Noun Phrases in Lhasa Tibetan

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Abstract: This paper provides a detailed description of the syntactic distribution and semantic interpretations of three types of noun phrases, bare nouns, numeral constructions and demonstrative phrases, in Lhasa Tibetan, one of the Tibetan dialects spoken in an area of Central Tibet surrounding the city of Lhasa, China. We first show that bare nouns in Lhasa Tibetan share the same properties as those in classifier languages such as Mandarin. Second, we show that unlike Mandarin, numerals combine directly with bare nouns in Lhasa Tibetan in the same way as those in number marking languages like English and Hindi. However, unlike English or Hindi, nouns in Lhasa Tibetan are not marked with number morphology and can be interpreted as singular or plural. At same time, we will see that numeral constructions in Lhasa Tibetan exhibit the same properties as those in number marking languages and classifier languages as observed in Jiang (2012). Third, we provide two diagnostic tests from Löbner's (1985) and Alexiadou et al. (2007) to argue that the so-called definite determiner *de/di* in Lhasa Tibetan are indeed demonstratives, which can appear in two different positions in the numeral constructions.

We explain the particular properties of the three types of noun phrases in Lhasa Tibetan with the Neocarlsonian approach to bare nominals (Carlson 1977; Chierchia 1998; Dayal 2004). The account of noun phrases in Lhasa Tibetan bears on current discussions about the nature of argument formation and contributes to the discussion about language variation and argument formation in general.

Keywords: Lhasa Tibetan, bare nouns, numerals, demonstratives, nominal arguments

1.   Properties of noun phrases in Lhasa Tibetan

We begin this paper by presenting properties of three types of noun phrases, bare nouns, numeral constructions, and demonstrative phrases, in Lhasa Tibetan, one of the Tibetan dialects spoken in an area of Central Tibet surrounding the city of Lhasa, China.[1] It will be shown that Lhasa Tibetan is neither a number marking language, i.e., a language with morphological exponents of grammatical number, such as English and Hindi, nor a classifier language, i.e., a language that has an obligatory system of classifiers, like Mandarin. At same time, it will be shown that Lhasa Tibetan exhibits the characteristics of both types of languages. The analysis of the structure and semantics of the three types of noun phrases presented in Section 1 will be taken up in Sections 2. In Section 3, the paper ends with a summarizing conclusion.

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[1] Tibetan belongs to the Bodic branch of Tibeto-Burman languages in the Sino-Tibetan language family (e.g. Shafer 1955; DeLancey 2003). The most comprehensive current classification of dialects of Tibetan is that of Nishi (1986), who distinguishes six major groups: Central or U-Tsang (Lhasa, Shigatse, Sherpa, Kagate, etc.), Western Archaic (Balti, Ladakhi, Purik), Western Innovative (Lahul, Spiti), Southern (dialects of Sikkim and Bhutan), Khams, and Amdo (c.f. DeLancey 2003: 270). Lhasa Tibetan belongs to the Central group and is the best-known contemporary Tibetan dialect, with a SOV word order (DeLancey 2003: 270-283; Denwood 1999). Most data from Lhasa Tibetan in this paper was collected by our consultant work with several native Lhasa Tibetan speakers. Data from the literature will be duly noted.

1.1   Bare nouns in Lhasa Tibetan

In this section, we will show that the syntactic distribution and the semantic interpretations of bare nouns in Lhasa Tibetan resemble those in classifier languages like Mandarin. Bare nouns in Lhasa Tibetan can serve as predicates, describing the property of the argument in the sentence:

(1)   blobzang   <u>slabgrwaba</u>   red.[2]
        Lopsang   student   be
        'Lopsang is a student.'

Bare nouns in Lhasa Tibetan can also serve as arguments, appearing with kind-level predicates (2a), in generic/characterizing sentences (2b), as well as in episodic statements (2c).

(2)   a. <u>dom</u> rtsamed   phyin   shag.
           bear extinct   from-now-on PERF
           'Bears are extinct.'
        b. <u>khyi</u> spyangpo   red.
           dog   clever   be
           'Dogs are clever.'
        c. ngas   <u>stag</u>   mthong song.
           I ERG   tiger   see   PST
           i. 'I saw a tiger/tigers.'
           ii. 'I saw the tiger(s).'
        d. phyi   la khyi skad rgyab kyidug
           outside at dog bark do   being
           i. 'Outside, some dog(s) is/are barking.'
           ii. 'Outside, the dog(s) is/are barking.'

As shown in (2), bare nouns in Lhasa Tibetan are not marked with number morphology and can be interpreted as singular or plural. The paradigm above fits in with the description of classifier languages like Mandarin by Yang (2001).
        It was noted by Denwood (1999: 100) that bare nouns in Lhasa Tibetan have indefinite as well as definite readings, as can be seen from (2c, d). Taking their indefinite reading first, (3) shows that they display the same scope properties as bare nouns in Mandarin (Yang 2001, Dayal 2004).

(3)   ngas stag mthong ma   byung.
        I-ERG tiger see   NEG PST
        (i) 'I didn't see tigers.'   ¬ > ∃
        (ii) Not: 'I didn't see certain tigers.'   *∃ > ¬

The definite reading of Lhasa Tibetan bare nouns, noted in (1c), is also supported by a third reading of (3), namely "I didn't see the tiger(s)". It is further confirmed by examples like (4)

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[2] There are two systems for transcribing Tibetan: Romanized transliterations and phonetic transcriptions (Denwood, 1999). This study uses Wylie transliteration (1959), one of the well-established Romanized transliteration methods

where the bare nouns in the second sentence are anaphorically linked to the nouns introduced in the first sentence.[3] Again, this is typical of classifier languages like Mandarin (Yang 2001).

(4)   ngas sgrasdudphruchas gcig dang cong gcig nyos payin. <u>sgrasdudphrulchas</u> thabstshang
        I-ERG radio   one and clock one buy PST   radio   kitchen
        nang   la bzhag yod. <u>cong</u> mgronkhang nang   la bzhag yod.
        inside at put PERF clock lobby   inside at put   PERF
        'I bought a radio and a clock. The radio is in the kitchen and the clock is in the lobby.'

Finally, the definite reading of bare nouns in Lhasa Tibetan is supported by the example in (5) in which the bare noun *zhimis* 'cat' can receive a definite interpretation when the referents are visible and uniquely identifiable for both the speaker and the hearer:

(5)   Context: both the speaker and the hearer are looking at the scenario in which a cat or a
        group of cats are running to catch fish in the river
        <u>zhimis</u>   gtsangpo-i nang-la   nya zabrtsis dug.
        cat-ERG   river-GEN   inside-TO   fish catch   would
        'The cat/cats will catch fish in the river.'

We saw that bare nouns in Lhasa Tibetan share the same properties as those in classifier languages such as Mandarin; in the following subsection we examine numeral constructions in Lhasa Tibetan.

1.2   Numeral constructions in Lhasa Tibetan

In Lhasa Tibetan, bare nouns combine with numerals directly:

(6)   deb   gcig/ gnyis
        book   one/two
        'one book/two books'

The above examples distinguish Lhasa Tibetan from classifier languages like Mandarin which obligatorily require a classifier to connect bare nouns with numerals (e.g. Chao 1968; Li and Thompson 1981). The behavior of numerals and bare nouns in (6) is similar to that in number marking languages such as English and Hindi; however, unlike English or Hindi, nouns in Lhasa Tibetan do not change form regardless of whether the numeral is singular or plural, as we can see from (6).

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[3] Interestingly, if the bare noun is a human noun, Lhasa Tibetan seems to disallow it to be used in discourse-anaphoric contexts to refer to an antecedent in the preceding sentence:
(i) bu gcig dang bumo gcig khangpai nangla   dug. <u>bumo *(de)</u> slabgrwaba red.
     boy one and girl   one room's inside-at exist girl   that student   be
     'There are one boy and one girl in the room. The girl is a student.'
(ii) bu gsum dang bumo gnyis khangpai nangla   dug. <u>bumo *(de gnyis)</u> slabgrwaba red.
     boy three and girl two   room's inside-at exist girl   that two student   be
     'There are three boys and two girls in the room. The two girls are students.'
We will leave the data above for future study.

Although numeral constructions in Lhasa Tibetan differ from both number marking languages and classifier languages, they also exhibit the six properties of numeral constructions as observed in Jiang (2012):

(7)   Six tendentially universal properties of numeral constructions
        a. Predicative
        b. Restrictors of definites and quantifiers
        c. Narrow scope existential reading
        d. Long-distance scope and island-escaping ability
        e. Generic interpretation
        f. Lack of anaphoric use   (Jiang 2012)

By examining a wide range of languages, Jiang (2012: 74-121) observes that numeral constructions across languages exhibit six common properties regardless of whether a language is a number marking languages or a classifier language and also regardless of whether a language has overt article determiners or not. She further proposes that these six properties are potentially universal. When examining numeral constructions in Lhasa Tibetan, we also observe the same properties. First, numeral constructions in Lhasa Tibetan can be used as predicates:

(8)   Bkrashis dang   Chering slabgrwaba   gnyis red.
        Tashi   and   Chering student   two   be
        'Tashi and Tsering are two students.'

Second, numeral phrases in Lhasa Tibetan can be used as restrictors of demonstratives:

(9)   Nyimas   slabgrwaba gnyis de la gzhus song.
        Nyima-ERG   student   two   that to hit   PST
        'Nyima hit those two students.'

Third, they can serve as arguments, receiving a narrow scope existential interpretation:

(10)   Nyimas   deb   gnyis   nyo song.
        Nyima-ERG   book two   buy PST
        'Nyima bought two books.'

Fourth, numeral constructions in Lhasa Tibetan allow a long-distance scope interpretation and exhibit island-escaping ability:

(11)   Nyimas   mi   gnyis glas na gzugspo thangpo chags gi   red.
        Nyima-ERG person two   hire if body   healthy become would be
        'If Nyima hires two persons, he would become healthy.'   if > two; two > if

In (11), the numeral phrase *mi gnyis* 'two persons' occurs within the adjunct *if*-clause. It can receive a narrow scope interpretation within the *if*-clause, and the sentence can be paraphrased as 'for Nyima, the hiring of any two persons would be sufficient to make him become healthy'. The numeral phrase can also receive a wide scope reading out of the *if*-clause, and the sentence can

be paraphrased as 'for Nyima, there are two specific persons; if these two persons are hired, he would become healthy'.

Fifth, numeral constructions in Lhasa Tibetan can receive a generic interpretation in generic sentences:

(12) <u>bu   gsum-gyis</u>   sgrogtse de   bkyag thub gi   red.
      boy three-ERG   table   that lift   can   would be
      'Three boys can lift that table.'

(13) <u>kushu gsum</u> la   sgor   gnyis gnas gi   red.
      apple three to   money-unit two   cost would be
      'Three apples cost 2 dollars.'

Sixth, numeral constructions in Lhasa Tibetan lack anaphoric use. In (16), the numeral phrase *zhimi gsum* 'three cats' cannot refer to the same phrase in the preceding sentence without the demonstrative *de*.

(14) Nyimas   zhimi gsum dang khyi gnyis nyo song.
      Nyima-ERG cat   three and dog two   buy PST
      <u>zhimi gsum *(de)</u>   gongchenpo red.
      cat   three   that expensive   be
      'Nyima bought three cats and two dogs. *(Those) three cats are expensive.'

In the next section with will examine demonstrative phrases with and without numerals.

1.3   Demonstrative phrases in Lhasa Tibetan

Lhasa Tibetan has three demonstratives, the proximal demonstrative *di* 'this', the distal demonstrative *de* 'that', and the far distal demonstrative *pha-gi* 'yon' (DeLancey 2003: 273). In this paper, we will focus on the proximal demonstrative *di* and the distal demonstrative *de*.

Demonstratives in Lhasa Tibetan combine directly with bare nouns, appearing in the post-nominal position, and the whole phrase can freely occur in subject and object positions:

(15) a. <u>deb   di/de</u>   gongchenpo red.   b. khos   <u>deb   di/de</u>   bris   song.
         book this/that expensive   be   he-ERG book this/that write PST
         'This/That book is expensive.'   'He wrote this/that book.'

When demonstratives combine with numeral constructions in Lhasa Tibetan, they can appear in the position either preceding or following the numeral (see also DeLancey 2001: 273):[4]

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[4] As noted in DeLancey (2003: 273-275), when numerals occur in the position preceding the demonstratives, they can take the nominal suffix *-po,* which generally applies to adjectives in the modifying position:
(i)   *deb gnyi-po de*
         book two-po that
         'those two books'   (DeLancey 2003: 273)

(16)   a. deb **de**   gnyis
       book that   two
       'those two books'
     b. deb   gnyis **de**
       book two   that
       'those three books'

In the literature, scholars describe *di*/*de* in Lhasa Tibetan as both demonstratives and definite article determiners (e.g. Denwood 1999: 93; DeLancey 2001: 273). Below, we provide two diagnostic tests from Löbner's (1985) and Alexiadou et al. (2007) to argue that *de* and *di* in Lhasa Tibetan are demonstratives not definite article determiners.
     Löbner (1985) proposes a diagnostic test to separate true definite article determiners from demonstratives:

(17)   # The boy is sleeping and the boy is not sleeping.

(18)   That boy is sleeping and that boy is not sleeping.

If *de* and *di* are definite determiners like *the* in English, we would expect that phrases containing them behave like these in (17) rather than these (18). However such a predication is not borne out:

(19)   bu de/di   deb   klog song, bu de/di   deb   klog ma   song.
       boy that/this book   read PST   boy that/this book read NEG PST
       'That/This boy read a book; that/this boy did not read a book.'

The example in (19) shows that *de* and *di* in Lhasa Tibetan behave as demonstratives like *that* and *this* in English not definite article determiners.
     Our second test to differentiate definite article determiners from demonstratives comes from Alexiadou et al. (2007). Alexiadou et al. (2007: 98) observe one difference between the two, namely, only the definite article determiner can be used to refer to a kind term, whereas demonstratives cannot:

(20)   a. The dodo is extinct.
     b. This dodo is extinct.

When applying this diagnostic test to Lhasa Tibetan, we observe that phrase with *de* and *di* simply cannot appear with kind-level predicates to denote kind, showing that *de* and *di* do not behave as a definite article determiner:

(21)   *dom de/di   rtsamed phyin   shag.
       bear that/this extinct   from-now PERF
       Intended: 'The bear is extinct.'

Having seen the properties of bare nouns, numeral constructions, and phrases with demonstratives in Lhasa Tibetan, in the next section, we provide an analysis of the Lhasa Tibetan facts shown in Section 1.

## 2.   The structure and semantics of Lhasa Tibetan noun phrases

In this section, we will show that the particular properties of Lhasa Tibetan noun phrases noted in Section 1 are amenable to an analysis within the approach to nominal arguments by Chierchia (1998) and Dayal (2004), using well-established principles of interpretation.

2.1   Bare arguments in Lhasa Tibetan

We will start with the assumptions about the denotation and the syntax of bare nominals. The system of noun phrase denotations that we adopt is given below (Partee 1987; Chierchia 1998):

(22)   a. Nominalize: $^{\cap}P = \lambda s \; \iota \; P_s$, if $\lambda s \; \iota \; P_s$ is in K, else undefined. $<e,t> \rightarrow <e^k>$
          b. Iota: ιX = the largest member of X if there is one, else, undefined. $<e, t> \rightarrow <e>$
          c. Existential closure: $\exists X = \lambda P \; \exists y \; [X(y) \wedge P(y)]$ $<e, t> \rightarrow <<e,t>,t>$

We adopt here the traditional view that common nouns are predicates, denoting properties. According to this view, property-denoting nouns can be turned into arguments in two ways. The first one is to argumentize nouns via the article determiner (e.g. a/an/the in English) (Abney 1987; Longobardi 1994; Szabolcsi 1994, a.o.). As a consequence, the structure of noun phrases can be analyzed as the one in (23a), in which the functional head D(eterminer) merges with an NP, forming a determiner phrase (DP). In the DP analysis of noun phrases, Ds encode the three type-shifting operations in (22) and contribute to the different interpretations of noun phrases. Importantly, in this hypothesis, the D head can be realized in either a pronounced form or a silent form, depending on the language, and the silent/null D is only licensed in object positions and is subject to syntactic constraints (e.g. ECP) (see Longobardi 1994).

(23)   a.   DP   b.   NP
               D   NP |
                                                                          N
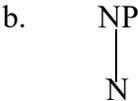
Alternatively, the second approach turns property-denoting nouns into arguments covertly in the semantics via the type-shifters in (22) (e.g. Chierchia 1998; Dayal 2004). Consequently, the structure of noun phrases is analyzed as the one in (23b), in which bare nouns project as NPs. Importantly, in this analysis covert type-shifting operations are subject to *Blocking Principle* that favors overt article determiners over the corresponding covert type-shifting operations (24).

(24)   *Blocking Principle* ('Type Shifting as Last Resort')
          For any type shifting operation τ and any X: $*\tau$ (X), if there is a determiner D
          such that for any set X in its domain, $D(X) = \tau$ (X)   (Chierchia 1998)

The Blocking Principle is what explains the difference between the anaphoric potential of bare nominals in languages with overt definite determiners like English as opposed to languages without overt determiners like Mandarin or Hindi, for example:

(25)   a. Some children came in. *(The) children were happy.   (English)
       b. *kuch bacce$_i$ aaye. bacce$_i$ bahut khush   lage.*   (Hindi)
          some children came children very   happy   seemed
          'Some children came. The children seemed very happy.'   (Dayal 2004)

In this paper, we adopt the second approach by Chierchia (1998) and Dayal (2004) for bare nouns in Lhasa Tibetan for two main reasons. First, as we have shown in Section 1.3, the elements *de* and *di* in Lhasa Tibetan are demonstratives rather than definite determiners, and Lhasa Tibetan does not have overt determiners.[5] Second, as we saw in (2), bare nouns in Lhasa Tibetan can freely appear in subject and object positions with different interpretations and are not subject to any syntactic constraints, unlike bare norminals in the languages examined in Longobardi (1994). Below we will introduce two more crucial components in the approach by Chierchia (1998) and Dayal (2004) that are relevant to us.

One crucial point for the Chierchia-Dayal's approach is the difference between the indefinite readings of bare nominals and ordinary indefinites. The first allows only narrow scope indefinite readings, while the latter participates in scope interaction, as first observed by Carlson (1977) for English bare nominals:

(26)   a. Miles wants to meet policemen.   want > ∃/*∃ > want
       b. Miles wants to meet a policemen.   want > ∃/∃ > want   (Carlson 1977)

The above difference is explained via the sort adjusting rule of Derived Kind Predication (DKP in short) by Chierchia (1998) (27) and the existential closure '∃' in (22c): the former derives the obligatory narrow scope indefinite reading of kind-denoting bare nominals (26a), and the latter derives the flexible scope interpretations of ordinary indefinites (26b).

(27)   *Derived Kind Predication* (DKP):
       If P applies to objects and k denotes a kind, then P(k) = ∃x [$^∪$k(x) ∧ P (x)]

The last piece of the theory in Chierchia (1998) and Dayal (2004) relevant to our discussion is *Rank of Meaning*, which ranks the three covert type-shifters in (22), namely, kind-formation '$^∩$' (22a), definite 'ι' (22b), and indefinite '∃' (22c) in the following way:

(28)   *Ranking of Meaning*:
       a. $^∩$ > {ι, ∃}(Chierchia 1998);   b. {$^∩$, ι} > ∃ (revised by Dayal (2004))

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[5] It was noted by DeLancey (2003: 273) that Lhasa Tibetan has a indefinite determiner *cig* which historically is a reduced form of the numeral 'one' *gcig*. According to our informants, *cig* and *gcig* are pronounced in the same way in Lhasa Tibetan and are only differ in written Tibetan. Whether there are further differences between the two is unknown, and we will leave it for future study.

 In Chierchia (1998), '∩' ranks over 'ι' and '∃' (28a); this ranking is motivated by the fact that (English) plurals generally favor the kind interpretation over the indefinite one (29a). Chierchia claims that '∃' comes into the picture when '∩' is undefined (29b).

(29)   a. Machines are widespread.
        b. ?? <u>Parts of that machine</u> are widespread.   (Chierchia 1998)

A further explanation is that kind formation '∩' only changes the type of its arguments without changing the information associated with it, but existential closure '∃' introduces quantificational force in addition to changing the type of its arguments. Kind formation '∩', therefore, is more meaning-preserving than '∃' and should get picked whenever possible. Dayal (2004), however, notes that Chierchia's ranking in (29a) would block bare nominals in determiner-less languages from having any object-level meaning, definite or indefinite. She also notes that the same reasoning that favors '∩' over '∃' should apply to 'ι' as it also merely changes the type of its arguments without adding quantificational force. The revised ranking (28b) explains the fact that bare nominals can denote kinds as well as contextually-salient entities in languages without definite determiners. That is, definite readings are never blocked by kind formation in such languages. Ranking '∃' below 'ι' is based on her claim that bare nouns in such languages are *not* bona fide indefinites and that their indefinite readings are derived from their kind-level meaning:

(30)   *waimian gou mei zai-jiao*.   (Chinese)
        outside   dog not be-barking
        'Dogs are not barking outside.'   ¬ > ∃/*∃ > ¬   (Dayal 2004)

With this background in place, we now illustrate how the different readings of bare nouns in Lhasa Tibetan in (2) are derived:

(31)   a. NP$_{<e,t>}$
           |
           N
        b. (2a) = extinct (∩bears)
        c. (2b) = Gen x, s [∪∩dogs (x)] [clever (x, s)]
        d. (2ci) (via DKP) = ∃x [∪∩tigers (x) ∧ see (I, x)]
        e. (2cii) = ιx [tigers (x) ∧ see (I, x)]

Given that bare nouns in Lhasa Tibetan are property-referring (31a), they can be turned into arguments with a *kind* interpretation via the kind-formation operation '∩' (31b) due to the *Ranking of Meaning* (28b). In generic sentences (2b), the kind term provides the restriction for the generic operator *Gen* (31c) (see Krifka 1995 for a detailed discussion on *Gen*). To derive bare nouns' existential reading in episodic statements (2ci)/(2di), we apply DKP, as in (31d). As an immediate consequence of this, we derive the obligatory narrow scope behavior we observed in (3) in Section 1. Let us now consider the definite reading of bare nouns in (2cii)/(2dii). As we noted above, this would not follow in Chierchia's (1998) *Ranking of Meaning* (28a), but is made possible under the revision proposed by Dayal (2004) (28b). The revised *Ranking of Meaning* in (28) and lack of overt definite determiner like English *the* in Lhasa Tibetan predict that bare

nouns in Lhasa Tibetan can be turned into arguments with a definite interpretation via the iota operation 'ɩ' (31e).

In this subsection, we saw that the kind, generic, existential, and definite interpretations of bare nouns in Lhasa Tibetan shown in Section 1 are correctly predicted by the approach of Chierchia (1998), with the specific modification of *Ranking of Meaning* from Dayal (2004). We will now turn to the interpretation and the structure of numeral constructions in Lhasa Tibetan.

2.2 The syntax and semantics of numeral constructions in Lhasa Tibetan

The behavior of Lhasa Tibetan numeral constructions is consistent with our claim that Lhasa Tibetan bare nouns denote properties. When numerals, which are property-seeking, combine with property-denoting nouns, we expect that they can combine directly, deriving the fact we presented in (6) in Section 2.1.

Regarding the structure of numeral construction in Lhasa Tibetan, we adopt the analysis that numerals across languages are phrasal (Borer 2005; Ionin and Matushansky 2006; Di Sciullo 2012; a.o.) and place them in the adjunct position in Lhasa Tibetan (32). As for the semantic derivation of the numeral construction, we adopt the view that numerals are predicate modifiers in Ionin & Matushansky (2006). Under this view, numerals always combine with atomic predicates. In the analysis in (32), the numeral phrase *deb gnyip* 'two book' receives a predicative meaning, type <e, t>. This analysis of numeral phrases accounts not only for the fact that they can occur in predicative positions (8) but also for the fact that they can be used as restrictors of demonstratives (9) and generic operator (12).

(32)

$$\text{NP } \lambda x[\text{two}(\text{book})(x)] \ {}_{<e,t>}$$

NP ——— NumP
deb   *gnyis*
'book' book$_{<e,t>}$ 'two' $\lambda P[\text{two}(P)] \ {}_{<<e,t>, <e,t>>}$
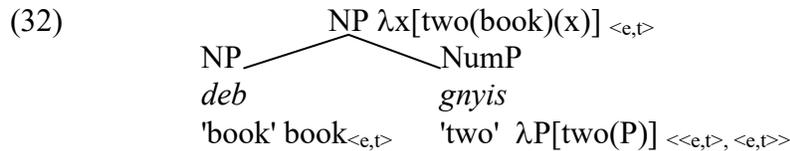
Since numeral phrases are predicative phrases in (32), we might well ask how they might be used as arguments with an indefinite interpretation, as in (10) in Section 2.1. Here we adopt the view that numerals have a predictable lexical variant in which they are indefinite determiners of type <<e,t,>, <<e,t>, t>>> (Dayal 2012; Jiang 2012). The resulting numeral phrase, under this analysis of numerals, is a generalized quantifier (GQ). Such an analysis immediately accounts for the fact that numeral phrases in Lhasa Tibetan are arguments (10) and show the scope behavior typical of indefinites (11).

2.3 The syntax of the demonstrative phrases in Lhasa Tibetan

Having shown that bare nouns and numeral constructions in Lhasa Tibetan can have a predicative meaning (31)/(32), we predict that they can combine with demonstratives. Note though that there is a difference in word order in the latter case:

(33)   a. deb de
             book that
             'that book'
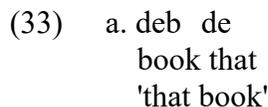
b. deb **de** gnyis
   book that two
   'those two books'
c. deb gnyis **de**
   book two that
   'those three books'

We adopt the view that demonstratives occur in specifier positions of NPs (Giusti 1997, 2002; Brugè 2000, 2002; Alexiadou et al 2007, a.o.). We first give the structure of (33a) below:

(34)

$$NP$$
$$NP_i \quad NP$$
deb Dem NP
'book' *de* t_i
'that'
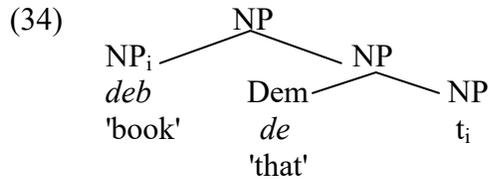
In (34), the demonstrative appears in Spec NP position. The NP movement seen above draws on Simpson (2005: 309-323), where such movement is used to explain cross-linguistic variation in the ordering of constituents in the numeral classifier phrases of South East Asian languages. By adopting the NP-movement analysis, the demonstrative phrase in (33b) and (33c) have the structures in (35a) and (35b) respectively:

(35)   a.

$$NP$$
$$NP_i \quad NP$$
deb Dem NP
'book' *de* t_i NumP
'that' *gnyis*
'two'

b.

$$NP$$
$$NP_i \quad NP$$
NP Nump Dem t_i
deb *gnyis* *de*
'book' 'two' 'that'
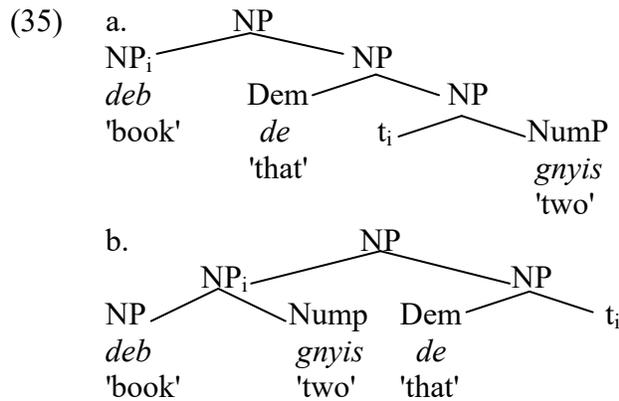
In (35a), the demonstrative appears in Spec NP, and the bare noun 'book' undergoes NP-fronting to the initial position of the phrase, yielding the observed word order [NP Dem Num]. In (35), the numeral modified NP *deb gnyis* 'two books' undergoes NP-fronting to the initial position, leading to the word order [NP Num Dem].

3.   Conclusion

This paper provided a description of the syntactic distribution and semantic interpretations of bare nouns, numeral constructions and demonstrative phrases in Lhasa Tibetan. It was shown that bare nouns in Lhasa Tibetan share the same properties as those in classifier languages such as Mandarin. In addition to serving as predicates, Lhasa Tibetan bare nouns can serve as arguments, appearing with kind-level predicates, in generic/characterizing sentences, as well as

in episodic sentences. But unlike Mandarin, numerals combine directly with bare nouns in Lhasa Tibetan in the same way as those in number marking languages like English and Hindi. However, unlike English or Hindi, nouns in Lhasa Tibetan do not change form regardless of whether the numeral is singular or plural. We further showed that numeral constructions in Lhasa Tibetan exhibit the same six properties as those in number marking languages and classifier languages as observed in Jiang (2012). We provided two diagnostic tests from Löbner's (1985) and Alexiadou et al. (2007) to argue that the so-called definite determiner *de/di* in Lhasa Tibetan are indeed demonstratives, which can appear in two different positions in numeral constructions.

We saw that the particular properties of Lhasa Tibetan noun phrases noted in this paper are amenable to an analysis within the approach to nominal arguments by Chierchia (1998) and Dayal (2004), which includes a set of well-established principles of interpretation and a principle blocking covert type shifting operations in the presence of corresponding overt versions. Such an analysis, which is applicable to a wide range of languages, allows us to explain the properties of noun phrases in Lhasa Tibetan without making language-specific assumptions.

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