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Issues of Ambiguity in Sesotho: Meaning Retrieval

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ABSTRACT This paper is based on the findings from a study conducted to examine issues of ambiguity in Sesotho. This is a qualitative study in which two experiments were conducted to collect data from 30 Sesotho native speakers. The respondents were purposefully selected from language users in Motheo district in South Africa. The results from these experiments showed that native speakers are able to distinguish a dominant meaning of a word from a subordinate meaning. They are able to assess the role of context in determining the meaning(s) of words. The implications of these findings are discussed. This paper provide an insight as to how context should be regarded as crucial in meaning retrieval. That in the absence of 'context', or if it is less restrictive, the most frequent occurring meaning will be activated.

INTRODUCTION

Ambiguity can be defined as a word, phrase, or sentence is ambiguous if it has more than one meaning. The word 'light', for example, can mean not very heavy or not very dark. The notion of ambiguity has philosophical applications. It is normally acknowledged that ambiguity is a semantic relation that concerns different meanings attached to an expression. According to Adu and Olaoye (2014), this is one of the features of natural language in which 'a word, phrase, or a sentence is prone to different interpretation'. Udemmadu (2012) observed that the syntactic knowledge goes beyond being able to decide which strings are grammatical and which are not. It account for multiple meanings, or ambiguity. Chrabaszcz and Gor (2014: 416) assert that the meaning of a sentence, or the fact that it is ambiguous or anomalous, can be known in isolation from any context, and that speakers of language must know the meaning of a sentence before they can use it in any given context. That meaning equivalence is not stating meaning, and there is no proof that knowing the meaning of a sentence does not entail knowing the context in which it is used.

In defining issues of ambiguity in Northern Sotho, Chokoe (2000) emphasizes verbal tricks that sometimes lead to confusions and misunderstandings that often result in unnecessary conflicts. It is for this reason that an attempt is made to study on matters of ambiguity in Sesotho language.

Current Issues

Discussions of context are, of course frequent in the ambiguity literature, but there have been relatively few attempts to develop a principled account of context types. In his distinction and discussion on two types of context-dependence models, Ahrens (1998:12) mentions a 'a strictly' selective account and 'a modified' selective account, the context alone is enough for the processor to select the appropriate meaning of the ambiguous word. This view is shared by the likes of Schvaneveldt et al. (1976), Simpson (1981), Glucksberg et al. (1986), Gooding (2006), Tsai (2012) and (Kiliçkaya 2016).

This implies that if 'the context is biased towards the dominant meaning of a word, then only the dominant meaning is accessed (McPhedran 2014: 126). In addition, if the context is biased toward the subordinate meaning of a word, then only the subordinate meaning is accessed (Harley 2013). In essence, the context-dependent model denotes that the meanings of ambiguous words are activated by the context of the sentences in which they occur, 'so that only the contextually appropriate meaning of the ambiguous word is activated' (Burgess and Simpson 1988).

Ahren (1998: 13) take this further by saying that in effect, context can block the access of the non-contextually appropriate meaning, and select only the meaning that is contextually appropriate; and select only the meaning that is contextually appropriate. On the other hand, 'a modified selective account says that when context and dominance (frequency of meaning of the lexical item) interact, only the contextually

appropriate meaning of a word is selected' (Anji and Anto 2014: 393). This view is shared by Tabossi et al. (1987), Tabossi and Zardon (1993) and Khoshkhabar (2015).

According to one version of this context-independent view (for example, Hogaboam and Perfetti 1975; Salehi and Basiri 2015), the order of access to meanings is based on their relative frequencies. Whenever an ambiguous word is encountered, regardless of context, the most common meaning is retrieved. If this meaning is discovered to be inconsistent with the context, then it is discorded and a second meaning is retrieved. This process will be continued until an acceptable match is found. In most cases, the result will be the same as under the context-dependent model. That is, because the context is most often consistent with the most frequent sense of ambiguous word, an ordered access model predicts the processing of only one meaning on most occasions, but multiple meanings when the context is consistent with the less frequent (subordinate) meaning.

According to Rodd et al. (2016: 18), ambiguous words can be 'subcategorized into dominant and subordinate meanings as often two meanings of a word not equally used'. This means the dominance of a meaning refers to the relative frequency each meaning of an ambiguous word used. Sereno et al. (2006: 335) observed that ambiguous words have been classified as 'either balanced or biased, depending on the relative frequency of alternative meaning'. This implied that some ambiguous words are balanced, having two salient meaning (and, possibly, other subordinate meanings), but most are biased (or polarized), having one strongly dominate meaning and one or more subordinate meanings. Anji and Anto (2014: 393) avers that 'context can either select the more frequent, dominant meaning or the less frequent, subordinate meaning' (this is true even in the case of ambiguous words, because the two meanings are rarely precisely equal in occurrence).

To explain how context influences meaning selection in ambiguous word processing, Groove (2014: 158) maintains that the 'idea of meaning dominance' should be introduced in order to have a better understanding. Many words occur more frequently than others. The property of ambiguous words is referred to as meaning dominance. Some ambiguous words have one frequent (dominant) meaning; and other less frequent (subordinate) meanings. This kind of word maybe called a biased ambiguous word. Dominant and subordinate meanings can be divided into polarized and balanced ambiguous words. According to Khalili and Rahmany (2014: 1140) 'polarized words are those with meanings that have a predominant earning which is most frequently used in relation to the word. In comparison, balanced words are ambiguous words which do not have one dominate interpretation for the word (that is, *right* may mean either *correct* or a *direction*).

Aim of the Paper

The aim of this paper is to test the ambiguity of words in a sentence, starting from the most dominant meaning to the most subordinate meaning.

Research Objectives

The paper intended to: Find out whether Sesotho native speakers are able to distinguish between dominant and subordinate meaning of words in the absence of context. Identify different interpretations of a set of ambiguous words in a sentence.

Research Questions

In which way are Sesotho native speakers able to distinguish between dominant and subordinate meaning of words in the absence of context?

How are Sesotho native speakers able to tell different interpretation of a set of ambiguous words in a sentence?

METHODOLOGY

Experiment 1

In an attempt to answer the research questions posed above, the researcher find it appropriate to conduct two experiments to provide a clear direction .The aim of the first experiment was to determine the dominant meaning (DM) and the subordinate meaning (SM) of each of the given words. It was based on the native Sesotho speakers' knowledge of selected Sesotho words and their parallel meaning. Each participants' linguistic competence (that is, what he/she really knows, not necessarily what language

he/she uses) was measured. This experiment was limited to: a study of the ability of 'native speakers' of a language, their native ability depended on the fact that they have heard the language 'spoken in the community in which they were born and spent their years. an individual's ability, not his ability to use ambiguity lexical semantic ambiguity only

Method

Participants

The participants comprised of a total of thirty (30) Sesotho mother tongue speakers of different ages and sexes. There were five language practitioners (**LP**); five university lecturers (**UL**);five primary and high school Educators (**E**); five old pensioners (**OP**); five postgraduate and undergraduate students (**US**) and five high school learners (**HL**).

Materials

There were 15 ambiguous targets which were randomly selected. The following words/stems written on index cards were given: '*mafura*' (fat/ fuel); '*kereke*' (church/congregation); '*o nyetse*' (he/she is married/defecated); '*molala*' (neck/ bachelor); '*ithotela*' (urinating oneself/ collecting oneself luggage); '*hlola*' (stay/win/create cause); '*boka*' (praise/cement); '*ikgama*' (hang oneself/milk oneself); '*o tshwarehile*'(busy/bewitched); '*o ile matsatsing*' (mensuration/ on holidays); '*epa*'(convene meeting/ dig a hole); '*lehata*' (liar/skull); '*seriti*' (shadow/dignity); '*roka*'(sew/praise); '*bopa*' (create/sad).

Procedure

The participants were tested individually on various days. Each participant received the same treatment and data. They were given words which had at least two meanings and participants were asked to provide the first meaning of the word, and if possible, followed by other meanings. The words were given to participants in print and they were not read (aloud). Each participant was expected to read each word silently and give meaning(s). The most frequent meaning (that is, the meaning found first by most participants) was regarded as the dominant meaning.

Experiment 2

Immediately, when the researcher is convinced that a participant had acquired at least two meanings of each word, the second experiment was introduced. The purpose of the second experiment was to assess the role of context in determining the meaning(s) of words.

Method

Participants

The participants comprised of a total of thirty (30) Sesotho mother tongue speakers of different ages and sexes. There were five language practitioners (**LP**); five university lecturers (**UL**); five primary and high school Educators (**E**); five old pensioners (**OP**); five postgraduate and undergraduate students (**US**) and five high school learners (**HL**).

Material

The materials were identical to those used in Experiment 1.

Procedure

Each given word in the first experiment was put within the context of a sentence thereby biasing towards a particular meaning. When the meaning of that particular word was correctly given, another sentence being biased towards the second meaning, three other sentences, one being weakly biased towards one meaning, another being weakly biased towards the other meaning and the last being fully ambiguous, were given. It was expected of the participant to tell which sentence was biased towards which meaning, and which of the five sentences was fully ambiguous. The participants were asked to give reasons backing their answers. These reasons are included in the discussions that follow.

OBSERVATIONS AND DISCUSSION

From the experiments undertaken, more especially experiment number 1, one could observes that the ambiguity of some words is more easily detected than in the other words, and that some meanings are 'more equal than others'. Taking '*lehata*' (skull/liar) as an example, not even a single participant hesitated to give 'skull'

as its first (dominant) meaning. The reason behind this choice is that 'skull' is the basic meaning whereas other meanings like 'liar', 'Golgotha', etc., are just subordinate implying that the ambiguity of '*lehata'* is the result of polysemy. Experiment number 1 also reveals that 'the meanings of ambiguous words are ordered in semantic memory according to their relative frequencies, as observed by Rodd et al. (2016). Given a neutral context, or no context at all, this order will determine which meaning is retrieved when an ambiguous word is encountered. (Kiliçkaya 2016).

It was also observed that age plays a prominent role in determining the first meaning. People of different ages vary when it comes to the first meanings of some words. This view is supported by Salehi and Basiri (2015) when they say that old people will always find it appropriate to infuse euphemism in their speech as part of avoiding the effects of ambiguity. Compare '*nyetse*' (answering the call of nature and getting married). Pensioners understand that the word '*nyetse*' getting married' (100%) whereas High School learners sees it to mean nothing else but 'defecated' (80%). When asked to defend their first choice pensioners said that guarding against being vulgar is one of the social norms that they need to keep and not to violate. If they chose 'defecated' as their first choice meaning of '*nyetse*', they would be violating that social norm, but for the young ones, that unwanted meaning was the obvious one - they are still exploring the 'other side' of the world – the unacceptable. Remarkably enough, 'the unacceptable' meaning becomes the dominant meaning. Even though '*nyetse*' (defecated) and '*nyetse*' (married) are easily distinguished because of tone, it is impossible to differentiate them when in written form, because diacritic signs are no more used in non-scientific texts. In a normal context or no context at all, uttering '*nyètsè*' with a low-low tone refers to 'defecated', whereas '*nyétsè*' (high-low tone) refers to 'married. Within the sentential context, there is no difference in articulation because they are both uttered with one tone: a low-high tone. There are some differences between words uttered in isolation and those uttered within context as far as pronunciation is concerned (as in Khoshkhabar 2015). This simple means that a word uttered out of sentential context might not be pronounced tonally the same as one within the context of a sentence.

Experiment number two shows that one interpretation of a set of ambiguous words may be much more obvious in one sentential context than in another. For instance, the interpretation of sentence 1, below as referring to 'delivery one's luggage' is rather obscure, but this is not the case with sentence 2.

1. *Ka morao hore a lelekwe polasing, Motsiri o ile a ithotela ka potlako*
   (After being chased away from the farm, Motsiri delivered his luggage quickly.)
   (After being chased away from the farm, Motsiri urinated himself quickly.)
2. *Ngwana ya monyenyane o a ithotela hobane ha a so tsebe ho laola senya sa hae*.
   (A young child urinated himself/herself because he/she does not have control over his/her bladder.)

In order to discover such ambiguities one need to read the sentence several times, understand the first meaning and then look for the second meaning. The experiment proved that 'seeing the more obscure meaning for the particular context on the first reading could make discovering the ambiguity easy since perception of the second meaning is relatively probable. Seeing the more likely meaning on the first reading should make discovering the ambiguity take more time since the perception of the second meaning is less probable and presumably more difficult.

During the interview, the bias for a meaning, defined as percent of the participants who reported seeing that meaning first, was calculated for each sentence. For instance, a sentence where 25 of 30 participants report seeing one meaning first and five report the other first, would have 80 percent bias for one meaning and a 20 percent bias for the other.

One of the aims of this study was to test the ambiguity of words in relation to the most dominant meaning to the most subordinate meaning. In this instance, context plays a prominent role. Takufumi (2014: 262) emphasizes this idea when he says that 'a meaning is relatively decided by context dynamically'. But when faced with the following sentences, participants reacted otherwise:

3. a. *Thabang o nyetse ka lapeng* (Thabang married/defecated at home)
   b. *Thabang o nyetse ha malome wa have* (Thabang married/defecated at his uncle)

c. *Thabang o nyetse a sa rate* (Thabang married/defecated against his will)
d. *Ho thwe Thabang o nyetse mosadi maobane* (It is said Thabang married/ defecated yesterday)
e. *Thabang o nyetse ngwahola* (Thabang married/defecated last year)

The respondents all voted for sentence 3(c) above as the most ambiguous of them all. The sentence which is strongly biased towards the dominant meaning (53% - See Table 1); that is towards the excreta, remained problematic until the researcher discussed the role of some of the words within the sentence. Some opted for sentence 3(a), as the one with strongly biased meaning towards 'excreta' while others opted for sentence 3(e). In sentence 3 (e), the word '*ngwahola*' (last year) is the one which biases the meaning of the sentence towards 'marriage', for if he did (defecating) last year he would have died by now. To the native Sesotho speakers, '*ngwahola*' (last year) does not mere refer to last year (say today is the 1st January and we refer to the previous day as '*ngwahola*'), but to a date in the remote past. Those who argued that sentence 3(a) is strongly biased towards the dominant meaning based on the adverb '*ka lapeng*' (at home). Though, it is not impossible to get a life partner within the relative, rather queer and unusual. Pride and culture do not encourage such marriage, which is often regarded as incest. On the other hand, though embarrassing and of course, not acceptable, it is highly possible for a person to answer nature inside the house. Sentence 3(e) thus serves as the one which is strongly biased towards the subordinate meaning, namely, 'marriage' is sentence 3 (b), though some participants opted for sentence 3(d). Those who were against sentence 3(d) being biased towards marriage urged that the word '*ho thwe*' (it is said) changes the whole context to be biased against marriage – gossip is likened to a thorn – if not carefully considered, it can sometimes prick (Chokoe 2000: 126). The moment one says '*ho thwe*' it implies one is not sure. Hence the interpretation of '*o nyetse mosadi'* (married/defecated wife) being that he spat some vulgar words (that is, he insulted) on his wife or literally defecating on her.

The last sentence which is weakly biased towards the subordinate meaning- marriage in sentence 3(b). If one knows the Sesotho culture quite well, it is customarily expected and of course acceptable in Sesotho for a man to marry his maternal uncles' daughter so that '*lobola*' should go back to the family. He who instead of marrying, defecate at uncle's place is bad omen, and thus deserves to be punished.

To summarise this discussion, it is deemed fit to rearrange the above sentences, beginning with the one which is strongly biased towards the dominant meaning and ending with the one strongly biased towards the subordinate meaning (Table 2). The abbreviations are as follows:

Table 1: Five randomly selected words

Words	*Meanings*	*LP*	*UL*	*E*	*OP*	*US*	*HL*	*TOTAL*
lehata	Skull/Liar	5/0	5/0	5/0	5/0	5/0	5/0	30/0
hlola	Win/Stay/Create cause	4/1/0	4/1/0	3/1/1	2/1/2	2/2/1	3/2/0	18/8/4
O nyetse	Defecated/Married	3/2	3/2	4/1	0/5	0/5	4/1	14/16
O tshwarehile	Witchcraft/Commitment	4/1	4/1	4/1	1/4	5/0	0/5	18/12
Seriti	Shadow/Pride	5/0	5/0	4/1	3/2	2/3	0/5	19/11

Note: **LP=** Language Practitioners**; UL=** University Lecturers; **E** =Educators; **OP**= Old Pensioners; **US** = University Students; **HL** = High School learners

Table 2: Dominant / Subordinate meaning

Words	*Meanings*	*LP*	*UL*	*E*	*OP*	*US*	*HL*	*TOTAL*
lehata	Skull / liar	100/ 0	100/0	100/0	100/0	100/0	100/0	100%
hlola	Win/Stay/Createcause	80/20/0	80/20/0	60/20/20	40/20/40	40/40/20	60/40/0	60%/27%/13%
O nyetse	Defecated / Married	60/ 40	60/40	80/20	0/100	0/100	80/20	47%/53%
O tshwarehile	Witchcraft/Commitment	80/ 20	80/20	80/20	20/80	100/0	0/100	63%/37%
Seriti	Shadow / Pride	100/ 0	100/0	80/20	60/40	40/60	0/100	63%/37%

Note: **LP=** Language Practitioners**; UL=** University Lecturers; **E** =Educators; **OP**= Old Pensioners; **US** = University Students; **HL** = High School learners

DS > Dominant Meaning, Strong Bias
DW > Dominant Meaning, Weak Bias
SS > Subordinate Meaning, Strong Bias
SW > Subordinate Meaning, Weak Bias
FA > Fully Ambiguous
The sentences are arranged as follows:
DS >*Thabang o nyetse kalapeng*
(Thabang married/defecated at home)
DW >*Ho thwe Thabang o nyetse mosadi maobane*
(They said Thabang married/defecated yesterday)
FA >*Thabang o nyetse a sa rate*
(Thabang married/defecated against his will)
SW >Ho thwe *Thabang o nyetse ha malome wa hae.*
(It is said Thabang married/defecated yesterday)
SS >*Thabang o nyetse ngwahola*
(Thabang married/defecated last year)

The other group of sentences which the respondents grappled with is the following:

4. a. *Motho e moholo ha a ke a ithotela metsi bana ba ntse ba le teng*
(An adult cannot urinate her/himself/ deliver water for him/herself while kids are still around)
b. *Ha re mo emele, e tla re ha a qeta ho ithotela, re tla be re tsamaya*
(Let us wait for him/her, when he/she finished urinating him/herself / deliver his/her luggage him/herself, we will then leave)
c. *Ho ithotela, hantle ke ha motho a se a tsofetse mme ho bohloko*
(To urinate oneself/ to deliver one's luggage him/herself is when one is old and is very painful)
d. *E mong le e mong ha a ithotele, ha ho na kgomo sebeletsa pere mona* (Everyone has urinate her/himself /to deliver luggage for her/himself, no one has to rely to another person)
e. *Bohloko ba ho ithotela ha ho na ya sa bo tsebeng*
(No one does not know, the pain of urinating oneself/ collecting oneself luggage)

Knowing which sentences are biased towards either the dominant meaning (of '*ithotela*') which is 'urinating oneself' or subordinate meaning which is 'delivering one's luggage' was not a challenging task for respondents. They unanimously chose sentence 4 (b) and 4 (a) to represent DS and SS respectively. Their argument for choosing sentence 4 (a) to position SS was because of its last clause (that is, *bana ba ntse ba le teng* 'while kids are still around') which is used in that sentence to clarify the meaning of '*ithotela*', 'delivering one's luggage'. Sentence 4 (d) seems to be a bit biased towards the dominant meaning basing our argument on the clause '*ha ho kgomo sebeletsa pere*' (no one has to rely to another person). The implication here is that 'it is always a must that in a working situation everyone has to work for him/herself, that is, 'to deliver luggage for him/herself'. This leaves one with two 'ambiguous' sentences 4 (c) and 4 (e). Though both are fully ambiguous, it transpired during the interview that one is more ambiguous than the other. Salehi and Basiri (2015) also supported this view when they observed that dominance and context make independent contributions to the processing of ambiguous words Sentence 4 (e) has two authentic senses in it; namely, it is painful to have that disease of loosely bladder; and it is also painful to have to deliver your luggage. In terms of delivering the luggage by yourself, it is expected that people should assist you. This leaves sentence 4 (c) to be the most ambiguous of them all.

The sentences are arranged as follows:
DS >*Motho e moholo ha a ka ke a ithotela metsi bana ba ntse ba le teng*
(An adult cannot urinate her/himself/deliver water for him/herself while kids are still around)
DW >*Ha re mo emele, e tla re ha a qeta ho ithotela, re tla be re tsamaya*
(Let us wait for him/her, when he/she finished urinating him/herself / deliver his/her luggage him/herself, we will then leave)
FA >*Ho ithotela, hantle ntle ke ha motho a se a tsofetse, mme ho bohloko*
(To urinate oneself/ to deliver one's luggage him/herself is when one is old and is very painful)
SW >*Bohloko ba ho ithotela ha ho na ya sa bo tsebeng*
(No one does not know, the pain of urinating oneself/ collecting oneself luggage)
SS >*E mong le e mong ha a ithotele, ha ho na kgomo sebeletsa pere mona*
(Everyone has urinate her/himself /to deliver luggage for her/himself, no one has to rely to another person)

CONCLUSION

The experiments conducted support a model in which ambiguous word recognition is governed by two independent factors. This means that when context is sufficiently predicative of a single meaning, it will lead to immediate retrieval of that meaning alone. In the absence of context, or if it is less restrictive, the most frequent occurring meaning will be activated. This means that a word in isolation (that is, without context) begins with a very wide area of meaning, for it may occur in many hundreds of situations and may be used for scores of objects; but by means of the practical and linguistic contexts in which it is used we can shape it down to precisely that sub area of meaning which it must have in any specific utterance.

RECOMMENDATIONS

Since Sesotho and some other African languages are tonal languages, it is recommended that Sesotho writers should be striving to always tone-mark their articles, reports and reviews whenever they wish to use specific words in isolation. They should try by all means to provide a suitable context to assist both native and non-native Sesotho speakers. Sentential and situational contexts play a very vital role in determining the meaning of ambiguous words.

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