaphuzizila kutanthawuzila malondola zining'a za mu Cicewa. Kuti titha kuvetsa bwino momwe ana anaphuzizila zining'a, tifufuza njira zomwe ana amagwilitsa nechitu kuti aphuzile zining'a komanso tifufuza ngati galanala ya cining'a imasegolela momwe ana angacitanthawuzile cining'ace kapena kupangitsa ana kalephelo kucitanthawuzila. Tipchezaso magawo omwe ana amadutsama akamaphuzila kutanthawuzila zining'a. Kafukufukuyu ucita zintu izi:

- Kupeza osinkhu wemwa ana amayanzila kuphuzila zining'a.
- Kufatoka magawa omwe ana amadutsama akamaphuzila kutanthawuzila zining'a.
- Kupeza njira zomwe ana amagwilitsa nechitu kuti aphuzile kutanthawuzila zining'a za mu Cicewa.
- Kuwunguza ngati galanala ya cining'a imakhala ndi cocita pa momwe mwana anaphuzizila kucitanthawuzile cining'ace.

Wondiwankila pa kafukufuka amangyu ndi a Palotesa Telix Banda e ku Dipatimenti ya Linguistics, ku Yuniivesite ya Western Cape ku South Africa. Iwo mukhoza kuvetsa pa nambala iyi (27 21 959 2380) kapena kuwatembela kalata yoyenda pa magesi ku adilesi iyi fbanda@uwc.ac.za.

Ine mokhoza kundipeza metele: Mervis Kamanga, Dipatimenti ya Linguistics, ku Yuniivesite ya Western Cape ku South Africa, foni yanga ndi: +27 84 710 8020 adilesi yanga ya kalata yoyenda pa magesi ndi: amervis@gmail.com.

Kalata iyi yofotokozza za ine komanso kafukufukuyu ndi yanga kuti muyisunge kuti mudziwe colinga ca maekisiqelinenti omwe tipanga. Siginicha yanga pa cikalata omwe em timoda ndi kalata iyi yikutanthawuziza kuti mukuvetsetsa colinga ca kafukufukuyu.

Ine wanu,

A handwritten signature in black ink, appearing to be 'Mervis'.

Mervis Kamanga (3372051)

Appendix C: Consent Form for Parents

Appendix C (i): Consent Form for Parents in English



University of the Western Cape

Department of Linguistics
Doctor of Philosophiae Dissertation
Consent Forms (Parent)
2013

INFORMED CONSENT FORM FOR PhD THESIS

Date: 2 April 2013

Study Title or Topic: An Optimality Theoretic Account and Systemic Functional
Analysis of the Acquisition of Cicewa Idiom Interpretation by
Cicewa Speaking Children in Malawi.

Researcher: Mervis Kamanga, PhD candidate, Linguistics Department, University of the Western Cape.

Purpose of the Research:

Cicewa Idiom Interpretation Experiments on native Chichewa speaking children

I, Mervis Kamanga, am a PhD student in the Department of Linguistics, at the University of the Western Cape, South Africa. For this degree, I am investigating how native Cicewa speaking children learn to interpret Cicewa Idioms figuratively.

The main aim of my research will be to find out how native Cicewa speaking children learn to interpret Cicewa idioms figuratively. To understand developmental aspects of idioms, strategies employed by children to learn idioms and effect of syntactic structure on idiom interpretation will be investigated. Developmental stages that that children go through in acquisition of idiom will be identified. The study is geared towards achieving the following:

- (a) To identify idiom acquisition age.
- (b) To describe the stages that children go through when they are learning to interpret idioms.

(c) To identify the strategies that children employ to learn the interpretation of Cicewa idioms.

(d) To determine if the syntax of an idiom affects the learning of its interpretation.

My supervisor is Professor Felix Banda in the Department of Linguistics, University of the Western Cape, South Africa. He can be contacted at +27 21 959 2380 or fbanda@uwc.ac.za.

My contact details are as follows: Mervis Kamanga, Linguistics Dept., UWC, phone: +27 84 710 8020 or amervie@gmail.com.

I would therefore like to request that your child form part of my research study. If this permission is granted, the following will be required of your child:

- As a participant, your child will be required to take part in the idiom interpretation experiments.
- S/he will have to listen to the stories read to her/him and at the end s/he will be expected to answer questions or complete sentences or provide meanings.
- The data obtained will be analysed to understand developmental aspects of idioms interpretation; idiom acquisition age, strategies employed by children to learn how to interpret idioms, developmental stages that children go through in acquisition of idiom interpretation etc.
- Each experiment session will take 15 minutes.

Voluntary Participation: Your child's participation in the study is completely voluntary and s/he may refuse to listen to a story or answer any question or choose to stop participating at any time.

Withdrawal from the Study: You can withdraw your child from the study at any time, for any reason, if you so decide. Should you decide to withdraw your child from the study; all data generated as a consequence of her/his participation will be destroyed.

Confidentiality: All information that will be gathered during the research will be held in confidence. Your child's anonymity is guaranteed. Her/his name will not appear in any report or publication of the research. Her/his data will be safely stored and only the researcher will have access to this information.

Legal Rights and Signatures:

I _____ consent that my child

_____ can participate in the study entitled: An Optimality

Theoretic Account and Systemic Functional Analysis of the Acquisition of Cicewa Idiom

Interpretation by Cicewa Speaking Children in Malawi by Mervis Kamanga. I have

understood the nature of this project and wish my child to participate. I am not waiving

any of my child's legal rights by signing this form. My signature below indicates my consent.

Signature _____ **Date** _____
Participant

Signature _____ **Date** _____
Researcher



Appendix C (ii): Consent Form for Parents in Cicewa



University of the Western Cape
Department of Linguistics
Doctor of Philosophiae Dissertation
Consent Forms (Parent)
2013

INFORMED CONSENT FORM FOR PhD THESIS

Date: 2 April 2013

Study Title or Topic: An Optimality Theoretic Account and Systemic Functional
Analysis of the Acquisition of Cicewa Idiom Interpretation by
Cicewa Speaking Children in Malawi.

Wochita kafukufuku: Mervis Kamanga, wophunzila wa PhD ku Dipatimenti ya
Linguistics, ku Yunivesite ya Western Cape ku South Africa.

Colinga ca Kafukufuku:

Maekisipelimenti a Momwe Ana Omwe Ciyankhulo Cawo Coyamba ndi Cicewa Amanthawuzilila Zining'a za mu Cicewa

Ine, Mervis Kamanga, ndine wophunzila wa PhD ku Dipatimenti ya Linguistics, ku Yunivesite ya Western Cape ku South Africa. Kukhuzana ndi digili imeneyi, ndikupanga kafukufuku wofufuza momwe ana omwe ciyankhulo cawo coyamba ndi Cicewa amaphunzilila kutanthawuzila zining'a za mu Cicewa molondola.

Colinga ceniceni ca kafukufuku wanga ndi kufufuza momwe ana omwe ciyankhulo cawo coyamba ndi Cicewa amaphunzilila kutanthawuzila molondola zining'a za mu Cicewa. Kuti tithe kumvetsa bwino momwe ana amaphunzilila zining'a, tifufuza njila zomwe ana amagwilitsa nchito kuti aphunzile zining'a komanso tifufuza ngati galamala ya cining'a imatsogolela momwe ana angacanthawuzilile kapena kupangitsa ana kulephela

kutanthawuzila. Tipezanso magawo omwe ana amadutsamo akamaphunzila kutanthawuzila zining'a. Kafukufukuyu acita zinthu izi:

- (e) Kupeza msinkhu womwe ana amayambila kuphunzila zining'a.
- (f) Kufotokoza magawo omwe ana amadutsamo akamaphunzila kutanthawuzila zining'a.
- (g) Kupeza njila zomwe ana amagwilitsa nchito kuti aphunzile kutanthawuzila zining'a za mu Cicewa.
- (h) Kuwunguza ngati galamala ya cining'a imakhala ndi cocita pa momwe mwana amaphunzilila kucitanthawuzila cining'aco.

Wondiunikila pa kafukufuku amaneyu ndi a Pulofesa Felix Banda a ku Dipatimenti ya Linguistics, ku Yunivesite ya Western Cape ku South Africa. Iwo mukhoza kuwapeza pa nambala iyi +27 21 959 2380 kapena kuwalembela kalata yoyenda pa magesi ku adilesi iyi fbanda@uwc.ac.za.

Ine mukhoza kundipeza motele: Mervis Kamanga, Dipatimenti ya Linguistics, ku Yunivesite ya Western Cape ku South Africa, foni yanga ndi: +27 84 710 8020 adilesi yanga ya kalata yoyenda pa magesi ndi: amervie@gmail.com.

Kotelo ndikufuna ndikupempheni kuti mwana wanu atenge nawo gawo pa kafukufuku wanga. Ngati mwavomeleza kuti atelo, akuyembekezeleka kucita zinthu izi:

- Monga wotenga nawo gawo pa kafukufukuyu, akuyembekezeleka kutenga nawo gawo pa maekisipelimenti a momwe ana amanthawuzilila zining'a.
- Akuyembekezeleka kumvetsela nkhani yomwe izawelengedwe kwa iye ndipo pamapeto pake azayankha mafunso kapena kumaliza ziganizo kapena kupeleka matanthawuzo.
- Mfundo zomwe zitoleledwe zizanthulidwa kuti timvetsetse momwe ana amaphunzilila kutanthawuzila zininga; tizamvetsetsa zinthu izi: msinkhu womwe ana amanyambila kuphunzila zining'a, njila zomwe ana amagwilitsa nchito kuti aphunzile kutanthawuzila zining'a, magawo omwe ana amadutsamo akamaphunzila kutanthawuzila zining'a ndi zina zotelo.
- Ekisipeliment ina ili yonse izatenga mphindi 15.

Atengapo gawo mwakufuna kwanu: Kutengapo gawo kwa mwana wanu pa kafukufuku uyu kukhala kufuna kwanu ndipo mutha kumukaniza kumvetsela nkhani kapena kuyankha funso lina lili lonse kapenanso mutha kumusiyitsa kutengapo gawo nthawi yina yili yonse.

Kumusiyitsa kutengapo gawo pa kafukufuku: Mutha kumusiyitsa mwana wanu kutengapo gawo pa kafukufukuyu nthawi yina yili yonse pa cifukwa cina cili conse mutasankha kutelo. Mutasankha kumusiyitsa mwana wanu kutengapo gawo pa kafukufukuyu, mfundo zomwe zitoleledwe cifukwa ca kutengapo gawo kwa mwana wanu zidzawonongedwa.

Kusunga cinsinsi: Mfundo zonse zomwe zitoleledwe pa kafukufuku amaneyu zidasungidwa ndi kugwiritsidwa nchito mwacinsinsi. Tikukutsimikizilani kuti mwana wanu sazachulidwa. Dzina la mwana wanu silizapezeka mu lipoti lina lili lonse kapena mu cotsindikizidwa cina cili conse ca kafukufuku uyu. Mfundo za mwana wanu zizasungidwa motsamalitsa ndipo yekhayo nyemwe akupanga kafukufuku uyu ndi amane azakhale ndi mwayi wowona mfundozo.

Mawufulu ndi Masiginicha:

Ine _____ ndikuvomela kuti mwana wanga atenge nawo gawo pa kafukufuku yemwe mutu wake ndi: An Optimality Theoretic Account and Systemic Functional Analysis of the Acquisition of Cicewa Idiom Interpretation by Cicewa Speaking Children in Malawi yemwe akupangidwa ndi Mervis Kamanga. Ndazimvetsetsa zonse zokhuzana ndi kafukufuku uyu ndipo ndikufuna mwana wanga atenge nawo gawo. Sikuti ndikupeleka nsembe ma ufulu a mwana wanga ena aliwonse posayina fomu iyi. Siginicha yanga pansipa ikuwonetsa kuvomela kwanga.

Siginicha

Tsiku

Kholo la Mwana Wotengapo Gawo

Siginicha

Tsiku

Wocita Kafukufuku

Appendix D: Consent Form for Children

Appendix D (i): Consent Form for Children in English



University of the Western Cape

Department of Linguistics
Doctor of Philosophiae Dissertation
Consent Forms (Children)
2013

INFORMED CONSENT FORM FOR PhD THESIS

Date: 2 April 2013

Study Title or Topic: An Optimality Theoretic Account and Systemic Functional
Analysis of the Acquisition of Cicewa Idiom Interpretation by
Cicewa Speaking Children in Malawi.

Researcher: Mervis Kamanga, PhD candidate, Linguistics Department, University of the Western Cape.

Purpose of the Research:

Cicewa Idiom Interpretation Experiments on native Cicewa speaking children

I, Mervis Kamanga, am a PhD student in the Department of Linguistics, at the University of the Western Cape, South Africa. For this degree, I am investigating how native Cicewa speaking children learn to interpret Cicewa Idioms figuratively.

The main aim of my research will be to find out how native Cicewa speaking children learn to interpret Cicewa idioms figuratively. To understand developmental aspects of idioms, strategies employed by children to learn idioms and effect of syntactic structure on idiom interpretation will be investigated. Developmental stages that that children go through in acquisition of idiom will be identified. The study is geared towards achieving the following:

- (i) To identify idiom acquisition age.

- (j) To describe the stages that children go through when they are learning to interpret idioms.
- (k) To identify the strategies that children employ to learn the interpretation of Cicewa idioms.
- (l) To determine if the syntax of an idiom affects the learning of its interpretation.

My supervisor is Professor Felix Banda in the Department of Linguistics, University of the Western Cape, South Africa. He can be contacted at +27 21 959 2380 or fbanda@uwc.ac.za.

My contact details are as follows: Mervis Kamanga, Linguistics Dept., UWC, phone: +27 84 710 8020 or amervie@gmail.com.

I would therefore like to request that you form part of my research study. If this permission is granted, the following will be required of you:

- As a participant, you will be required to take part in the idiom interpretation experiments.
- You will have to listen to the stories read to you and at the end you will be expected to answer questions or complete sentences or provide meanings.
- The data obtained will be analysed to understand developmental aspects of idioms interpretation; idiom acquisition age, strategies employed by children to learn how to interpret idioms, developmental stages that children go through in acquisition of idiom interpretation etc.
- Each experiment session will take 15 minutes.

Voluntary Participation: Your participation in the study is completely voluntary and you may refuse to listen to a story or answer any question or choose to stop participating at any time.

Withdrawal from the Study: You can stop participating in the study at any time, for any reason, if you so decide. Should you decide to withdraw from the study; all data generated as a consequence of your participation will be destroyed.

Confidentiality: All information that will be gathered during the research will be held in confidence. Your anonymity is guaranteed. Your name will not appear in any report or publication of the research. Your data will be safely stored and only the researcher will have access to this information.

Legal Rights and Signatures:

I _____ consent to participate in the study entitled: An Optimality Theoretic Account and Systemic Functional Analysis of the Acquisition of Cicewa Idiom Interpretation by Cicewa Speaking Children in Malawi by Mervis

Kamanga. I have understood the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. My signature below indicates my consent.

Signature _____ **Date** _____
Participant

Signature _____ **Date** _____
Researcher



Appendix D (ii): Consent Form for Children in Cicewa



University of the Western Cape

Department of Linguistics
Doctor of Philosophiae Dissertation
Consent Forms (Children)
2013

INFORMED CONSENT FORM FOR PhD THESIS

Date: 2 April 2013

Study Title or Topic: An Optimality Theoretic Account and Systemic Functional
Analysis of the Acquisition of Cicewa Idiom Interpretation by
Cicewa Speaking Children in Malawi.

Wochita kafukufuku: Mervis Kamanga, wophunzila wa PhD ku Dipatimenti ya
Linguistics, ku Yunivesite ya Western Cape ku South Africa.

Colinga ca Kafukufuku:

Maekisipelimenti a Momwe Ana Omwe Ciyankhulo Cawo Coyamba ndi Cicewa Amanthawuzirira Zining'a za mu Cicewa

Ine, Mervis Kamanga, ndine wophunzila wa PhD ku Dipatimenti ya Linguistics, ku Yunivesite ya Western Cape ku South Africa. Kukhuzana ndi digili imeneyi, ndikupanga kafukufuku wofufuza momwe ana omwe ciyankhulo cawo coyamba ndi Cicewa amaphunzilila kutanthawuzila zining'a za mu Cicewa molondola.

Colinga cenicheni ca kafukufuku wanga ndi kufufuza momwe ana omwe ciyankhulo cawo coyamba ndi Cicewa amaphunzilila kutanthawuzila molondola zining'a za mu Cicewa. Kuti titha kumvetsa bwino momwe ana amaphunzilila zining'a, tifufuza njira zomwe ana amagwilitsa nchito kuti aphunzile zining'a komanso tifufuza ngati galamala ya cining'a imatsogolela momwe ana angacanthawuzilile kapena kupangitsa ana kulephela kutanthawuzila. Tipezanso magawo omwe ana amadutsamo akamaphunzila kutanthawuzila zining'a. Kafukufukuyu acita zinthu izi:

- (m) Kupeza msinkhu womwe ana amayambila kuphunzila zining'a.
- (n) Kufotokoza magawo omwe ana amadutsamo akamaphunzila kutanthawuzila zining'a.
- (o) Kupeza njila zomwe ana amagwilitsa nchito kuti aphunzile kutanthawuzila zining'a za mu Cicewa.
- (p) Kuwunguza ngati galamala ya cining'a imakhala ndi cocita pa momwe mwana amaphunzilila kucitanthawuzila cining'aco.

Wondiunikila pa kafukufuku amaneyu ndi a Pulofesa Felix Banda a ku Dipatimenti ya Linguistics, ku Yunivesite ya Western Cape ku South Africa. Iwo mukhoza kuwapeza pa nambala iyi +27 21 959 2380 kapena kuwalembela kalata yoyenda pa magesi ku adilesi iyi fbanda@uwc.ac.za.

Ine mukhoza kundipeza motele: Mervis Kamanga, Dipatimenti ya Linguistics, ku Yunivesite ya Western Cape ku South Africa, foni yanga ndi: +27 84 710 8020 adilesi yanga ya kalata yoyenda pa magesi ndi: amervie@gmail.com.

Kotelo ndikufuna ndikupempheni kuti mutenge nawo gawo pa kafukufuku wanga. Ngati mwavomeleza kutelo, mukuyembekezeleka kucita zinthu izi:

- Monga wotenga nawo gawo pa kafukufukuyu, mukuyembekezeleka kutenga nawo gawo pa maekisipelimenti a momwe ana amanthawuziila zining'a.
- Mukuyembekezeleka kumvetsela nkhani yomwe izawelengedwe kwa inu ndipo pamapeto pake muzayankha mafunso kapena kumaliza ziganizo kapena kupeleka matanthawuzo.
- Mfundo zomwe zitoleledwe zizasanthulidwa kuti timvetsetse momwe ana amaphunzilila kutanthawuzila zininga; tizamvetsetsa zinthu izi: msinkhu womwe ana amanyambila kuphunzila zining'a, njila zomwe ana amagwilitsa nchito kuti aphunzile kutanthawuzila zining'a, magawo omwe ana amadutsamo akamaphunzila kutanthawuzila zining'a ndi zina zotelo.
- Ekisipeliment ina ili yonse izatenga mphindi 15.

Mutengapo gawo mwakufuna kwanu: Kutengapo gawo kwanu pa kafukufuku uyu kukhala kufuna kwanu ndipo mutha kukana kumvetsela nkhani kapena kuyankha funso lina lili lonse kapenanso mutha kusiya kutengapo gawo nthawi yina yili yonse.

Kusiya kutengapo gawo pa kafukufuku: Mutha kusiya kutengapo gawo pa kafukufukuyu nthawi yina yili yonse pa cifukwa cina cili conse mutasankha kutero. Mutasankha kusiya kutengapo gawo pa kafukufukuyu, mfundo zomwe zitoleledwe cifukwa ca kutengapo gawo kwanu zidzawonongedwa.

Kusunga cinsinsi: Mfundo zonse zomwe zitoleledwe pa kafukufuku amaneyu zidasungidwa ndi kugwilitsidwa nchito mwacinsinsi. Tikukutsimikizilani kuti simuzachulidwa. Dzina lanu silizapezeka mu lipoti lina lili lonse kapena mu cotsindikizidwa cina cili conse ca kafukufuku uyu. Mfundo zanu zizasungidwa

motsamalitsa ndipo yekhayo nyemwe akupanga kafukufuku uyu ndi amane azakhale ndi mwayi wowona mfundozo.

Mawufulu ndi Masiginicha:

Ine _____ ndikuvomera kutenga nawo gawo pa kafukufuku yemwe mutu wake ndi: An Optimality Theoretic Account and Systemic Functional Analysis of the Acquisition of Cicewa Idiom Interpretation by Cicewa Speaking Children in Malawi yemwe akupangidwa ndi Mervis Kamanga. Ndazimvetsetsa zonse zokhuzana ndi kafukufuku uyu ndipo ndikufuna kutenga nawo gawo. Sikuti ndikupeleka nsembe ma ufulu anga ena aliwonse posayina fomu iyi. Siginicha yanga pansipa ikuwonetsa kuvomela kwanga.

Siginicha

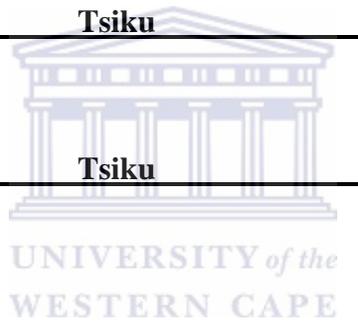
Wotengapo Gawo

Tsiku

Siginicha

Wocita Kafukufuku

Tsiku



Appendix E: Stories Used to Collect Data

Appendix E (i): Stories Used to Collect Data in Cicewa

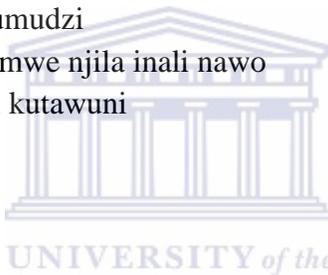
TASK 1

1. Ona msana wa njila

Banja la a Matabwa lidaganiza zoptita kutawuni kukasaka nchito. Atafika kutawuni a Matabwa adasowa kolowera ndi banja lawo. Kutawuni nyumba ndi zolipila komanso cili conse ndi cogula pamene kumudzi sizili concho. Banja la a Matabwa linakhala moyo wovutika kwambili kutawuni. Kenako anaganiza kuti **awona msana wa njila**.

Mawu oti ‘**awone msana wa njila**’ akutanthawuza cani munkhani yomwe mwamvetselayi? Sankhani yankho limodzi mwa awa:

- a. Anaganiza zobwelela kumudzi
- b. Iwo anawona msana womwe njila inali nawo
- c. Iwo anavutika kwambili kutawuni



2. Mwana alirenji

Bambo Chulu ndi mlimi wolimbikira kwambiri. Amalima mbewu zosiyanasiyana monga chimanga, nyemba mtedza, soya ndi zina zotero. Iwo amawetanso ng’ombe, mbuzi nkhusa nkhusu ndi nkhusa. Pakhomo pa bambo Chulu ndi pa **mwana alirenji**.

Mawu oti ‘**mwana alirenji**’ akutanthawuza chani munkhani yomwe mwamvetserayi? Sankhani yankho limodzi mwa awa:

- a. Mwana akulira chani
- b. Posasowa kanthu
- c. Posangalasa

3. Taya madzi

Tadala anali ndi mnzake wapamtima dzina lake Chikondi. Tsiku lina Tadala anaganiza zokamuwona mnzakeyo kwawo. Iye asananyamuke anamwa thobwa lambiri kuti apeze mphamvu zoyendera. Iye ali munjira muthupi munavuta. Iye anaganiza zopempha malo pa nyumba yina kuti **ataye madzi**.

Mawu oti ‘**ataye madzi**’ akutanthawuza chani munkhani yomwe mwamvetserayi? Sankhani yankho limodzi mwa awa:

- a. Abudule madzi

- b. akodze
- c. amwe thobwa

4. Khala maso

Chifuniro ndi chidzukululu cha mayi Mkambeni. Ndi mtsikana wowoneka bwino kwambiri. Komanso amagwira bwino ntchito za pakhomo. Koma chogwetsa ulesi ndi choti Chifuniro amakonda kuba. Kotero akafika pa malo muyenera **kukhala maso**.

Mawu oti '**kukhala maso**' akutanthawuza chani munkhani yomwe mwamvetserayi? Sankhani yankho limodzi mwa awa:

- a. Kukhala wosamala kwambiri
- b. Kukhala wosagona
- c. Kugwira bwino ntchito

5. Uma mutu

Mwana wa atsibweni anayamba sukulu kalekale koma akadali mu sitadadi wani. Iwo ayesetsa kulemba a phunzitsi oti azimuphunzitsa kunyumba koma sizikuthandiza. Iye ndi **wowuma mutu**.

Mawu oti '**wowuma mutu**' akutanthawuza chani munkhani yomwe mwamvetserayi? Sankhani yankho limodzi mwa awa:

- a. Mutu wake unawuma
- b. Wopanda nzeru
- c. Amaphunzira kunyumba

6. Malo oduka mphepo

Mayi Ngozo amafuna mayi Nthala awathandize pa mavuto omwe akukumana nawo. Koma nkhani yake inali yachinsinsi. Kotero anapita pa **malo oduka mphepo**.

Mawu oti '**malo oduka mphepo**' akutanthawuza chani munkhani yomwe mwamvetserayi? Sankhani yankho limodzi mwa awa:

- a. Malo omwe ena sangamve zomwe zikuyankhulidwa.
- b. Malo omwe mphepo siyikudutsapo
- c. Malo omwe mayi Ngozo ndi mayi Nthala anakumana

7. Gona pa mphepo

Chiyembekezo anali mnyamata wakhalidwe loyipa kwambiri. Anthu ambiri samasangalatsidwa ndi khalidwe lake. Itafika nthawi yoti akwatire anavutika kupeza mbeta. Mpakana pano **akugona pa mphepo**.

Mawu oti ‘**akugona pa mphepo**’ akutanthawuza chani munkhani yomwe mwamvetserayi? Sankhani yankho limodzi mwa awa:

- a. Akugona pa malo ozizira
- b. Sanakwatirebe
- c. Adakali ndi khalidwe loyipa

8. Ika kampeni kumphasa

Chikondi amagwira ntchito yolandira ndi kusunga ndalama. Abwana ake amamukonda kwambiri. Ogwira ntchito ena amachita naye nsanje. Tsiku lina m’modzi wa ogwira ntchito anaba ndalama pa malo pomwe Chikondi amasunga. Abwana ake anazindikira kuti wina **anamuyikira kampeni kumphasa**.

Mawu oti ‘**anamuyikira kampeni kumphasa**’ akutanthawuza chani munkhani yomwe mwamvetserayi? Sankhani yankho limodzi mwa awa:

- a. Anamupangira chiwembu
- b. Anayika mpeni wawung’ono kungsi kwa mphasa
- c. Anamuchitira nsanje

9. Onera pakhosi

Tadala anali mwana wa a Mbonekera. Tsiku lina Tadala anamva mthupi. Atapita naye kuchipatala anamupatsa mankhwala a malungo. Tadala anamaliza mankhala onse omwe anapatsidwa ku chipatala koma sizinasinthe. Matenda a Tadala anapitirira mpakana anayamba **kuwonera pakhosi**.

Mawu oti ‘**kuwonera pakhosi**’ akutanthawuza chani munkhani yomwe mwamvetserayi? Sankhani yankho limodzi mwa awa:

- a. Tadala akafuna kuwona chinthu amawonera pakhosi
- b. Matenda a Tadala anafika povuta.
- c. Tadala amadwala malungo.

10. Tsala madzi amodzi

Galu wa Chikondi ali ndi chizolowezi chodula pa chingwe. Lero anadulanso ndikupita ku msewu. Galimoto lina lamugunda ndipo wavulala kwambiri. Moti **watsala madzi amodzi**.

Mawu oti '**watsala madzi amodzi**' akutanthawuza chani munkhani yomwe mwamvetserayi? Sankhani yankho limodzi mwa awa:

- a. Watsala pang'ono kufa
- b. Wavulala kwambiri
- c. Watsala ndi madzi amodzi okha.

11. Temetsa nkhwangwa pamwala

Anaphiri anatereka ndiwo pa moto. Akupita kotunga madzi anawuza ana awo kuti azisonkhezera ndiwozo. Iwo pobwera anapeza ndiwo zitadyedwa. Atafunsa ana awo palibe anavomera kuti wadya. Onse **anatemetsa nkhwangwa pa mwala**.

Mawu oti '**anatemetsa nkhwangwa pa mwala**' akutanthawuza chani munkhani yomwe mwamvetserayi? Sankhani yankho limodzi mwa awa:

- a. Anakanitsitsa
- b. Anatema mwala ndi nkhwangwa
- c. Anasonkheza ndiwo

12. Galu wakuda

Chaka chatha mvula inavuta kwambiri. Mbewu monga chimanga, fodya, mtedza ndi nyemba zidapserera. Anthu ambiri sanapate chakudya. Kunali **galu wakuda**.

Mawu oti '**galu wakuda**' akutanthawuza chani munkhani yomwe mwamvetserayi? Sankhani yankho limodzi mwa awa:

- a. Njala
- b. Galu wantundu wakuda
- c. Kuvuta kwa mvula

13. Lowa m’kanyumba komata

Marita amaphunzira ku sukulu yogonera konko ya Chisambi Sekondale. Akakhala ku sukulu amasintha amuna ngati zovala. Makolo ake atamva nkhani imeneyi anadandawula kwambiri. Pofuna kumuthandiza anapempha azimayi achikulire kuti amuyankhule. Ndipo azimayiwo anachita monga anapemphedwera. Marita **analowa m’kanyumba komata**.

Mawu oti ‘**analowa m’kanyumba komata**’ akutanthawuza chani munkhani yomwe mwamvetserayi? Sankhani yankho limodzi mwa awa:

- a. Analangizidwa
- b. Analowa munyumba yochita kumata
- c. Amapanga uhule

14. Tsina khutu

Gumulani anali mnyamata wolimbikira pa ulimi. Msuweni wake amachita naye nsanje. Iye anaganiza zoti amulande minda Gumulani. Koma adzakhali ake **adamutsina khutu**.

Mawu oti ‘**adamutsina khutu**’ akutanthawuza chani munkhani yomwe mwamvetserayi? Sankhani yankho limodzi mwa awa:

- a. Adatsina khutu la Gumulani
- b. Adamuchitira nsanje
- c. Adamuchenjedza

15. Gwiritsa fuwa la moto

Chaka chatha mwana wanga woyamba anandilonjedza kuti andigulira feteleza. Ndinasangalala ndi nkhani imeneyi. Ndinalima minda yanga yonse mwachangu. Mvula itagwa ndidadzala mbewu. Ndinamukumbutsa mwana wanga za feteleza. Iye ananditsimikidzira kuti agula. Koma mbewu zinakula feteleza osabwera. Mwana wanga **anandigwiritsa fuwa la moto**.

Mawu oti ‘**anandigwiritsa fuwa la moto**’ akutanthawuza chani munkhani yomwe mwamvetserayi? Sankhani yankho limodzi mwa awa:

- a. Anandiputsitsa
- b. Anandipangisa kugwira fuwa lotentha ndi moto
- c. Sanagule feteleza

16. Tsamira dzanja

Angozo anayamba kudwala ngati masewera. Matenda awo anakula tsiku ndi tsiku. Ana awo anawatengera kuchipatala cha kuboma. Koma izi sizinathandize konse. Anangonako tsiku limodzi. Tsiku lotsatiralo a Ngozo **anatsamira dzanja**.

Mawu oti '**anatsamira dzanja**' akutanthawuza chani munkhani yomwe mwamvetserayi? Sankhani yankho limodzi mwa awa:

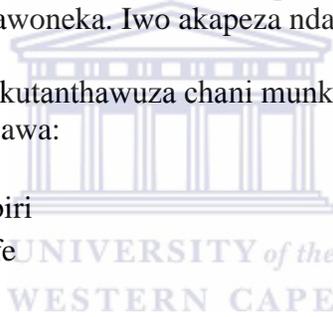
- a. Anagona chotsamira dzanja
- b. Anamwalira
- c. Anadwala kwambiri

17. Kupha phala

Atsibweni anga anayamba kumwa mowa ali achichepere. Ngakhale amapeza phindu lochuluka pa ulimi wawo silimawoneka. Iwo akapeza ndalama **amakapha phala**.

Mawu oti '**amakapha phala**' akutanthawuza chani munkhani yomwe mwamvetserayi? Sankhani yankho limodzi mwa awa:

- a. Amalima kwambiri
- b. Amanwa mowa kwambiri
- c. Amapanga phala kuti life



18. Dyera masuku pamutu

Chaka chatha ine ndi Kondwani tinapeza ganyu yowumba njerwa. Tinawumba njerwa mokhulupirika. Titamaliza kuwumba Kondwani anapita yekha kukatenga malipiro. Chokhumudwitsa ndichoti Kondwani anadya yekha ndalama zonse. Kondwani **anandidyera masuku pa mutu**.

Mawu oti '**anandidyera masuku pa mutu**' akutanthawuza chani munkhani yomwe mwamvetserayi? Sankhani yankho limodzi mwa awa:

- a. Anandigwiritsa ntchito yopanda malipiro
- b. Anadya masuku ali pa mutu panga
- c. Analandira ndalama

19. Pala moto kudambwe

Kusukulu kwathu kuli zipatso zambiri koma sitiloledwa kuthyola. Tsiku lina ndinakanika kupilira. Ndinathyola lalanje limodzi. Ndipo **ndinapala moto kudambwe**.

Mawu oti '**ndinapala moto kudambwe**' akutanthawuza chani munkhani yomwe mwamvetserayi? Sankhani yankho limodzi mwa awa:

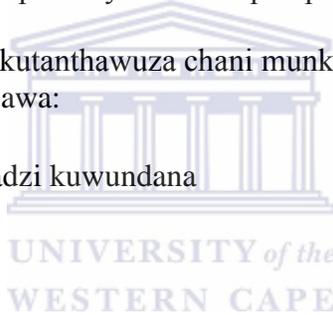
- a. Ndinaziputira mavuto
- b. Ndinapala moto wa kudambwe
- c. Ndinathyola lalanje

20. Kadaunda madzi

Mudzi wa a Chilipaine uli ndi alimi olimbikira. Alimi ambiri m'mudziwu anasamalira bwino mbewu zawo chaka chino. Izi zapangitsa kuti alimi ambiri akhale ndi chimanga chochuluka. Kotero m'mudziwu palibe yemwe akupemphetsa **kadaunda madzi**.

Mawu oti '**kadaunda madzi**' akutanthawuza chani munkhani yomwe mwamvetserayi? Sankhani yankho limodzi mwa awa:

- a. Chimanga chambiri
- b. Chinthu chopangitsa madzi kuwundana
- c. nsima



Appendix F: A List of Sentences Containing Idioms Used to Collect Data

IDIOM INTERPRETATION IN SENTENCES

TASK 2

Perekani matanthauzo a mawu omwe ali ndi mzere kungsi kwawo

1. Tabwera lija ndikale **tiwone nsana wanjira** tsopano.

2. Banja la a Moyo ndi **lamwana alirenji**.

3. Usamwe tiyi wambiri ungavutike ndi **kutaya madzi** munjira.

4. Munthu yemwe wabwerayu sitikumudziwa choncho muyenera **kukhala maso**.

5. Mwana wanu ndi **wowuma mutu** nchifukwa chake amalephera kusukulu.

6. Gumede **akugona pa mphepo** chifukwa akazi amangomukana.

7. Ntchito yanga yatha chifukwa winawake **anandiyikira kampeni kumphasa**.

8. Tikambirane nkhanayi pa **malo oduka mphepo**.

9. Mwana wa Angozo akudwala akuchita **kuwonera pakhosi**.

10. Nkhuku yanga **yatsala madzi amodzi** ili ndi chitopa.

11. Amfumu **atemetsa nkhwangwa pamwala** kuti maliro amenewa sayikidwa m'mudzi muno.

12. Chaka chino **galu wakuda** wavuta chifukwa mvula inavuta.

13. Apongozi anga **anditsina khutu** kuti Chikondi ndiwakuba.

14. Atsibweni anandilonjeza fetereza koma **andigwiritsa fuwa lamoto**.

15. Agogo Chatha **atsamira dzanja** dzulo.

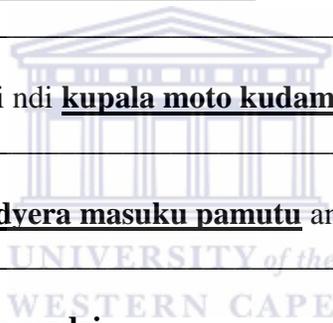
16. Apongozi anga sangatukuke chifukwa amakonda **kupha phala**.

17. Aphunzitsi **analowa m'kanyumba komata** ndi Tadala kusukulu.

18. Zomwe mukuchita inuzi ndi **kupala moto kudambwe**.

19. Chikondi amakonda **kudvera masuku pamutu** anzake.

20. Ife tadya kale **kadaunda madzi**.



Appendix G: A List of Idioms Used to Collect Data

IDIOM INTERPRETATION OUT OF CONTEXT

TASK 3

Perekani matanthauzo a mawu ali minsiwa:

1. Ona nsana wanjira.

2. Mwana alirenji

3. Taya madzi

4. Khala maso

5. Uma mutu

6. Malo oduka mphepo

7. Gona pa mphepo

8. Ika kampeni kumphasa

9. Onera pakhosi

10. Tsala madzi amodzi

11. Temetsa nkhwangwa pamwala

12. Galu wakuda



13. Tsina khutu

14. Gwiritsa fuwa la moto

15. Tsamira dzanja

16. Kupha phala

17. Kadaunda madzi

18. Lowa m'kanyumba komata

19. Pala moto kudabwe

20. Dyera masuku pamutu



Appendix H: A List of Sentences Containing Incomplete Idioms Used to Collect Data

SENTENCE COMPLETION

TASK 4

Malizani ziganizo zili munsidzi polemba mawu oyenera pa mpata womwe waperekedwa.

1. Alendo atatha kudya chakudya anawona nsana _____.
2. Munthu wolimbikira ntchito zakumunda pakhomo pake pamakhala pa mwana _____.
3. Chikondi anataya _____ mkalasi chifukwa aphunzitsi anamuletsa kutuluka.
4. Mwana wanu amakhala _____ akamagulitsa malonda.
5. Ine ndinalephera sukulu chifukwa ndine wowuma _____.
6. Ine ndatopa kugona _____ naganiza zokwatira tsopano.
7. Sibwino kuyikirana kampeni _____ pa malo a ntchito.
8. Ife tinakumana pamalo _____ mphepo kuti tigawane ndalama.
9. Agogo akudwala kotero akuchita kuwonera _____.
10. Galu wanga wagundidwa moti watsala _____ amodzi.
11. Angozo atemetsa _____ pamwala kuti Marita sakumufunanso.
12. Chaka chino mvula yavuta kwambiri kotero kuli galu _____.
13. Mukawona mnzanu akulakwitsa ndibwino kumutsina _____.
14. Mwana wanga wandigwiritsa _____ la moto.
15. Apongozi anga anatsamira _____ ali ndi zaka makumi asanu.

16. Ine sindifuna mamuna wokonda _____ phala.
17. Chikondi analowa _____ komata dzulo.
18. Mwana wanu wapala _____ kudambwe.
19. Iye amakonda kudyera _____ pamutu amnzake.
20. Ife lero sitidya _____ madzi chifukwa kwathu kulibe ufa.



Appendix I: A List of Sentences Containing Modified Idioms

IDIOM INTERPRETATION IN RELATION TO SYNTACTIC MODIFICATION

TASK 5

Perekani matanthauzo a mawu omwe ali ndi mzere kungsi kwawo

1. Chikondi amatayataya madzi.

2. Iye amalowalowa mkanyumba komata.

3. Tadala amandiyikirayikira kampeni kumphasa.

4. Mwana uyu akutaya pafupipafupi madzi.

5. Ine sindifuna kupalapala moto kudambwe.

6. Sibwino kudyeradyera masuku pamutu.

