Locative Inversion as an Alternation Phenomenon in Setswana: The Case of Lexical Functional Grammar Theory

Prof. Setumile Morapedi
University of Botswana
Private Bag 00 703, Gaborone
Email: morapeds@mopipi.ub.bw

Abstract

The paper has examined locative inversion constructions in Setswana, showing that the pre-posed locative phrase in these constructions is not the subject as it is viewed by other linguists in the literature. It has been argued, in this paper, that locative phrase occurs in the sentence initial position to perform the topic function which sets the scene for the focused noun phrase that alternates with it (locative phrase). The analysis has been achieved through information structure approach, showing the locative phrase that occurs in sentence initial position is a discourse phenomenon showing given information, and that the focused post-verbal noun phrase is new information that is emphasised on. Also, an appeal is made to Lexical Functional Grammar Approach to explain different ways of representing syntactic structures such as constituent structure and the functional structure.

Key words: argument, information structure, locative, topic, focus, Lexical Functional Grammar

1.0   Introduction

The paper discusses the locative inversion constructions in Setswana, arguing that the alternation of the locative phrase with the subject noun phrase, happens for discourse purposes of realization of pragmatically important features such as *topic* and *focus*. Locative inversion refers to the alternation of the subject and the locative noun phrase complementing intransitive verbs of posture and motion, such as the English verbs *sit* (1) below, (Morapedi 2006:2), Lutz, (2006) (Diereks 2011), (Creissels, 2011), Zeller, (2011), Zeller, (2013), Vander Spuy, (2014), Mugari, V. and Makoro, (2014). These are the constructions in which the order of sentence elements [NPloc V NP] differs from the canonical ordering [NP V NPloc], as in (1a) and (1b) below. Locative inversion constructions occur when the *theme* is the highest available role in the hierarchy of thematic roles, (Bresnan and Kanerva, 1989) and Demuth and Mmusi (1997), (Dalymple, 2001). What is interesting about these types of constructions is that, there is no addition or suppression of any argument even with the addition of a verbal extension, a situation that is common in other argument structure alternation, such as the addition of the benefactive argument in applicative constructions, or the suppression of the agent in passivisation.

(1a)   *Mo-nna   o-nts-e   mo-se-tilo-ng.*
      1-man   1SM-sit-M   18-7-chair-LOC
      'The man is sitting on the chair.'

(1b)   *Mo-setilo-ng   go-nts-e   mo-nna*
      18-7-chair-LOC   17SM-sit-M   1-man
      'On the chair is sitting the man.'

In the literature on this topic, there are conflicting views, with one group of researchers arguing that the preverbal locative in locative inversion constructions is the subject of the sentence, (Bresnan and Kanerva 1989 for Chichewa, Machobane 1995 for Sesotho, and Demuth and Mmusi 1997 for Setswana), while another group holds the view that the preverbal locative is an adverbial, but not the subject, (Perez 1983 for Chishona and Demuth 1990 for Sesotho. They use many subject-hood criteria, which in my view do not pass them. In particular, it is argued in this paper that the preverbal locative phrase denoting the

direction, place or time locative of a post-verbal noun phrase defies straightforward analysis, in the sense that it does not pass the tests usually used by linguists as diagnostics of subject-hood, (Keenan 1976). I argue that it is topic, setting the scene for the focused subject in post-verbal position. Lambrecht, (1994) points out that topic is an element that serves to establish a spatial, temporal or instrumental frame-work within which the predication holds, as in the adverbial phrases, (Morapedi 2006:86). In the analysis of these constructions, I appeal to Lexical Functional, Grammar, as a discourse sensitive theory, by investigating the interaction of grammatical positions with discourse functions that contribute to information structure. Therefore, the theory has the potential to explain the discourse-oriented type of data presented in this paper.

Information structure refers to the relation between the pragmatic and the structural properties of a language, that is, how information in the clause relates to what has been discussed before by both the speaker and the hearer, (Lambrecht 1994:2), Yoneda (2011). Contrary to Chomsky's (1993) view that syntax is an autonomous structural component of grammar, it has often been argued that the analysis of structural properties of language should take into account not only grammatical and semantic structure, but also the pragmatic or discourse-oriented features of language. For example, Lambrecht, (1994:2) argues that some aspects of grammatical form require pragmatic explanations, relating to the context in which they occur. Fillmore, (1976:81) argues that sometimes pragmatic information is needed in order to interpret the syntactic structures of the sentence. VanValin and Lapolla, (1997) concur with the view that pragmatic and syntax should be analysed simultaneously, and argue that since sentences are usually uttered in particular communicative contexts, the addressee needs to interpret them in the same context to retrieve the speaker's intended meaning. In this regard, the simultaneous treatment of form and the communicative aspects of language is important. Keenan (1976:319) and Chafe (1976:30), define topic as 'old or given information', since the referent referred to, whether it can easily be seen or not, is known to both the speaker and the addressee. Li and Thompson (1976:459) define topic as an independent element followed by a comment. A comment is a basic sentence expressing the proposition about the topic. This means that a comment refers to everything that excludes topic, as illustrated in (2) below.
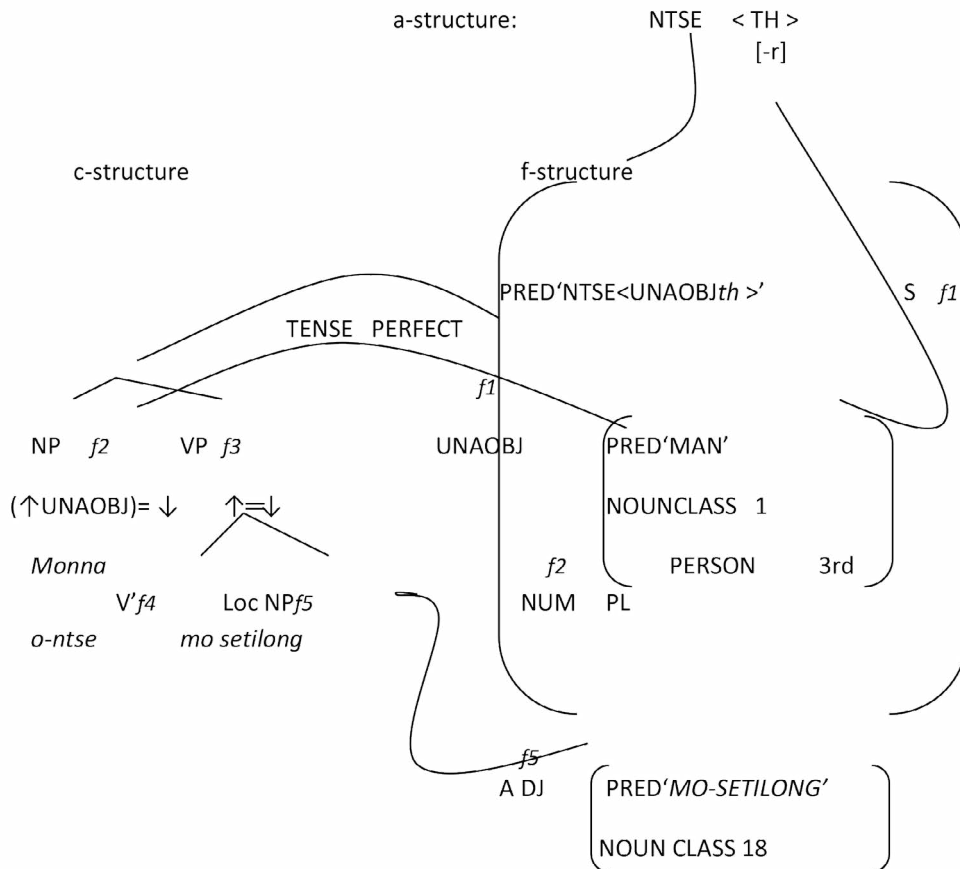
(2) As for drink, John prefers it hot.

In example (2), the expression *as for drink*, is topic, while the clause *John prefers it hot* is the comment clause, which the presupposed information is about. Li & Thompson (1976:459) and Morimoto (2000) also observe a similar situation about Bantu languages. They have observed that in Bantu languages, topic is an isolated constituent element that is intonationally marked, and is usually followed by a comment in discourse, (Yoneda (2011). Carstens, (1997), Buel, (2012).

1.1   Lexical Functional Grammar

Lexical Functional Grammar Theory is a lexical non-transformational, generative grammar developed by Bresnan and Kaplan, (1970); Bresnan (1978, 1982); Bresnan and Kaplan (1982). It assumes two different ways of representing syntactic structure, the constituent or c-structure and the functional or f-structure. The two structures show two subsystems of linguistic structure. Constituent structure is the overt level of linear and hierarchical organisation of words into phrases. Functional structure is the abstract functional syntactic organisation of the sentence representing syntactic predicate. See examples below. Sentence (3) has the c-structure and f-structure as shown below.

(3)   *Mo-nna*   *o-nts-e*   *mò –se-tilo-ng*
         1-man   1SM-sit-M   18-7-chair-LOC
         'The man is sitting on the chair."

a-structure: NTSE < TH >
            [-r]

c-structure   f-structure

PRED'NTSE<UNAOBJ*th* >'   S *f1*

TENSE PERFECT

         f1

NP *f2* VP *f3*   UNAOBJ PRED'MAN'

(↑UNAOBJ)= ↓ ↑=↓   NOUNCLASS 1

Monna   PERSON 3rd
          f2
   V'*f4* Loc NP*f5*   NUM PL

o-ntse   *mo setilong*

            f5
        A DJ PRED'*MO-SETILONG*'

            NOUN CLASS 18

The subject NP *monna* 'man' in the c-structure for example (3) is the unaccusative object, which surfaces as the subject of the sentence in such constructions, as indicated by the UNAOBJ (unaccusative object) feature in the PRED(icate) information in the *f*-structure. The UNAOBJ NP *monna* 'man' corresponds to the *theme* argument. The *theme* is classified as the [-r] by virtue of being the most marked function and the locative phrase receives no intrinsic classification feature as it is not sub-categorised. In the c-structure of (3), the UNAOBJ *monna* 'man' with an annotation ↑= ↓ is the sister to the VP. The partial correspondence shows how the node of the c-structure is mapped into an UNAOBJ f-structure marked *f2,* which is a subsidiary of *f1*. The completeness condition requires that the verbal argument structure condition be met, in this case something fills the SUBJ(ect) function in the f-structure *f1*. The subject marker o- carries the features class 1, NUM(ber) singular and PER(son) 3rd, which are consistent with those of the subject NP *monna* 'man', thus satisfying the uniqueness condition. The locative NP is a VP adjunct and is linked to the locative role, which is optionally expressed, as shown by the f-structure marked *f5*.   The locative phrase *mo-setilong* 'on the chair' is an *adjunct* and as such is non-obligatory, (Bresnan 2001).

1.2   Geographic setting and Language family

Setswana belongs to the Bantu branch of the Niger –Congo language family. It is a language spoken in Botswana and other neighbouring countries such as South African, Namibia, Zimbabwe and Zambia. Botswana is a landlocked country surrounded by these countries, which should explain why Setswana speakers are found in these neighbouring countries. Botswana is a sparsely populated country covering approximately 581,730 square kilometres, which is about the size of France or Kenya. It is located as an average altitude of 1,000 metres on the South African plateau (Newman 1999:20). As of 1st January 2020, the population of Botswana was estimated to be 2,473, 507 million people. The population is concentrated around certain areas (Southern part) that are determined by the availability of water, grazing or arable land.

1.3 Basic word order

Setswana, like other Bantu languages, has the SVO (Subject Verb Object) sentence pattern as its canonical word order. The grammatical subject precedes the verb and the verb is followed by the object, which is adjacent to it. The subject is followed by the subject marker (SM) which is prefixed to the verb and agrees with the subject in class and number, as in (4). If the object marker is present, it immediately precedes the verb and it also agrees with its object in terms of features (class, number and person).

> *(4) Mo-sadi   o-hudu-a   bo-gobe.   [SVO: transitive]*
> 1-woman   1SM-stir-M   14-porridge
> 'The woman is stirring porridge.'

Other patterns may involve two objects, as in (5a) or complements (C), as in (5b)

> *(5a) Mo-sadi   o-rek-el-a   ngwa.na   mo-sese.*
> 1-woman   1SM-buy-APPL-M   1.child   3-dress [SVOO: ditransitive]
> 'The woman is buying the child the dress.'

> *(5b) Ba-na   ba-tlhoph-il-e   mo-sadi   mo-eteledipele.*
> 2-child   2SM-elect-PERF-M   1-woman   1-leader [SVOC:]
> 'The children have elected the woman the leader.'   complex transitive]

There are other patterns that involve *adjuncts* (A), which are adverbials modifying the verb. There can be a variety of such types of locative phrases functioning adverbially. See examples in (6a through to 6c) below.

> *(6a) Mo-sadi   o-bid-its-e   ba-na   mo-mo-so-ng.*
> 1-woman 1SM-call-PERF-M   2-child   18-3-morning-LOC
> 'The woman called the children in the morning.'   [SVOA: mono-transitive]

> *(6b) Ba-simane   ba-sets-e   (mo-ko.loi-ng).*
> 2-boy 2SM-remain-PERF-M   18-9.car-LOC
> 'The boys have remained in the car.' [SVA:intransitive]

> *(6c) Mo-sadi   o-ts-il-e   Ga.borone.   [SVA: intransitive]*
> 1-woman   1SM-come-PERF-M 1a-*Gaborone*
> 'The woman has come to Gaborone.'

Setswana arrives at the formation of locative nouns through the employment of three main strategies summarized as follows; the first strategy involves the prefixing of the prefixes *fa-*, *go-*, *mo-*, to form simple locative phrases as in (7a). The second strategy is to prefix *kwa-*, and *ka-* and fa-, to locative nouns that are in (7a, b, c), to form examples in (8a, b, c).

> *(7a) Fa-tshe   b.go-dimo   c.mo-rago   [simple locative*
> 16-ground   17-on top   18-back   noun phrase]
> 'ground'   'top'   'back'

> *(8a) Fa-f a-tshe   b. kwa-mo-rago.   c. ka-kwa-morago. [compound locative]*
> 16-16-ground 18-18-at-back   18-18-at-back   phrase
> 'on the ground' 'at the back'   'at the back'

> *(8d) mo-mo-so-ng.*
> 18-3-morning-LOC
> 'in the morning'

The third strategy is the one in which proper nouns like those of places (towns, villages, districts and countries) are used as locatives, as in examples in (9). The prefix *kwa-* occurring with all common nouns

must be accompanied by another locative morpheme (*-eng*), which usually gets suffixed to the nouns to form locatives from ordinary nouns, as in (9a through to 9c).

(9a) *kwa-mo-rak-eng*   b. *kwa-Gaborone* [compound locative noun phrase]18-at-3-cattlepost-
  LOC   18-at-1a-Gaborone
  'at the cattle-post' 'at Gaborone'

(9b) *Mo-sadi*   *o-nts-e*   *mo-n.tlo-ng*.   [locative prefix & suffix]
  1-woman   1SM-sit-M   18-9.house-LOC
  'The woman is sitting in the house.'

(9c) *Mo-nna*   *o-il-e*   *mo-rake-ng*.   [locative suffix]
  1-man   1SM-go-M   3-cattlepost-LOC
  'The man has gone to the cattle-post.'

Example, (9a) shows the noun *ntlo* 'house' with the locative prefix *mo-* and the locative suffix *-ng*, while (9b) shows the noun *moraka* 'cattle-post' with the locative suffix as well.

   All the locative nouns and noun phrases from (6) through to (9) can be replaced by a locative pronoun *gone* 'there' as in (10), which can only be used if the places referred to by the pronoun can be retrieved from the context.

(10) *go-ne*
  17-there
  'there'

The compound locative phrases of the kind in (8a) may occur with the form *ka-* which occurs before them, thus forming complex locative phrase, as in (11a) and (11b). The formative *ka-* may also be used with locative forms indicating location of time, as in (11c). The *ka-* expresses the meaning similar to that of the English preposition over or round. When *ka-* is used with compound locatives, it expresses meanings similar to those conveyed by the English prepositions and adverbial phrases such as *round at*, *round to*, *over at*, *over to* and *over from* (Cole 1955:356-8).

(11a) *Ka-kwa-morago.* [complex locative]
  17-17-18-back
  'at the back'

(11b) *Ka-kwa-pele*
  17-17-front
  'at the front'

(11c) *Ka-moso*
  17-morning
  'in the morning

Worth noting is that Setswana has primitive adverbs illustrated in (12) below falling within the category of adverbs, whereas the locative noun phrases (indicating place and time) illustrated in (11) belong to the category of nouns in the sense that they take the noun class prefix *fa-* (16), *go-* (17) and *mo-* (18), as is the case with other nouns taking class prefixes, the difference being that the locative prefixes do not have plural forms.

(12a) *Mo-sadi*   *o tsil-e*   *leng*?
    1-woman   1SM-come-PERF-M   when
      'When did the woman come?'

(12b)   *Mo-nna*   *oya*   *kae*?
            1-man   1SM-go-M   Where
            'Where is the man going?'

(12c)   *Ngwa.na*   *o-tsamay-a*   *jang?*
            1a.child   1SM-walk-M   how
            'How does the child walk?'

Further, there are mismatches of agreement features between the locative prefixes of classes 18 and 16 and their subject markers *go* which belongs to class 17. For instance, class 18 takes the prefix *mo-* while class 16 has the prefix *fa-*, yet they occur with the class 17 subject marker *go-*. Conversely, subjects have agreement features match those of their subject markers, as shown by examples in (12a and 12b), where the subjects noun *mosadi* 'woman' and *monna* 'man' and their subject marker *o* take class 1, 3rd person and singular. It is partly due to these agreement disparities that there is a considerable controversy on the issue of whether the preverbal locative noun phrase should be considered the subject or not, (Van de Spuy, 2014).

Setswana also has two well-known properties of Bantu languages such as the noun class system and the tone, with two significant tonal values, high (H), and low (L). In Setswana, tone is semantically significant as it helps to distinguish between different words with different meanings that may be segmentally the same (Cole 1955:32). See examples in (13a) and (13b).

(13a)   *Bóna* *ba-na.*
          See   2-child
          'See the children'

(13b)   *Ba-na,*   *bòne*   *ba-a-bua.*
            2-child   2-they   2SM-PRES-talk
            'The children, they are talking.'

Notice that the noun *bana* 'children' is a class 2 word. The word *bone* in (12a) and (12b) are spelt the same but pronounced differently. In (12a) it is a verb starting with high tone, ending with low tone [H L]. In (12b), it is a pronoun starting with low tone ending with high tone [L H].

2.0   Data

There were three methods used in the data collection for the study and were as follows: (i) Story-telling, (ii) picture discussion, and (iii) questionnaire. The combination of these methods proved to be very useful in yielding the required data for the study. The picture discussion method involved several informants at a time. It was expected to yield   revealing data, such as, assertion/correction exchanges and question/answer exchanges that would address the hypothetical statement explored in the study. The picture discussion and story-telling tasks were expected to provide larger text where locative inversion constructions would emerge together with their discourse context. The questionnaire method was necessary as a back-up method in order to ensure that completed locative inversion constructions were elicited since everyday spontaneous speech often has incomplete (elliptical) sentences. Altogether, three hundred instances of topic and focus constituents were collected through the three methods of data collection. One hundred and seventy were topic constructions, while one hundred and thirty were focus constructions. Recorded data from the three methods were transcribed and glossed by the researcher. Data from the three methods used in the study showed examples in which the locative NP was in preverbal position, as topic setting the scene for post-verbal the *theme* argument in post-verbal position. The class 17 subject marker was an 'expletive agreement' acting for the post verbal *theme* argument. The findings also showed data in which the locative NP did not occur sentence initially at all sentence. The *theme* argument showed focused features by virtue of occurring in either VP-internal or post-copula position. In this case, the findings were providing support for the hypothesis that the clause external locative-NP functions as topic and the *theme* argument in post-verbal position as new information in focus.

The question –answer exchange in (14b) shows the preverbal locative NP as topic followed by a comment.

(14a) Q: *Mó-tlhá.gé-nġ*   *go-robets-e*   *eng?*   [Loc-NP V Wh-   XP],
              18-9. grass-LOC   17SM-sleep-M   what
              Lit: 'On the grass there sleeps what?'
              'What sleeps on the grass?

(14b) A: *Mó-tlhá.gé-nġ,*   *go-robets-e*   *ta.u.*   [Loc-NP V XP]
              18-9.grass-LOC   17SM-sleep-M 9-lion
              'On the grass sleeps the lion.'

Sentence (14b) is uttered in the context in which the informants were looking at the picture, and another speaker is unable to identify the animal. Hence a Q (question). The topicalised locative noun phrase *mo-tlhageng* 'on the grass' in the left periphery of the sentence is topicalised because it is old information that has already been established in the context. The locative is already old information to both speaker and hearer before the question is asked. The preverbal NP as topic is followed by a comment clause that begins with the expletive class 17 subject marker *go-*, marking a thematically empty subject position. The locative NP is followed by an interruption to the prosodic flow of the utterance, a characteristic feature of topics. The pause after the locative NP was a consistent feature of the locative topics I found in the data. The class 17 subject marker go- is an impersonal concord or expletive marking the presence of a semantically empty subject position.

3.0 DISCUSSION

3.1 Preverbal locative

The preverbal locative in locative inversion constructions cannot be the subject because it fails the subject-hood criteria used by many linguists in the literature. Bresnan and Kanerva (1989). Machobane (1995) and Demuth and Mmusi (1997) argue that the preverbal locative has raised from VP-internal position to the (Spec IP) position in front of the verb and therefore triggers agreement. This position rests upon the premise that the locative originates in VP-internal position.   The position taken in this paper is that preverbal locative in Setswana is not the subject but an adverbial functioning as topic setting the scene for the post-verbal focused subject. The preverbal locative in Setswana is an adjunct. This is indicated by the fact that it has positional mobility in the sentence in which it occurs. It can occur post-verbally or pre- verbally. Examples (15a) and (15b) show the locative on either side of the clause. Notice that the locative in (15a) has high tone in the penultimate syllable and falling tone in the last syllable, whereas the locative NP in the pre-verbal position (15b) receives high tone in all its syllables.

(15a)   *Mo-nna*   *[o-em-e]*   *mo-le-tlapé-ng`.* [post-verbal locative]
        1-man   1SM-stand-M   18-5-rock-LOC
        'The man is standing on the rock.'

(15b)   *Mó-lé-tlápé-ng`*   *mo-nna*   *o-em-e.* [preverbal locative & subject]
        18-5-rock-LOC 1-man   1SM-stand-M
        'On the rock, the man is standing.'

(15c)   *Mó-lé-tlápé-ng`gó-em-e*   *mo-nna*.
        18-5-rock-LOC   17SM-stand-M   1-man
        'On the rock is standing the man.' [preverbal locative & post-verbal theme]

Bresnan and Kanerva's argue that when the locative noun phrase is not present, the class 17 subject marker is not an expletive but has meaning in the sense that it refers anaphorically to the covertly expressed locative phrase. B&K's (1989) view that locative agreement markers in Chichewa have locative meaning does not hold for Setswana.   In contrast, the Setswana locative subject markers are semantically empty, as shown in the occurrence of *go-* with clause-initial locatives, weather verbs, and impersonal passive constructions illustrated by examples in (16a) through (16d).

(16a)   *Gó-ńts-é*   *mo-nna.*   (locative verb)
        17SM-sit-M   1-man
        'There is sitting the man.'

(16b)   *Go-tsididi.*   (weather verb)
        17SM-be.cold
        'It is cold.'

(16c)   *Go-n-a*   *pu.la.*   (weather verb)
        17SM-fall-M   9.rain
        'It is raining.'

(16d)   *Go-a-je-w-a.*   (impersonal passive verb)
        17SM-PRES-eat-PASS-M
        'There is being eaten.'

None of the class 17 subject markers in (16) have locative meaning. The morpheme *go-* in the examples in (16) represents expletive concord, which occurs with an empty subject but does not represent an absent locative. The full range of locative markers is no longer available in Setswana. The class 17 subject marker has been grammaticalised as an expletive classes and 16 and 18 have been lost as locative subject markers, (Taraldsen, (2010).

    Also problematic is the argument advanced by B&K (1989; Chichewa), Machobane (1995; Sesotho) and D&M (1997; Setswana) that the preverbal locative NP is the subject because it can **raise** in the way subjects do. The preverbal locative NP in Setswana does not behave like a subject in the context of raising verbs like *lebega* 'seem'. The raising verbs require subject noun phrases to raise from the finite or non-finite complement clause to the matrix subject position, as illustrated by (17).

(17)   *Mo-sadi*   *o-lebeg-a*   *gore   øo-itlhaganel-el-a*   *ba-na.*
        1-woman   1SM-seem-M that   1SM-rush-APPL-M 2-child
        'The woman seems to be rushing for the children.' [raising from finite COMP clause]

(18a)   *Mo-nna*   *o-lebeg-a*   *go-tabog-a*   *thata.*
        1-man   1SM-seem-M 15SUB-run   fast.
        'The man seems to run fast.' [raising from non-finite comp clause]

(18b)   *Mo-se-tilo-ng [---] go-lebeg-a*   *go-nts-e*   *mo-nna.*
        18-7-chair-LOC   17SM-seem-M   15SUB-sit-M 1-man
        'On the chair there seems to be sitting the man.'

(18c)   *Go-lebeg-a*   *gore   mo-nna*   *o-tabog-a*   *thata.*
        17SM-seem-M   that   1-man   1SM-run-M   fast
        'It seems that the man runs fast.'

In example (18b), the locative does not occur sentence initially in the way the non-locative subjects are required to, for the raising verb *lebega* 'seem' in (17) and (18a). Thus the locative phrase *mo setilong* 'on the chair' is not the subject of the verb *nna* 'sit', rather it occurs externally. Furthermore, the *go-* in the matrix clause licenses a non-raising phenomenon by indicating a null expletive subject and so the locative phrase occurs externally. Thus there is no argument in the matrix subject position for the class 17 subject marker *go-* to agree with. The locative NP cannot raise from the external position in the embedded clause, as raising is a property of selected (internal) elements like subjects.

However, sentence (18c) which starts with the class 17 subject marker *go-* is grammatical, indicating that the class 17 subject marker is an expletive that occurs with empty subjects. D&M (1997) only

provide examples of locative raising with weather predicates, which are well known as empty subject constructions, so they provide no evidence of locative agreement with a subject marker, as shown in (19a) and (19b).

(19a) *Kwa-no.ke-ng* *go-bona-gal-a* *go-thiba.*
      17-9.river-LOC 17SM-seem-M 15SUB-cloudy
      'A the river it seems to be cloudy.' (Demuth and Mmusi l997:6)

(19b) *Kwa-Gauteng go-lebelets-w-e* *go-na.*
      17-G-LOC 17SUB-expect-PASS-PERF 15SUB-rain
      'In Johannesburg it is expected to be rainy.'((Demuth and Mmusi 1997:6)

A more revealing set of examples is provided in (20), which illustrates the distribution of the locative NP in a clause containing the raising verb *lebega* 'seem'.

(20a) *Mo-se-tilo-ng$_i$* *go-lebeg-a* t_i *go-nts-e* *mo-nna.*
      18-7-chair-LOC 17SM-seem-M 17SM-sit-M 1-man
      'On the chair seems to be sitting the man.'

(20b) *Go-lebeg-a* *go-nts-e* *mo-nna* *(mo-se-tilo-ng).*
      17SM-seem-M 17SM-sit-M 1-man 1 8-7-chair-LOC
      'There seems to be sitting the man on the chair.'

(20c) *Go-lebeg-a* *mo-se-tilo-ng* *go-nts-e* *mo-nna.*
      17SM-seem-M 18-7-chair-LOC 17SM-sit-M 1-man
'It seems on the chair is sitting the man.'

Although the clause-initial position of the locative phrase in (20a), together with class 17 subject marker, might initially suggest a raising analysis of the locative phrase, observe that the remainder of the examples in (20) call this analysis into question. Example (20b) shows that the verb *lebega* 'seem' displays class 17 concord when the locative phrase is clause-final, or when the locative phrase is absent altogether. Example (20c) shows that the verb *lebega* 'seem' shows class 17 concord when the locative inversion construction is embedded. The examples in (20) therefore show that the class 17 subject marker is best viewed as expletive agreement. Thus there is no evidence that the preverbal locative is a subject in the sense in which the subject *monna* 'man' is, in example (17) above. Instead, example (20) displays properties characteristic of an adjunct, particularly with respect to its optionality and its positional mobility. Example (21) demonstrates the inability of the subject to undergo a positional mobility in a complex sentence.

(21) *o-lebeg-a* **mo-sadi* *goreø* *o-itlhaganel-el-a* *ba-na.*
      1SM-seem-M 1-woman that 1SM-rush-APPL-M 2-child
      'The woman seems to be rushing for the children.' [raising from finite COMP clause]

3.2 The post-verbal theme argument

The post-verbal *theme* argument in locative inversion constructions is in a focus position, as expressed in the literature by Bresnan and Kanerva (l989) for Chichewa and Demuth and Mmusi (l997) for Setswana. I show that the new information focus can be expressed in the post-verbal VP-internal position.

3.2.1 In-situ construction

The in-situ construction is the one in which the *theme* argument occurs post-verbally in VP-internal position, which is a focus position typically but not exclusively corresponding to new information. The in-situ constructions are syntactically parallel to in-situ *wh*-questions. In both the constructions, a marked word order, in which the *theme* stays in-situ in the post-verbal position rather than preverbal subject

position, is involved. The *wh*-questions involve a clause that is presupposed except for one element (the variable, corresponding to the *wh*-phrase). Responses to *wh*-questions typically have the same syntactic structure as the questions. For example, if the question word appears in VP-internal position, the focused constituent will typically appear in the corresponding VP-internal position in the response, introducing new information that provides a value for the variable in the preceding question. Examples of *wh*-question/answer pairs, which establish the new information status of the post-verbal (in situ) *theme* are provided in (22) below. The discourse constituents in the data collected showing the in-situ constructions providing new information. The focused *theme* arguments *baruti* 'priests' in post-verbal position in example (22) were uttered in the context in which they were new in the discourse. Note that (22c A) provides contrastive focus.

(22a)   <u>*Masego,*</u>   *mo-mo-tsi-ng,*   *go-gorog-il-e*   **ba-ruti**
        1a.Masego   18-3-village-LOC   17SM-arrive-PERF-M   2-priest
        'Masego, in the village, there have arrived priests.'

(22b)   Q. *Wáré*   *mó-mó-ts-íng*   *gó-gorog-il-e*   *bo-mang*?
            You say   18-3-village-LOC   17SM-arrive-PERF-M2-who
            Lit: You said in the village there have arrived who?
            'Who did you say have arrived in the village?'

        A. <u>*Mó-mó-tsíng*</u>   *go-gorog-il-e*   **ba-ruti**.
            18-3-village-LOC   17SM-arrive-PERF-M 2-priest
            'In the village there have arrived the priests.'

(22c)   Q: *Á-gó-gorog-il-e*   *ba-ruti kana   ba-ithuti mo-mo-tsi-ng*?
            Q-17SM-arrive-PERF-M   2-priest-or   2-student   18-3-village-LOC
            'Have there arrived the priests or the students in the village?'

        A: *Gó-górog-il-e*   **ba-ruti**   <u>*mo-mo-tsi-ng,*</u>   *eseng ba-ithuti*
            17SM-arrive-PERF-M2-priest   18-3-village-LOC   not   2-student
            'There have arrived priests in the village, not students.'

The in situ construction in (22a) is new information which is uttered in an 'out of blue' situation and provides non-contrastive meaning. The constituent *baruti* 'priests' receives the prosodic prominence. One of the informants had interrupted the discussion of pictures by uttering (22a), whereupon another informant participating in the group discussion asked question (22b). The in-situ *wh*-question response in (22b) provides new information that is non-contrastive. The response provides a value for the variable that is introduced by the *wh*-phrase in the question. In both examples (22a) and (22b), the new information receives prosodic prominence but does not entail the exclusion of other possibilities. That is, *baruti* 'priests' are not necessarily the only people who have arrived in the village. In example (22cQ), the focused constituent *baruti* 'priests' shows exhaustive meaning in the sense that it eliminates other possibilities. The proposition in (22c) presupposes that some people have arrived *mo-motsing* 'in the village', and so this fact must already be known to the addressee.   It shows a contrastive focus, which implies that there are other members of the set. However, the in situ constructions can also show contrastive focus, as shown by example (23) constructed by the author who is the native speaker of Setswana. Observe that in the data, there are instances in which the *theme* argument in the form of the resumptive pronoun *ene* 'her' in the post-verbal focus position of the sentence is linked with the name *Neo* in the topicalised phrase *haele Neo* 'as for Neo'. The topicalised phrase *haele Neo* 'as for Neo' sets the scene for the focused pronoun *ene* 'her' (see discussion below), (Yoneda 2011).

(23)   *Háélé Néó,*   *gó-nts-e*   *ene*   *mo-se-tilo-ng.*
        As-for 1a.Neo   17SM-sit-M   1a.her   18-7-chair-LOC
        'As for Neo, there is sitting her on the chair, (but not the guest').'

The pronoun *ene* 'her' is contrastively focused in the sense that it was uttered in a context in which the speaker expected somebody other than *Neo* to be sitting on the chair. The construction in (23) is uttered in a context in which there are not enough chairs, and so the speaker is surprised to see *Neo* as the host sitting on the chair instead of offering it to one of the guests. The type of data occurring in example (23) indicates that, apart from being used to focus noun phrases corresponding to new information, the post-verbal (in situ) position can also be used to focus pronouns providing contrastive information. However, this seems to be the case only with the pronouns occurring in VP-internal position.

4.0   THEORETICAL APPROACH

As demonstrated in the previous section on information structure, that the preverbal locative NP in locative inversion constructions in Setswana is a topic. I argued that the preverbal locative NP is not the subject since it does not pass the subject-hood criteria put forward in the literature, such as (a) subject-verb agreement, (b) subject raising. In this section, I develop an LFG account of the empirical findings of the previous section, and argue that the topic function is linked to the locative NP, which performs the non-argument function of *adjunct*, and is not generated by the S rule. Hence, the pre-verbal locative NP in S1 below is not a governable function since it is identified with the *adjunct* function. It is connected to the topic function in the f-structure, as shown by the c-structure for example (24). The mapping from c-structure to the corresponding f-structure is shown graphically with arrows.

(24)   *Mó-sé-tíló-nǵ*   *go-nts-e*   *mo-nna.*
        18-7-chair-LOC   17SM-sit-M   1-man
        'On the chair is sitting the man.'
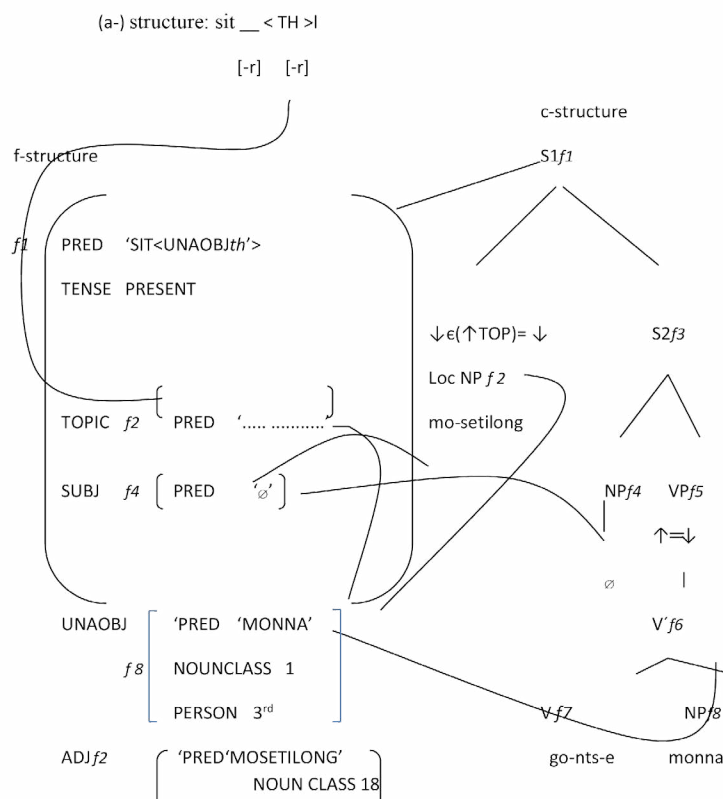
The subject NP *monna* 'man' in the c-structure for example (24) corresponds to the unaccusative object in the *f*-structure (*f* 8). The unaccusative object corresponds to the *theme* argument, which is the only sub-categorized element of the verb *nna* 'sit'. Because the *go-* morpheme indicates a null subject, it follows that the locative NP *mo setilong* 'on the chair' is not an argument of the lexical predicate (see linking of zero morpheme ø between c-structure, f-structure and a-structure in example (24). Rather, it is the *adjunct* which modifies the predicate. The locative NP is not a governable function. Therefore, it does not obey coherence and uniqueness conditions. The preverbal locative remains an *adjunct* and, therefore,

the predicate does not impose any feature restriction on it, (Kaplan and Bresnan 1982:215). The *locative* receives no intrinsic feature since it performs an *adjunct* function which modifies the intransitive verb *ntse* 'sit' (Bresnan 2001:308). Bresnan Kanerva (1989:26) also argue that a locative does not always receive the locative intrinsic classification features, and that it is only the locative role (OBL$_\square$) from the applicative (obligatory) constructions that can be assigned a feature such as [+o] (Alsina and Mchombo 1990). In the c-structure, the S2 containing the predicate *gontse* 'is sitting' is embedded in S1 in which the topic locative NP *mo setlong* 'on the chair' occurs.

The two parallel structures in (24), the c-structure that models the surface form and the f-structure that expresses the functional aspect, show the linking relation. The c- structure in shows that the locative noun phrase is adjoined to the sentence marked S2, where the two form a larger unit, as in S1. The S1 node dominates the locative noun phrase and the S2 nodes as its daughters. The pre-verbal topic locative noun phrase and S2 are sisters. The topic locative NP as a non-argument (*adjunct*) precedes the predicate to which it is linked through the PRED(icate) attribute.   The value of the topic function is associated with the syntactic function of the *adjunct* locative NP *mo setlong* 'on the chair' through mapping in the f-structure by the extended coherence condition. The topmost node S1 maps to the outermost f-structure labelled *f1*. The preverbal NP locative maps to the f-structure *f2* of *topic*. Recall that the topic locative NP is a non-sub-categorised function.   It follows that if the locative NP is not expressed in the f-structure, the f-structure would still be complete because the sub-categorisation of the verb *nna* 'sit' does not require a locative NP with the *adjunct* function, (Bresnan and Mchombo, 1987)

5. Conclusion

The discussion in locative inversion constructions has accounted for the behaviour of locative inversion constructions as a discourse phenomenon. It has been argued in this paper that the locative NP in locative inversion constructions is topic because it occurs it occurs external to the sentence and followed by pause. The position taken in this paper is that the locative noun phrase, which is derived by means of the locative prefix, typically functions adverbially in the sentence. Crucially, the adverbial function is a non-argument function. It has been argued that it provides old information that is known to both the speaker and the hearer. This evidence supports the hypothesis that the preverbal locative noun phrase is topic setting the scene for a comment in which the theme argument is contained. It has also been argued that the in situ occurring in post-verbal position is focused as it is bringing new information that occurs within the comment clause. It has also been shown through Lexical Functional Theory that syntactic, constituents and functional structures can be represented through linking.

References

Alsina, Alex and Sam. Mchombo, (1990).The Syntax of Applicatives in Chichewa: problems for a theta theoretic asymmetry. *Natural Language and Linguistic Theory* 8: 493-506.

Bresnan, J. (1978). *A Realistic Transformational Grammar. Linguistic Theory and Psychological Reality, eds Morris Halle, Joan Bresnan, and George A. Miller, 1-59. Cambridge, MA: MIT Press.*

Bresnan, J. (2001). *Lexical Functional Syntax*. Massachusetts: Blackwell Publishers I Inc.

Bresnan, J. and Mchombo, S. (l987). Topic, pronoun, and agreement in Chichewa.   In *Language* 63 (4), 741-782

Bresnan, J. and J. M. Kanerva (l989). Locative inversion in Chichewa: A case of factorization. In *Linguistic Inquiry* (20), 1:1-50.

Buel, Lester (2012). Class 17 as a non locative non class in Zulu. *Journal of African Languages and Linguistics,* 33 (1) , 1-35

Carstens, Vicki (1997). Empty nouns in Bantu locatives. *The Linguistic Review*, 14, 361-410.

Chafe, Wallace L. (1976). Givenness, Contractiveness, Definiteness, Subjects, Topics and Point of view. In Li, C. (Ed.) *Subject and Topic*: New York: Academic Press, 26-55.

Chomsky, Noam (1993). A Minimalist Program for Linguistic Theory. In Kenneth L. Hale and Samuel J. Keyser (eds.). *The view from Building 20*: Essays in Honor of Sylvain Bromberger. Cambridge: MIT Press. Pp1-52

Cole, Desmond T. (1955). *An Introduction to Tswana Grammar*. Cape Town: Longman Penguin.

Creissels, D. (2011). Tswana locative and their status in the inversion construction. *Africana Linguistics* XVII, 17, 33-52

Dalrymple, M. (2001). *Lexical Functional Grammar*: San Diego; CA: Academic Press.

Demuth, Katherine (1990). Locative, impersonal and expletives in Sesotho. The Linguistic Review 7, 233-249.

Demuth, Katherine. and Sheila Mmusi (l997). Presentational focus and thematic structure in comparative Bantu. In *Journal of African Languages and Linguistics* (18):1-19.

Diercks, Michael (2011). The Morpho-syntax of Lubukusu Locative Inversion and the Parameterization of Agree. *Lingua*, 121 (5), 702-720.

Fillmore, Charles (1976). Pragmatics and the Description of Discourse. In S. Schmidt (Ed.). *Pragmatic II*. Munic: Wilhelm Fink Verlag. Reprinted in Cole (ed.), 1981

Harford, C. (l993). The Applicative in Chishona and Lexical Mapping Theory. In Mochombo, S. (ed), *Theoretical Aspects of Bantu Grammar*. Stanford, CA:CSLI *Mchombo* (l993c), 93-111.

Kaplan, Ronald M and Joan Bresnan, (1982). Lexical –Functional Grammar: a formal system for grammatical representation. In Bresnan, J. (ed.), *The Mental representation of Grammatical Relations*. Cambridge MA: MIT Press

Keenan, Edward (1976). Towards a Universal Definition of "Subject". In Charles Li (Ed.), *Subject and Topic*. New York: Academic Press, 3030-334.

Lambrecht, Knud (1994). *Information Structure and Sentence Form.* Topic, Focus, and the Mental Representations of Discourse Referents (Cambridge Studies in Linguistics 71). Cambridge: Cambridge University Press.

Li, Charles N. And S. A. Thompson (1976). Subject and Topic: A new Typology of Language. In Li, C. (Ed.) *Subject and Topic*. New York: Academic Press

Lutz, Marten. (2006) . Locative Inverstion in Otjiherero: More on morphosyntax variation in Bantu. ZAS. Papers in Linguistics. 43:97-122

Machobane, M. (l995). The Sesotho Locative constructions. In *Journal of African Languages and Linguistics* (16):115-136.

Mchombo, S. (2003). On Discontinuous Constituents in Chichewa. In Zribi-Hertz, Anne, & Patrick Sauzet (eds.). *Typologie de langues d'Afrique et Universaux de la Grammaire, 141-167.*Paris : L' Harmattan.

Mchombo, S. (2004). *The syntax of Chichewa*. Cambridge: University of Cambridge.

Morapedi, Setumile (2006). The syntax of Locative Inversion and Related Constructions in
 Setswana: An approach to Information Structure in Lexical functional Grammar. Doctoral Thesis, University of Sussex, Sussex, UK.``

Morimoto, Y. (2000). Discourse Configurationality in Bantu Morpho-syntax, Doctoral dissertation, Stanford University, California.

Muragi, Victor and Makoro, Laston (2014). Locative Inversion in Shona. In L. Khumalo (ed) African Languages and Linguistic Theory. Cape Town: CASAS

Neumann, Sabine (1999). The Locative Class in Shengologa (Kgalagadi). New York: Peter Lang.

Perez, Carolyn (1983). Locative Pseudo-Subjects in Shona. *Journal of African Languages* 5, 131-155

Taraldsen, Knut (2010). The Mono-syntax of Nguni Noun Class Prefixes and Concords. *Lingua*, 120 (6), 1522-1548

Van der Spuy, Andrew (2014). The Morphology of the Zulu Locative. Transactions of the Philological Society.

Van Valin, R. and R. Lapolla (l997). *Syntax*: Structure, Meaning and Functions. Cambridge: Cambridge University Press.

Yoneda, N. (2011). Word Order in Matego: topically and information roles. *Lingua* 121 (5): 754-771

Zeller, Jochen (2011). Semantic Locative Inversion and predication in Zulu. Manuscript, University of Natal

Zeller, Jochen (2013).   Locative Inversion and predication in Zulu. *Linguistics*, 51:1107-1146 University of Natal.