

The ambiguity with *pa*-nominalization in Lhasa Tibetan

A marker-centered account

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A tensed clause that undergoes nominalization marked with *pa* (*pa*-phrase) in Lhasa Tibetan can give either an event reading or a participant reading. A syntactic analysis of the *pa*-phrase is conducted by proposing the Differential Nominalizer Hypothesis (DNH). Specifically, *pa* selects an AspP as its complement and projects an NP; *pa* enters the derivation either as a grammatical item that shifts an AspP to an NP or as a lexical item that binds an empty category in the THEME position within the AspP. This categorial difference of *pa* and the consequent derivational difference of the *pa*-phrase provide a plausible account of the semantic ambiguity of *pa*-nominalization. The idea that the nominalizer *pa* has a double category is supported with an assumption of grammaticalization, as is evidenced by the functional multiplicity of *pa* in Lhasa Tibetan: it is a productive grammatical marker but still bears lexical content of a lexical formative. The assumption of grammaticalization lends support to the DNH.

Keywords: Lhasa Tibetan, nominalization, *pa*, ambiguity

1. Introduction

It is well attested in natural languages that nominalized constituents can have diverse meanings. In some European languages, the ambiguity is usually found between a *process* interpretation and a *result* interpretation, as the English examples in (1) show. See Picallo (1991), Bottari (1992), Schoorlemmer (1998), Rozwadowska (2000), Alexiadou (2001), and Müller (2017), for examples in Catalan, Italian, Russian, Greek, Polish, and Spanish respectively. A different type of ambiguity has, however, been recognized in some Altaic, Amerindian, and Sino-Tibetan languages, where nominalization targets clauses rather than mere verb stems, and the nominalized clauses allow both *event* (or *process*, as the afore-

mentioned researchers call it) and *participant* (or *theta*, as Walinska de Hackbeil (1984) labels it) readings. Examples (2) and (3) exemplify the phenomenon in two Altaic languages and two Amerindian languages respectively.

(1) English

The examination took a long time. (process)

The examination was on the table. (result)

(Grimshaw 1990: 49)

(2) Sakha

a. *Masha terilte-ni salaj-yy-ta*

Masha company-ACC manage-EVN.NMLZ-3SG.POSS

‘Masha’s management of the company.’ (event)

b. *Terilte-ni salaj-aaccy kel-le.*

company-ACC manage-AGT.NMLZ come-PST.3SG.SBJ

‘The manager of the company came.’ (participant)

(Baker & Vinokurova 2009: 520)

c. Kolyma Yukaghir

mit emd’e tamun juØ-t ibil’e-gi šoboi’e-j

our brother that see-IPFV cry-NMLZ cease-3SG

‘Our brother saw this and stopped crying.’ (event)

d. *qodō-gen kej-ŋile-ben*

lie-IMP.3SG give-3PL-NMLZ

‘Let whatever they give just lie there.’ (participant)

(Maslova 2003: 403, 426)

(3) Harakmbut

a. *pa e’-wa-ta i’-pak e-mationka-ta ndo-ere*

Q NMLZ-go-ACC 2SG-want NMLZ-hunt-ACC 1SG-COM

‘Do you want to go and hunt with me?’ (event)

b. *Jonas-tewapa o-ning-ka wa-wedn gringo-a*

Jonas-BEN 3SG.IND-BEN-make NMLZ-lie foreigner-NOM

‘The foreigner makes a bed for Jonas.’ (participant)

(Van linden 2019: 473, 466)

Northern Paiute

a. *Nii a=bbauma-wini-na naka*

1SG.NOM 4.GEN=rain-IPFV-NMLZ hear

‘I hear it raining.’ (event)

b. *I=saa-na ne-hu*

1SG.GEN=cook-NMLZ burn-PRF

‘What I was cooking burned.’ (participant)

(Toosarvandani 2014: 787)

Lhasa Tibetan has five well-established nominalizers: *pa* (པ), *rgyu* (རྒྱུ), *yag* (ཡག), *sa* (ས) and *mkhan* (མཁན) (Wang 1994: 488–514).¹ Like Northern Paiute – but unlike Sakha, Kolyma Yukaghir, or Harakmbut – this language allows any one of these morphemes to mark both event and participant nominalizations. Examples (4) and (5) show this double function of the nominalizer *pa*.

(4) Lhasa Tibetan

- a. ཁོང་གིས་ནན་ལགས་ལ་གནས་ཚུལ་ཞུས་པ་དེ་འགྲིགས་སོང་།
khong-gis rgan=lgas-la gnas=tshul zhus-pa de
 he-ERG teacher-ALL situation speak.HUM.PST-NMLZ that
 'grigs-song'²
 be_right.PST-PRF.EXP.EV
 'It was right that he told the teacher about the situation.' (event)
- b. གནས་ཚུལ་དེ་ངས་ཞུས་ཞུས་པ་རེད།
gnas=tshul de nga-s zhus~zhus-pa red
 situation that 1SG-ERG speak.HUM.PST~PRF-NMLZ be.FAC.EV³
 'That situation is what I have already spoken of long before.' (participant)
 (Zhou & Xie 2003: 27)

1. But see Denwood (1999: 225), Tournadre & Dorje (2003: 177) and Zhou & Xie (2003: 27–30) for different lists of nominalizers in Lhasa Tibetan.

2. Transcription of Lhasa Tibetan data in this paper follows the conventions of Wylie transcription (Wylie 1959) and the interlinear glossing observes the *Leipzig glossing rules* (Comrie et al. 2015). In particular, the syllabic boundary within a stem is marked with an equal sign <=>, the boundary between a stem and a grammatical morpheme and between two grammatical morphemes with a hyphen <->, and the boundary between word-like units with a space. The interlinear glosses make consistent use the shortened forms listed in Abbreviations.

3. In this glossing, *pa* is a nominalizer and *red* 'be', with a non-neutral tone, functions as the predicate verb. The glossing is supported by the fact that some elements – i.e. *de* (དེ) 'that', *de ga=rang* (དེ་ག་རང་) 'just that', and *dnagos=gnas* (དངོས་གནས་) 'indeed' – can be interposed between *pa* and *red* 'be', as was pointed out to me by an LL reviewer and confirmed by the informants. There is an alternative analysis of this sentence. That is, *pa* and *red* constitute a complex auxiliary, with *red* carrying a neutral tone, and the sentence thus reads '(As for) that situation, I have already spoken of (it) long before.' Also see Wang (1994: 525) for this kind of reanalysis.

Note that verb reduplication in a *pa*-phrase marks the perfective aspect, meaning 'have already done something long before', as is described in Hoshi (1988: 401), Hu (2002: 435), and Zhou & Xie (2003: 27). In a context other than nominalization, however, the reduplicated verb has either a perfective meaning or an iterative one (DeLancey 2003: 281–282).

(5) Lhasa Tibetan

- a. བཞེས་པ།
bltas-pa
 see.PST-NMLZ
 ‘seeing (what was seen)’
- b. བཟས་པ།
bzas-pa
 eat.PST-NMLZ
 ‘eating (what was eaten)’
- c. གོན་པ།
gon-pa
 wear-NMLZ
 ‘wearing (what was worn)’
- d. ཟྱས་པ།
zhus-pa
 speak.HUM.PST-NMLZ
 ‘speaking’ (event)
 ‘what was spoken of’ (participant)
- (Zhou & Xie 2003: 27; cf. Denwood 1999: 225–226)

This study attempts a syntactic explanation of this phenomenon in Lhasa Tibetan. Instead of the verb-centered approach, which many researchers have taken to interpret the nominalization-related ambiguity in European languages (Grimshaw 1990; Picallo 1991; Bottari 1992; Schoorlemmer 1998; Rozwadowska 2000; Alexiadou 2001; Müller 2017, *inter alios*), this study attempts a (nominalizing) marker-centered approach to the event/participant ambiguity with Lhasa Tibetan nominalization marked with *pa*. The rationale for adopting this new perspective is threefold. First, the theoretical interpretations proposed for the process/result ambiguity with nominalization in European languages have not yet reached agreement (Rozwadowska 2006), suggesting that the verb-centered approach, either syntactically or semantically/thematically oriented, is not free of problems and not necessarily applicable to the Lhasa Tibetan case. Second, studies of the event/participant ambiguity with nominalization in non-European languages have produced very few accounts that can be referenced for this study. Third, nominalization in Lhasa Tibetan is typologically different from that in the other aforementioned languages. In Lhasa Tibetan, a morphologically independent nominalizer (e.g. *pa*) serves both event and participant nominalizations and does not involve lexicalization. In European languages, nominalization is marked with irregular affixation and necessarily involves lexicalization, as shown in (1), and in Sakha, Kolyma Yukaghir, and Harakmbut, event and participant nominalizations involve different morphological markers, as shown in (2a, b) and (3a).

In this regard, Northern Paiute is exceptional in that it fulfills event and participant nominalizations with the same markers, just as in Lhasa Tibetan. However, nominalization in this language target a mere νP , as Toosarvandani (2014) argues, whereas that in Lhasa Tibetan targets a constituent larger than a νP . As a result, only limited referential value can be derived for this study from the previous research on nominalization in Northern Paiute and similar languages.

Lhasa Tibetan is the “Modern Colloquial Tibetan as spoken in and around Lhasa” (Tournadre & Dorje 2003:16), which is the “Common Language” or “Standard Tibetan” used in Central Tibet for spoken communication between speakers of different Tibetic languages or dialects (Tournadre 2014: 119). It is also the most important *lingua franca* dialect used to varying degrees in most parts of the Tibetan-speaking world (Denwood 1999:23). The data used in this paper include words and sentences cited from research documents on Lhasa Tibetan. Specifically, the data were cited, in the first place, from various sources of literature on this language. Then they were subjected to confirmation and modification by five native speakers from Lhasa City so as to guarantee their authenticity. The cited examples that were judged to be inappropriate were either abandoned or kept for use after being modified by the informants. These modified cases are also documented, with their original sources provided.

This paper is organized as follows. § 1 and 2 describe the syntactic and semantic properties of Lhasa Tibetan *pa*-nominalization respectively. § 3 proposes a tentative syntactic account of the event/participant ambiguity that *pa*-nominalization displays. § 4 presents data of functional multiplicity of *pa* in Lhasa Tibetan, which suggest a process of grammaticalization that *pa* has been undergoing and can be evidence for the ambivalent category of *pa* to support the syntactic account. And § 5 concludes the paper.

2. The syntactic properties of *pa*-nominalization

Nominalization is characteristic of the syntactic organization of Lhasa Tibetan and other languages within the Tibetan-Burman family (DeLancey 2002:55). The phrase resulting from the process of nominalization with the marker *pa* (*pa*-phrase hereafter) can serve the same syntactic functions as those that a normal nominal phrase generally serves. In this paper I argue that the source constituent that can undergo *pa*-nominalization is an aspect phrase.

2.1 Syntactic functions

The syntactic functions that a *pa*-phrase can serve include subject, object, complement, and attributive. A fairly detailed description of how a *pa*-phrase functions in a sentence is found in Goldstein et al. (1991: 135–142). See (6) through (11) for examples.

- (6) སློན་མ་བྱ་ནག་ལ་བཏང་ཡིག་བཏང་བ་ཁག་པོ་རེད།
sngon=ma rgya=nag-la btang=yig btang-ba khag=po red
 formerly Han_area-LOC letter send.PST-NMLZ difficult be.FAC.EV
 ‘Formerly, sending a letter to the area of Han people was difficult.’
 (Goldstein et al. 1991: 136)
- (7) མགོ་ལ་སྐྱ་འཛུགས་བྱལ་པ་དཔེ་རང་རེད།
mgo-la skra dzugs thub-pa dpe rang red
 head-LOC hair plant.PRS be_able_to-NMLZ amazing very be.FAC.EV
 ‘Being able to plant hair on the head is very amazing.’
 (Tournadre & Dorje 2003: 282)
- (8) ཁོས་མོ་སྤྲོ་བ་ཡིན་པ་ཤེས་པ་རེད།
kho-s mo so=pa yin-pa shes-pa=red⁴
 3SG-ERG she spy be-NMLZ know-PRF.FAC.EV
 ‘He knew that she was a spy.’
 (Goldstein et al. 1991: 139)
- (9) གནམ་འབྲེལ་བ་མ་གཏོགས་ཆར་པ་གཏང་མཛོག་ཁ་པོ་མ་རེད།
gnam 'thibs-pa ma=gtogs char=pa gtang mdog=kha=po
 sky cloud_over-NMLZ EXCL rain fall-FUT likely
ma-red
 NEG-be.FAC.EV
 ‘Apart from the sky clouding over, it’s not likely to rain.’ (Denwood 1999: 227)
- (10) ཁོས་མེ་མདའ་ཉིས་པར་ཁོ་ཚོས་སྒྲིན་བརྒྱུད་བྱེད་པ་རེད།
kho-s me=mda' nyos-pa-r kho-tsho-s skyon=brjod=byed-pa=red
 3SG-ERG gun buy.PST-NMLZ-LOC 3SG-PLU-ERG criticize-PRF.FAC.EV
 ‘They criticized his buying guns.’ (adapted from Goldstein et al. 1991: 139)

4. In Lhasa Tibetan, the post-verb auxiliary particles and their combinations, i.e. the copula *yin* and *red* and the existential verbs *yod*, *dug* and *yod=red*, are notoriously complex in terms of grammatical function such that they are sometimes referred to as “person-sensitive TAME [tense-aspect-modality-evidentiality] marking” (Post 2013: 107). For ease of discussion, these elements in the examples are only glossed as aspect and/or evidentiality markers. Three general terms and the associated classification are adopted from Denwood (1999: 140, 158–164) to label their aspectual function: perfect, imperfective, prospective. And three general terms and the associated classification are adopted from Hill & Gawne (2017) and Yukawa (2017[1975]) to indicate their evidential function: personal, experiential, and factual.

- (11) གནས་ཚུལ་དེ་ངས་ཞུས་ཐུང་པོ་རེད། (= (4b))
gnas=tshul de nga-s zhus~zhus-pa red
situation that 1SG-ERG speak.HUM.PST~PRF-NMLZ be.FAC.EV
‘That situation is what I have already spoken of long before.’

(Zhou & Xie 2003: 27)

- (12) ངས་ཀློག་པའི་དེད།
nga-s klog-pa-i deb
1SG-ERG read-NMLZ-GEN book
‘the book which I have read.’

(Denwood 1999: 225)

In (6) and (7), the *pa*-phrase serves as the subject of the copular verb *red* ‘be.’⁵ In (8), the *pa*-phrase serves as the object of the verb *shes* ‘know’. In (9) and (10), the *pa*-phrase serves as the complement of a postposition: *ma=gtogs* ‘apart from’ in the former takes ‘the sky clouding over’ as its complement and *la/r* ‘at’ in the latter takes as its complement ‘his buying guns.’⁶ In (4b), repeated as (11), the *pa*-phrase serves as the complement of the copula verb *red* ‘be’. Finally, in (12), the *pa*-phrase serves as an attributive of the noun *deb* ‘book’, marked with the genitive marker *i*.

These examples show clearly that the *pa*-phrase can function as a nominal phrase in the sentence, and the function of *pa* as a nominalizer should be beyond any doubt. Nevertheless, the use of the *pa*-phrase is not limited to those contexts mentioned above. See Noonan (1997) for the various functions of nominalization in Tibeto-Burman languages.

5. The key terms used for describing the syntactic function of *pa*-phrases, including *subject*, *object* and *complement*, should be taken in the sense of Quirk et al. (1985: 53–57), whose definition of these terms is based on a verb-centered account of clause structure. That is, a transitive verb takes two nominal phrases, the one about which the clause predicates something being the subject and the other, contained in the predication, being the object; an intransitive verb (including existential verb) takes only one nominal phrase, which is the subject; and a copula verb takes two elements, the one nominal phrase about which the clause predicates something being the subject, and the other element (whether it is a nominal phrase or not) being the complement. The nominal phrase that occurs with a pre/postposition is a complement as well (ibid. 657).

6. Controversy exists over the grammatical category to which these adjunct-marking particles belong. While some scholars, e.g. Goldstein et al. (1991: 193–142), Denwood (1999: 202–208), Tournadre & Dorje (2003: 99), Jiang (2016: 38–43) as well as an LL reviewer, regard them as case markers, others, e.g. Magee et al. (1993: 207, 280, 295) and Wang (1994: 430–436), take them to be postpositions. Under the latter view, the *pa*-phrase in (9) and (10) serves as complement of the postposition. Either way, the *pa*-phrase preceding these adjunct-marking particles is undoubtedly of nominal nature.

2.2 Source constituents

The constituent that can undergo *pa*-nominalization should be an aspect phrase (AspP) because a *pa*-phrase generally contains a verb in the past tense form, which can be followed by an aspect auxiliary. I provide evidence that the source constituent of *pa*-nominalization cannot be a projection higher or lower than AspP.

A complete sentence in Lhasa Tibetan can express the grammatical categories of tense, aspect, evidentiality, and force, and the word order of the functional heads goes as tense > aspect/evidentiality > force, as (13) illustrates.

- (13) ང་ཇོ་ཤེས་ཀྱི་མི་འདྲག་གས།
nga ngo=shes-kyi-mi-'dug *gas*
 1SG know-IPFV.EXP.EV-NEG-IPFV.EXP.EV SFP
 'Don't you recognize me?' (Jiang 2016: 52)

Here the verb *ngo=shes* 'know' is invariable in form and understood to be in the present tense.⁷ The auxiliary *kyi='dug* indicates the imperfective aspect as well as the experiential evidentiality, and *mi* in between is a negator. *Gas* is a sentence-final particle (SFP) expressing the interrogative force.⁸

As regards the constituent that undergoes *pa*-nominalization, first of all, it contains a tensed verb and, therefore, is a finite clause, in which the arguments are case-marked in the same way as in the matrix clause, as (4) and (6) through (12) above show. On top of the tensed verb, there can occur a marker for aspect. For example, in (11), verb reduplication is employed to mark the perfect aspect (see

7. In Modern Literary Tibetan, which is common to all Tibetan dialects, a verb may have four different graphological stems (present, past, future, and imperative) that can denote different tenses alone or in combination with distinctive auxiliaries. In Lhasa Tibetan, a verb may have at most three different graphological stems (present, past and imperative) (Denwood 1999: 105–108). It should be noted, however, that a large portion of Lhasa Tibetan verbs are formally invariable (cf. Hoshi (2003)). When such a verb occurs in a *pa*-phrase, it can be taken to be in the past tense since a *pa*-phrase generally denotes a completed event, e.g. *yin* 'be' in (8). Nevertheless, a present/future-tense verb may occasionally occur in a *pa*-phrase as well, as is noticed and illustrated by Goldstein et al. (1991: 140). See (14) below for instance.

8. In Lhasa Tibetan, an aspect auxiliary and an evidentiality auxiliary always cooccur such that they appear to be one lexical unit (Denwood 1999: 115–169; Tournadre & Dorje 2003: 164–170). That's why they are handled as a single word and the boundary between the two auxiliaries is marked with an equal sign <=> in the interlinear glosses in this paper. The language also uses sentence-final particles to mark various types of force, which can be subsumed under the three general categories: indicative, interrogative and imperative (Wang 1994: 436–446; Zhou & Xie 2003: 244–262).

Footnote 3), and in (14), the verb is followed by an aspect auxiliary. See Denwood (1999: 224) for more examples of this kind.

- (14) ངས་ཁྱིད་རྒྱལ་ཚོས་ཁ་ལག་བླ་གི་ཡོད་པར་ལྟ་གི་ཡོད།
nga-s khyed=rnam-tsho-s kha=lag za-gi=yod-pa-r
 1SG-ERG 2SG.HON-PL-ERG meal eat.PRS-IPFV-NMLZ-LOC
lta-gi=yod
 watch.PRS-IPFV.PERS.EV
 ‘I am watching you eating.’ (Denwood 1999: 226)

Though in a matrix clause the post-verb auxiliary can indicate both aspect and evidentiality, its function in a *pa*-phrase is confined to aspect alone. As observed by Chang & Chang (1984: 607–608), DeLancey (1990: 298) and Tournadre & Dorje (2003: 94), the contrast between different types of evidentiality gets neutralized in subordinate clauses. In other words, evidentiality ceases to play a role in a *pa*-phrase. This is just expected considering that evidentiality is “the representation of source and access to information according to the speaker’s perspective and strategy” (Tournadre & LaPolla 2014: 240) and therefore only works on the matrix clause level. A connected category is mood/modality, which can be expressed either by the same auxiliaries that express aspect and evidentiality or by independent modal verbs. In the former case, mood/modality resembles evidentiality in a *pa*-phrase in that it is neutralized for its being speaker-related. In the latter case, a modal verb enters a serial verb construction with a canonical verb and can itself be followed by an aspect auxiliary (Denwood 1999: 171–178).

Apart from evidentiality and mood/modality, other speaker-related grammatical categories are not represented in the source constituent of a *pa*-phrase, either. First, an SFP, e.g. *gas* in (13), which is supposed to head a force projection, is not allowed before the nominalizer *pa*. Nor is the dedicated topic marker *ni* (ནི), which heads a topic projection, is found in a *pa*-phrase. Focus in Lhasa Tibetan can be realized by moving a constituent into the preverbal position and giving it a particular stress (Denwood 1999: 213; Tournadre & Dorje 2003: 94), but such a marked word order is seldom found in a *pa*-phrase. For example, all the *pa*-phrases in the example sentences in this paper have an unmarked word order. Finiteness, which is not obviously speaker-oriented, is a meagerly understood grammatical category in Lhasa Tibetan, as the language has no counterparts of the English complementizers *for* vs. *that*, which betrays a finite/nonfinite contrast. Nor does it have an element analogous to the Italian *di*, which selects a nonfinite TP and projects a FinP (Rizzi 1997). Of the four projections into which the general CP domain is split (see Rizzi 1997), none is found in the source constituent of a *pa*-phrase. It is fair to conclude that the source constituent of *pa*-nominalization is a projection of

aspect at the highest. In other words, the source constituent is an untyped clause and therefore only expresses indicative meaning by default.

It is also noteworthy that the source constituent of *pa*-nominalization cannot be a projection lower than AspP, i.e. a bare V, VP or *v*P, either. *Pa*-phrases may be composed of a bare verb and the marker *pa*, and some researchers, e.g. Zhang (1994: 108), Denwood (1999: 113), Hu (2002: 434–435), Zhou & Xie (2003: 27), and Tournadre & Dorje (2003: 177), hold the view that, in addition to being able to nominalize a verbal phrase or clause, *pa* can nominalize a bare verb and thus serves as a derivational suffix for word formation. More generally, Genetti (2011: 164) holds that nominalization in Tibeto-Berman languages applies at two different levels of grammar: derivational and clausal. The former takes as its domain the verb root or predicate and works at the morphological level to derive lexical nouns, and the latter takes as its domain the clause or clause combination and works at the syntactic level to allow a grammatical clause to be treated as a nominal phrase within a broader syntactic context. This view, however, cannot be correct. First, the verb that is involved in *pa*-nominalization is generally in the past tense form, and, therefore, is not to be equated with the “verbal stem-suffix” construction in European languages, where the stem is always a verb in its bare form (see Footnote 7 for comparison). Second, the formation of the “verb-*pa*” constituent is productive, in contrast to the lexical derivation in European languages, where a nominalizing suffix only applies to some, but not all, verbs of a certain class. Third, the verb can be modified with an adverbial, as in (16) below, where the verb is modified by the adverbial *kha=sang* ‘yesterday’. Most importantly, the seemingly simple “verb-*pa*” structure, as it occurs in a syntactic environment, is not simple at all: it is a case where the argument(s) of the verb is/are either elided or suppressed, as (15) and (16) illustrate. By ellipsis is meant that the argument(s) is/are omitted for discourse reasons, but they can be supplied without affecting the grammaticality and meaning of the sentence. For example, in (15a), the only argument of the verb *yong* ‘come’ in the *pa* phrase is elided. But it can be supplied without affecting the grammaticality and meaning of the sentence, as (15b) shows. In contrast, suppression means that a sentence involves an implicit argument that cannot be explicitly expressed and, if it is made explicit, the sentence becomes ungrammatical or its meaning is changed. For example, in (16a) the subject of the verb *slebs* ‘arrive’ is implicit. If it is made explicit, as in (16b), the sentence becomes ungrammatical.

- (15) a. ད་རེས་འདིར་ཡོང་བ་བློན་པ་དང་པོ་ཡིན།
da=res 'dir yong-pa thengs dang=po yin
 this_time here come-NMLZ time first BE.PERS.EV
 'This is the first time (I) have come here.'
- b. ད་རེས་ང་འདིར་ཡོང་བ་བློན་པ་དང་པོ་ཡིན།
da=res nga 'dir yong-pa thengs dang=po yin
 this_time 1SG here come-NMLZ time first be.PERS.EV
 'This is the first time I have come here.' (Denwood 1999: 226)
- (16) a. ཁ་སང་སློབས་པ་དེ་ཕྱི་ལོགས་ལ་བསྐྱོད་ཀྱི་འདུག
kha=sang slebs-pa de phyi=logs-la bsdad-kyi='dug
 yesterday arrive.PST-NMLZ that outside-LOC wait.PRS-IPFV.EXP.EV
 'The one who arrived yesterday is waiting outside.' (Denwood 1999: 200)
- b. *མི་ཁ་སང་སློབས་པ་དེ་ཕྱི་ལོགས་ལ་བསྐྱོད་ཀྱི་འདུག
mi kha=sang slebs-pa de phyi=logs-la bsdad-kyi='dug
 man yesterday arrive.PST-NMLZ that outside-LOC wait.PRS-IPFV.EXP.EV
 'The man who arrived yesterday is waiting outside.'

Finally, the source constituent of *pa*-nominalization cannot be a VP or *vP*. The arguments in a *pa*-phrase follow exactly the same pattern of case marking as those in the matrix clause. As the above examples show, the subject argument in a *pa*-phrase, if present, carries either the absolute case (marked with zero morpheme) when the verb is intransitive (including copular verb and existential verb) (see (8), (9), and (15b)) or the ergative case (marked with *gis* (གིས) or its variant *s* (ས) {see (4), (11), (12), and (14)}). Following the standard minimalist assumptions (Chomsky 1995b), the case feature checking for the subject argument does not take place within VP or *vP*. The argument needs to raise to Spec,TP instead. This proves that the source constituent of *pa*-nominalization projects beyond a *vP*.

To recapitulate, a *pa*-phrase results from nominalization of an AspP and serves the syntactic functions that a nominal phrase serves typically.

3. The semantic properties of *pa*-nominalization

A *pa*-phrase can give either an event reading or a participant reading, and in certain contexts both readings are possible, giving rise to ambiguity. The general rule is that an event reading is available when all the arguments in the source constituent AspP are explicit or can be made explicit in cases where they are elided; whereas a participant reading is available when a certain argument in the source constituent AspP is suppressed and therefore cannot be made explicit.

3.1 The event/participant ambiguity

The event/participant ambiguity of *pa*-nominalization depends upon the explicitness/implicitness of argument expression in the source constituent AspP. When an implicit argument can be regarded as either being elided or being suppressed, both an event reading and a participant reading are possible.

First of all, when all the arguments of the verb in the source constituent AspP are explicitly expressed, the *pa*-phrase only gives an event reading. For example, in (17), the two arguments of the verb *yin* ‘be’, namely *kho=rang* ‘he’ and *bod=pa* ‘Tibetan’, are both present; in (18), the only argument of the verb *na* ‘sicken’, namely *nga* ‘I’, is also present. As a result, both *pa*-phrases are interpreted as events.

- (17) ཁོ་རང་བོད་པ་ཡིན་པ་ངས་ཤེས་མ་བྱུང་།
kho=rang bod-pa yin-pa nga-s shes-ma-byung
 3SG Tibetan be-NMLZ 1SG-ERG know-NEG-PRF.PERS.EV
 ‘I don’t know that he is a Tibetan.’ (adapted from Hu 2002: 448)

- (18) ང་ན་གི་ཡོད་པ་སྤུས་ཟེར་གི་འདུག་གས།
nga na-gi=yod-pa su-s zer-gi='dug gas
 1SG sicken-IPFV-NMLZ who-ERG say-IPFV.EXP.EV SPF
 ‘Who says that I am ill?’ (adapted from Hu 2002: 448)

Second, when ellipsis occurs to the argument(s) of the verb in the source constituent AspP, the *pa*-phrase still gives an event reading. For instance, in (19a), the two arguments of the verb complex *dbor tshar* ‘finish transporting’, i.e. the subject and object of the clause, are both elided; in (20a), the subject argument of the verb *shes* ‘know’ is elided. Both *pa*-phrases are interpreted as events. That these two *pa*-phrases involve ellipsis of arguments can be proven by the fact that these elided arguments can be made explicit according to the context, as (19b) and (20b) show. A special note should be added that the verbs in the *pa*-phrases in (19)–(22) and (24)–(25) are all transitive. For one thing, they refer to an action that targets an object or produces a result; for another, they cooccur with a subject carrying an ergative marker, which is disallowed by an intransitive verb (Goldstein et al. 1991: 46–48; Wang 1994: 131–133).

- (19) a. ཉིན་བདུན་གྱི་ནང་དུ་དངོས་ཚར་བ་བྱེད་རྒྱ་ཡིན།
nyin bdun-gyi nang-du dbor tshar-ba byed-rgyu=yin
 day seven-GEN inside-LOC transport finish-NMLZ do-PRO.PERS.EV
 ‘(I) have to try to have (it) completely transported within seven days.’
 (adapted from Jiang 2016: 47)

- b. ངས་ཉིན་བདུན་གྱི་ནང་དུ་འབྲས་དཔོར་ཙམ་བ་བྱེད་རྒྱུ་ཡིན།
nga-s nyin bdun-gyi nang-du 'bras dbor tshar-ba
 1sg-ERG day seven-GEN inside-LOC rice transport finish-NMLZ
byed-rgyu=yin
 do-PRO.PERS.EV
 'I have to try to have the rice completely transported within seven days.'
- (20) a. བོད་སྐད་ཤེས་པ་དེ་གལ་ཆེན་པོ་རེད།
bod=skad shes-pa de gal=chen=po red
 Tibetan know-NMLZ that important be.FAC.EV
 'It's important to know Tibetan.' (Tournadre & Dorje 2003: 282)
- b. ཚོ་དབང་གིས་བོད་སྐད་ཤེས་པ་དེ་གལ་ཆེན་པོ་རེད།
tshe=dbang-gis bod=skad shes-pa de gal=chen=po red
 Tsewang-ERG Tibetan know-NMLZ that important be.FAC.EV
 'It's important for Tsewang to know Tibetan.'

It is noteworthy that argument ellipsis occurs in a matrix clause in Lhasa Tibetan as well. A similar phenomenon is also found in such East Asian languages as Chinese, Japanese, and Korean, and some researchers, e.g. Tomioka (2003) and Barbosa (2019), view it as discourse *pro*-drop. As far as Lhasa Tibetan is concerned, at least, the difference between argument ellipsis and discourse *pro*-drop is, perhaps, more terminological than substantial.

Third, when suppression of a certain argument of the verb in the source constituent AspP occurs, the *pa*-phrase gives a participant reading. For example, in (21), the *pa*-phrase, marked with the genitive 'i, serves as a modifier of the noun *don* 'meaning' and cannot realize the object argument of the verb *gsungs* 'say'. The suppressed argument is just the noun phrase that the *pa*-phrase modifies, and the *pa*-phrase refers to the missing participant.⁹ Similarly, in (22), the object argument of the verb in the source constituent AspP of the *pa*-phrase is suppressed and the *pa*-phrase can only be interpreted as what the suppressed argument refers to. That is, the question targets at the product of the writing event instead of the writing event itself.

9. The *pa*-phrase in such a case is generally regarded as a relative clause. It is only natural for the relevant argument to be kept unrealized in a relative clause. See Mazaudon (1978) and DeLancey (2002) for detailed discussions of relativization and its relationship with nominalization in Tibetan languages.

- (21) ད་གིན་ཁྱིད་རང་ཁྱིམ་གསལ་པའི་དོན་ནམས་ངས་ཤེས་སོང་།
da=gin khyed=rang-khis gsungs-pa-i don-rnams nga-s
 just_now 2SG.HON-ERG say.HON.PST-NMLZ-GEN meaning-PL 1sg-ERG
shes-song
 know-PRF.EXP.EV
 'I know the meaning of what you said just now.' (adapted from Jiang 2016: 296)
- (22) ངས་བྲིས་པ་འདི་འགྲིགས་སོང་ངས།
nga-s bris-pa 'di 'grigs-song ngas
 1SG-ERG write.PST-NMLZ this be_right.PST-PRF.EXP.EV SFP
 'Is what I wrote correct?' (Hu 2002: 448; Zhou & Xie 2003: 26)

Finally, when both ellipsis and suppression can account for the absence of an argument and the given context allows an event reading and/or a participant reading, ambiguity results. In some cases, the same *pa*-phrase, when accommodated in two different syntactic environments, can give two different readings respectively, as (23) shows.¹⁰

- (23) a. ད་གིན་ཡོང་པ་དེ་སུ་རེད།
da=gin yong-pa de su red
 just_now come-NMLZ that who be.FAC.EV
 'Who is the person that came just now?'
 b. དེ་རིང་འདིར་ཡོང་པ་ཡག་པོ་བྱུང་གས།
de=ring 'dir yong-pa yag=po-byung=shag
 today here come-NMLZ good-PRF.PERS.EV
 'It was a good thing/idea for us to come here today.'
 (Tournadre & Dorje 2003: 282)

In other cases, the same one syntactic environment may allow two different readings at once. Consider (24). If the object argument of the verb *shes* 'know' is understood to be suppressed, the *pa*-phrase means something I know. In contrast, it can mean the fact that I know something if the object argument is understood to be elided, though this reading is less readily available than the participant reading, according to the informants.

10. Tibetan verbs fall into two main classes: active/volitional and involuntary/non-volitional. Verbs in the first class express intentional and controllable actions and those in the second class imply unintentional and uncontrollable processes which do not depend on the subject's volition (Goldstein 1991: 46; Tournadre & Dorje 2003: 141). *Yong* 'come' is an active/volitional verb (Yu 1983: 893) and, therefore, also an unergative verb. An AspP involving an unergative verb is generally nominalized with the marker *mkhan* (མཁན) rather than *pa*. As an LL reviewer pointed out to me and has been confirmed by the informants, both *pa* and *mkhan* can be used in this sentence, but the use of *mkhan* is much more frequent.

- (24) ངས་ཤེས་པ་ལ་བ་ཀྱི་ཡིན།
nga-s shes-pa lab-kyi=yin
 1SG-ERG know-NMLZ tell.FUT-PROSP.PERS.EV
 ‘I’ll tell what I know.’ (participant)
 ‘I’ll tell that I know (about it).’ (event)

3.2 Thematic constraints on the ambiguity

There is no constraint on the syntactic type of the verb in the source constituent of *pa*-nominalization. For example, the associated verbs in (6)–(7), (10)–(12), (14), (19)–(22), and (24) are all transitive verbs; those in (15) and (23) are unergative verbs; those in (9), (16) and (18) are unaccusative verbs; and the one in (8) and (17) is a copula. Nor is there any constraint on the grammatical type of the elided argument in a *pa*-phrase. For example, ellipsis targets both the subject and object arguments of a transitive verb in (19a), only the subject argument of a transitive verb in (20a), and only the object argument of a transitive verb in (24) (event-oriented) and (25). In (23b), it targets the subject argument of an intransitive verb.

- (25) མོས་སྐྱེས་པ་མེན་པ་ར་འཕྲོད།
mo-s skyes-pa min-pa ra=’phrod
 she-ERG bear.PST-NMLZ be.NEG-NMLZ be_proved
 ‘It is proved that she didn’t give birth to (the boy).’
 (adapted from Jiang 2016: 113)

However, there is a constraint on the thematic type of the suppressed argument in a *pa*-phrase. That is, suppression only occurs to the object argument of a transitive verb and the only argument of an unaccusative verb. For example, in (21), (22), and (24) (participant-oriented), the object argument of a transitive verb is not allowed to appear, and in (16a), repeated as (26), the only argument of an unaccusative verb cannot be made explicit.

- (26) ཁ་སང་སྐབས་པ་དེ་ཕྱི་ལོགས་ལ་བསྐྱོད་ཀྱི་འདུག། (= (16a))
kha=sang slebs-pa de phyi=logs-la bsdad-kyi=dug
 yesterday arrive.PST-NMLZ that outside-LOC wait.PRS-IPFV.EXP.EV
 ‘The one who arrived yesterday is waiting outside.’ (Denwood 1999: 200)

What deserves special attention is that argument suppression cannot occur to the subject argument of a transitive verb or the only argument of an unergative verb in the source constituent of a *pa*-phrase. For, when a transitive verb misses its subject argument or an unergative verb misses its only argument, only an event reading is available from the *pa*-phrase and the missing argument(s) can be supplied without affecting its grammaticality or meaning. A *pa*-phrase gives a participant reading only when an argument of the verb in the source constituent AspP is sup-

pressed, and the suppressed argument, either the object of a transitive verb or the only argument of an unaccusative verb, bears the theta role of THEME according to the well-established relationships among arguments, theta roles and syntactic positions (Hale & Keyser 2002; Harley 2011, among others). Also note that this conclusion differs from Tournadre and Dorje's (2003: 281) observation that the suppressed argument "denotes prototypically the grammatical patient of the verbal action in the perfective past" and thus refers to "the direct object when it is used with a transitive verb or the subject when it is used with an intransitive verb". Their view overlooks the thematic distinction between the subject of an unergative verb and that of an unaccusative verb as well as the fact that the subject of an unergative verb does not undergo suppression in a *pa*-phrase generally. However, see Footnote 10.

To sum up, an event reading is available from a *pa*-phrase when all the arguments of the verb in the source constituent AspP are overtly expressed or can be made overt in the case of ellipsis, and a participant reading is available when the THEME argument of the verb is suppressed, i.e. cannot be made overt without affecting grammaticality or meaning of the sentence.

4. A syntactic account of the event/participant ambiguity

In light of the classical assumptions of interpretive semantics (Chomsky 1971; Jackendoff 1972; Heim & Kratzer 1998, among others), syntactic structure constrains semantic interpretation, and the meaning of a sentence is interpreted compositionally according to its structural configuration. It is desirable to reduce the two interpretations of *pa*-nominalization in Lhasa Tibetan to some structural variation in the derivation of *pa*-phrases. For this purpose, I propose a generative account of the *pa*-phrase in Lhasa Tibetan based on a hypothesis about the double category of the nominalizer *pa*. Specifically, *pa* selects an AspP as its complement and projects an NP; *pa* enters the derivation either as a grammatical item that shifts an AspP to an NP or a lexical item that binds an empty category in the THEME position within the AspP. This categorial ambivalence of *pa* and the consequent derivational difference of the *pa*-phrase can offer a plausible account of the semantic ambiguity of *pa*-nominalization.

Chomsky's (1995b) *Minimalist Program* (MP) is adopted as the theoretical framework for this account. The derivation of Lhasa Tibetan *pa*-phrases is considered to be a narrow-syntax process, instead of one that complies with Distributed Morphology (Halle & Marantz 1993) or Lexical Syntax (Hale & Keyser 1993), both of which mainly target word formation and tend to eliminate the boundary between lexicon/morphology and syntax. The linear order of Lhasa Tibetan sentences is attributed to the head parameter, i.e. languages are basically

head-initial (e.g. English) or head-final (e.g. Lhasa Tibetan), as is maintained in the bare phrase structure theory (Chomsky 1995a: 79–87) and MP (Chomsky: 1995b: 334–340). Considering that Lhasa Tibetan is a head-final language with an SOV linear order, I hold back from Kayne’s (1994) Linear Correspondence Axiom, which requires that syntactic structures must always be right-branching and an apparent SOV language must be re-analyzed as underlyingly SVO through leftward movement. However, the required movements may lack syntactic motivations, as is pointed out by Lasnik (2002: 436).

4.1 *Pa*-phase as NP

The source constituent of *pa*-nominalization is an AspP, as is described in § 1.2, and a *pa*-phrase functions syntactically as a typical nominal phrase, as is discussed in § 1.1. A further question is in order: what is the phrasal category of the *pa*-phrase? Is it an NP, DP or QP? Close observation of the data shows that a *pa*-phrase should be an NP. Consider (4a), (16a), (20), (22), (23a) and (26) above as well as the data below.

- (27) རྩད་རང་གིས་བོད་སྐད་མ་བྱིན་པ་འདི་ཡག་པོ་ཞིང་གསེར་དེ།
khyed=rang-gis bod=skad mkhyen-pa di yag=po zhe=drags red
 2SG.HON-ERG Tibetan know.HON-NMLZ this good very be.FAC.EV
 ‘It’s very good that you can speak Tibetan.’ (adapted from Zhou & Xie 2003: 26)
- (28) ཁོ་མི་སྤུག་ཅག་ཡིན་པ་དེ་ཆང་མ་ཤེས་གསལ་རེད།
kho mi sdug=cag yin-pa de tshang=ma shes=gsal red
 3SG man villainous be-NMLZ that all know_well be.FAC.EV
 ‘It’s well-known that he is a villain.’ (adapted from Zhou & Xie 2003: 26)
- (29) ཁོང་གིས་ཞུས་པ་དེ་གོ་ཁག་པོ་ཞིང་པོ་ཅིག་འདུག
khong-gis zhush-pa de go=khag=po zhe=po=cig’dug
 3SG-ERG speak.PST-NMLZ that hard_to_understand extremely exist.EXP.EV
 ‘What he said is extremely hard to understand.’
 (adapted from Zhou & Xie 2003: 26)
- (30) སྐད་མ་ཤེས་པ་ཅིག་ཡིན་ན།
skad ma shes-pa cig yin-na
 language NEG know-NMLZ one be.PERS.EV-if
 ‘If (you/he/she) could be someone who doesn’t know the language, ...’
 (Denwood 1999: 229)¹¹

11. However, the argument suppressed in the *pa*-phrase in this sentence is the subject of a transitive verb. A similar observation is made by Tournadre & Dorje (2003: 282) that the suppressed argument in a *pa*-phrase “also extends to the subject of transitive benefactive verbs”, as in *yod-pa* ‘the person who has’ and *thob-pa* ‘the person who has obtained’. Considering these cases,

- (31) ལས་ཀྱིས་སྤྲོས་པ་ཚང་མ་ཚུ་ཡག་པོ་འདུག
las=ka byes-pa tshang=ma yag=po 'dug
 work do.PST-NMLZ all good exist.EXP.EV
 'All the work that was done was good.' (Goldstein et al. 1991: 136)

The *pa*-phrase in (22), and (27) is followed by the proximal demonstrative '*di* 'this' and that in (4a), (16a), (20a), (23a), (26), (28), and (29) is followed by the distal demonstrative '*de* 'that'. Moreover, the *pa*-phrases that are followed by a demonstrative include both those that give an event reading (e.g. (28)) and those that give a participant reading (e.g. (29)). The presence of the determiners shows that the *pa*-phrase cannot be a DP. Further, the *pa*-phrase in (30) and (31) is followed by a quantifier, i.e. *cig* 'one' and *tshang=ma* 'all' respectively, which proves that it cannot be a QP. Finally, the presence of determiners and quantifiers on top of a *pa*-phrase also dismisses a CP analysis, i.e. taking *pa* as a complementizer or a *wh*-word. The CP analysis is tempting at first glance, for the event-reading *pa* resembles the English complementizer *that* and the participant-reading *pa* behaves like an English *wh*-word in a free relative clause, as the English translations in (28) and (29) show respectively. All in all, it is mostly likely that the *pa*-phrase is an NP. A similar idea is also found in Goldstein et al. (1991: 135–136), Denwood (1999: 224), and Tournadre & Dorje (2003: 282), though it is not formulated in standard syntactic terms. This conclusion forms the basis for the subsequent analysis of the syntactic derivation of *pa*-phrases.

4.2 *Pa* as a lexical head

A *pa*-phrase that gives a participant reading always suppresses the THEME argument of the verb involved. A natural question is how a *pa*-phrase that does not realize a certain argument can be interpreted as the participant that the unrealized argument denotes. For such a semantic interpretation to be possible, there should be a constituent that bears the participant meaning. As the argument that denotes the participant is not explicitly expressed, a plausible conclusion is that the participant meaning is contributed by the nominalizer *pa*. Furthermore, for *pa* to contribute the participant meaning, it can enter the syntactic derivation of the *pa*-phrase at a node that c-commands the node of the THEME argument so that a binding relation is set up between them. Considering these points and drawing upon Baker & Vinokurova's (2009) analysis of agent nominalization in Gikūyū, a tentative proposal for the participant-oriented *pa*-nominalization in Lhasa Tibetan is that *pa* selects for its complement a gapped AspP and binds the

it might be more accurate to decide that argument suppression in *pa*-nominalization targets a non-volitional participant no matter what syntactic function it serves.

gap in it. The gap is the syntactic position for the suppressed argument and is supposedly occupied by an empty category. This binding relation forms the syntactic basis for interpreting the *pa*-phrase as denoting a participant in the component of Logical Form.

The narrow-syntax derivation of a participant-reading *pa*-phrase is demonstrated in Figure 1, taking the *pa*-phrase in (22), repeated as (32), for example. The X-bar theoretic tree is adopted here (and in Figure 2 in § 4.3), instead of one in the bare phrase structure style, just for the exposition to be more reader-friendly, not implying any theoretical departure from the latter.

- (32) ངས་བྲིས་པ་འདི་འགྲིག་པ་སྟོང་ངས། (= (22))
 nga-s bris-pa 'di 'grigs-song ngas
 1SG-ERG write.PST-NMLZ this be_right.PSP-PRF.PERS.EV SFP
 'Is what I wrote correct?' (Hu 2002: 448; Zhou & Xie 2003: 26)

The derivation is explained informally as follows. First, the verb *bris* ‘wrote’ merges with an empty category *e*, i.e. the suppressed THEME argument, and projects into a VP. The VP is then merged with *v* as its complement and *nga-s* ‘I’ is merged as the specifier of the *v*P. Next, the *v*P merges with T as its complement, which is followed by the head movement of the V *bris* ‘wrote’ through *v* to T to have its tense feature checked and the A-movement of *nga-s* ‘I’ to Spec,TP to check its case feature and the EPP feature of T. Further, the TP merges with Asp to form an AspP. Finally, the AspP merges with *pa* as its complement, resulting in the *pa*-phrase NP *nga-s e bris-pa* ‘I *e* wrote-*pa*’.

It should be noted that movement in this analysis is handled here under the copy theory of movement (Chomsky 1995b:206). The strikethrough effect indicates the lower copies that are to be deleted in the Phonological Form component, and the undeleted items stand in a structural relation that can produce the expected linear order. The empty category *e* in the structural position of the suppressed argument is licensed if it can be bound in accordance with the Binding Principle A (Chomsky 1995b:77), and *pa* is a ready candidate for a binder. Alternatively, the relation between *pa* and the empty category *e* can be analyzed as an operator-variable relation, i.e. an empty operator raises to adjoin to the NP head directly, leaving behind a bound variable, as shown in (33). See related discussion in Chomsky (1995b:152–153).

- (33) $[_{NP} [_{TP} nga-s [_{vP} nga-s [_{VP} \textbf{operator} \textit{bris}] \textit{v-bris}] T-bris] pa-operator]$

An analogous analysis is found in Baker & Vinokurova (2009: 547–548) for agent nominalization in Gikũyũ, a Bantu language. It is assumed in the analysis that the nominalizer binds an empty category in the source constituent. See the illustration in (34).

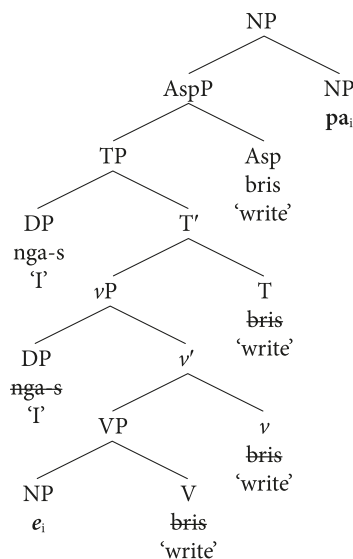


Figure 1. Syntactic derivation of the participant-oriented *pa*-phrase

- (34) a. *thīnj-í mbūri ūūru*
 slaughter-AGT.NMLZ goats badly
 'that (person) who slaughters goats badly'
 (abridged from Baker & Vinokurova (2009: 547))
- b. $[_{NPi} \acute{i} [_{VoiceP} PRO_i [_{Voice'} [_{Voice'} Voice [_{VP} \acute{thīnj} \acute{mbūri}]]] \acute{ūūru}]]]$
 (before verb raising)

The participant reading of the *pa*-phrase is now accounted for. The empty category *e* refers to the THEME in the event expressed by the constituent AspP and helps to specify the meaning of the entire NP, the head of which is *pa*.

4.3 *Pa* as a grammatical head

In contrast to a participant-oriented *pa*-phrase, a *pa*-phrase that gives an event reading does not suppress any of the argument(s) of the associated verb. For a *pa*-phrase to be interpreted as an event, the only thing needed is to shift the syntactic category of the source constituent AspP to an NP, for the source constituent AspP denotes an event in itself. No additional constituent is needed to obtain the event interpretation. Moreover, as the verb has or can have all its argument(s) expressed explicitly, there is no variable-like constituent that needs to be bound by the NP head *pa* within the AspP. Considering that *pa* does not need to contribute semantic content to the event interpretation and does not bind an empty

category within the AspP, the most plausible proposal about it is that it serves as a purely grammatical head of NP. The derivational process is illustrated in Figure 2, taking the *pa*-phrase in (28), repeated as (35), for example.

- (35) ཁོ་མི་སྤུག་ཅག་ཡིན་པ་དེ་ཚང་མ་གླེས་གསལ་རེད།
kho mi sdug=cag yin-pa de tshang=ma shes=gsal red
3SG man villainous be-NMLZ that all know_well be.FAC.EV
'It's well-known that he is a villain.'
- (= (28))

In informal terms, the syntactic derivation of the *pa*-phrase proceeds as follows. To begin with, the DP *mi* ‘man’ is adjoined to by the adjective *sdug=cag* ‘villainous’. The resulting DP is merged with the verb *yin* ‘be’ as its complement to generate a VP, which then merges with *v* as its complement. The DP *kho* ‘he’ is merged with the resulting constituent as the specifier of the *v*P. Next, the *v*P merges with T as its complement, resulting in a tense projection. At this juncture, the verb *yin* ‘be’ raises through *v* to adjoin to T to check its tense feature and *kho* ‘he’ raises to Spec,TP to check its case feature and the EPP feature of T. The TP is then merged with Asp to generate an AspP, which is followed by the merger between the AspP and *pa*, resulting in the *pa*-phrase NP *kho mi sdug=cag yin-pa* ‘he man villainous is-pa’.

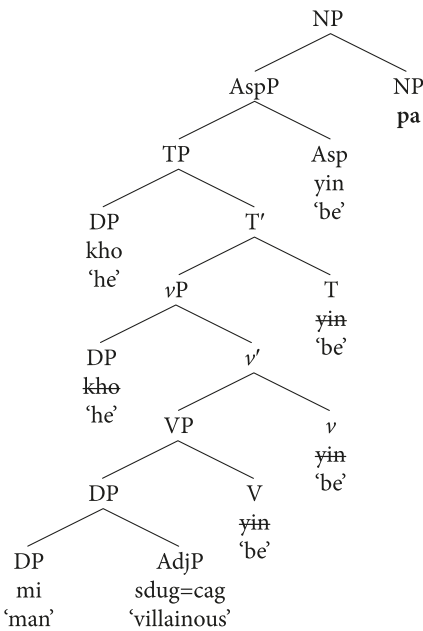


Figure 2. Syntactic derivation of the event-oriented *pa*-phrase

One crucial aspect that discriminates the derivation of (35) from that of (32) lies in that the source constituent of an event-oriented *pa*-phrase does not involve an empty category that needs to be bound in accordance with the Binding Principle A and the derivation of such a *pa*-phrase does not, therefore, establish in the process a binding relation between *pa* and any other constituent in the phrase.

The event reading of the *pa*-phrase can be generated straightforwardly. The constituent AspP expresses an event and the nominalizer *pa* recategorizes the AspP into an NP, but does not make any semantic contribution.

4.4 The Differential Nominalizer Hypothesis

As has been argued for, the nominalizer *pa* is uniformly merged with an AspP as the head of NP but displays different functions. Its semantic contribution to the NP varies with the syntactic environment: with an AspP that contains a bound empty category, it needs to bind the empty category to generate a participant reading; with an AspP that does not contain a bound empty category, it makes no semantic contribution and allows an event reading. Its grammatical function also differs in these two conditions. Consequently, there are two distinct versions of *pa*: one participant-oriented, the other event-oriented. The differences associated are listed in Table 1 below.

Table 1. Differences between participant *pa* and event *pa*

	Syntactic category	Semantic content	Grammatical function	Effect on <i>pa</i> -phrase
Participant <i>pa</i>	nominalizer; lexical item	co-referential with a participant	nominalizes AspP via interaction with an empty category within AspP	determines a participant reading
Event <i>pa</i>	nominalizer; grammatical item	nominal category; identifies an event	nominalizes AspP directly	determines an event reading

On this basis, I venture to put forth the Differential Nominalizer Hypothesis, as in (36).

(36) The Differential Nominalizer Hypothesis

Pa in Lhasa Tibetan nominalizes an AspP either as a lexical item or a grammatical item. In the former case, it binds an empty category in the AspP and contributes to the derivation of a participant-oriented NP; in the latter, it recategorizes the AspP directly into an event-oriented NP.

This hypothesis crucially hinges on the double category of the nominalizer *pa*, which is attested to by its synchronic functional multiplicity in Lhasa Tibetan, as is spelled out in the next section.

5. Multiple uses of *pa* in Lhasa Tibetan

Synchronically observed, *pa* is a multifunctional lexical unit in Lhasa Tibetan. In addition to marking nominalization, it occurs as a marker of AGENT and THEME nouns, adjectives, ordinals, aspect and force. These facts point to a process of grammaticalization that *pa* has been undergoing from a lexical formative to a functional marker. The ambivalent category of the nominalizer *pa* and the consequent semantic ambiguity of *pa*-nominalization can possibly be attributed to the grammaticalization fact that *pa* belongs to the lexical category and the grammatical category simultaneously.

5.1 *Pa* in nouns

Nouns that contain *pa* as a morpheme fall into two main types: V-*pa* and N-*pa*. In the V-*pa* type of nouns, *pa* has two variants of stress pattern: stressed with a high-falling tone and unstressed with a neutral tone (Hu 2002: 433–435). Hereafter the stressed *pa* with a high falling tone is marked as *pa*⁵³ and its unstressed counterpart is to be left unmarked. Note that, as a nominalizer, *pa* is pronounced with a neutral tone or is atonal. Hence all the instances of nominalizer *pa* in the aforementioned *pa*-phrases are not tone-marked.¹²

Consider the V-*pa* nouns first. When the verb is in the present/future tense form or imperative form, *pa* carries a non-neutral tone.¹³ The derived nouns can denote either AGENT persons or THEME things, as (37) and (38) illustrate respectively (Yu 1983: 576; Wang 1994: 31; Hu 2002: 433–434). It should be noted that, synchronically, this way of deriving nouns, AGENT nouns in particular, with *pa* with a non-neutral tone is not productive.

12. In Lhasa Tibetan, a monosyllabic word or the first syllable of a polysyllabic word carries a tone in one of the four contours: high flat, high falling, low flat (rising), and low rising-falling (Tournadre & Dorje 2003: 35–36). In a Chao style, they are marked with ⁵⁵, ⁵³, ¹¹⁽³⁾ and ¹³² respectively, and the neutral tone is left unmarked (see Wang 1994: 9).

13. For most Lhasa Tibetan verbs, their present and future tense forms are identical. See Hoshi (2003), Zhou & Xie (2003: 35) and others.

- (37) a. བོ་བླ་པ་
*bzo-pa*⁵³
 work.PRS-pa
 ‘worker’
- b. འདུམ་པ་
*dum-pa*⁵³
 mediate.PRS-pa
 ‘mediator’
- c. རྩིས་པ་
*rtsis-pa*⁵³
 count.IMP-pa
 ‘accountant’
- d. སློབ་ཐོན་པ་
*slob thon-pa*⁵³
 school leave.IMP-pa
 ‘graduate’
- e. གཉེན་པ་
*gnyer-pa*⁵³
 attend_to.PRS-pa
 ‘attendant’
- (38) a. བསམ་པ་
*bsam-pa*⁵³
 think.FUT-pa
 ‘idea’
- b. སྤྲིན་པ་
*sbyin-pa*⁵³
 give.PRS-pa
 ‘charity’
- c. སྦྱག་པ་
*skyug-pa*⁵³
 vomit.PRS-pa
 ‘vomitus’
- d. མཆོད་པ་
*mchod-pa*⁵³
 sacrifice.PRS-pa
 ‘offering’
- e. དད་པ་
*dad-pa*⁵³
 believe_in.PRS-pa
 ‘belief’

- f. འདོད་པ
'*dod-pa*⁵³
want.PRS-pa
'wish'
- g. དགོས་པ
*dgos-pa*⁵³
need.PRS-pa
'need'
- h. བཟུང་པ
*phan-pa*⁵³
be_of_use.PRS-pa
'benefit'

In contrast, when the verb is in the past tense form, *pa* usually carries a neutral tone, and the resulting nouns generally refer to THEME things. Moreover, deriving nouns with an atonal *pa* is a productive process. See the examples in (39), cited from Hu (2002: 434–435).¹⁴

- (39) a. བརྟུན་པ
brtsis-pa
count.PST-pa
'what is counted'
- b. བསམས་པ
bsams-pa
think.PST-pa
'what is thought about'
- c. བྱིན་པ
byin-pa
give.PST-pa
'what is given'
- d. བསྐྱུགས་པ
bskyugs-pa
vomit.PST-pa
'what is vomited up'

14. While most scholars of Lhasa Tibetan grammar, e.g. Wang (1994) and Hu (2002), regard this type of noun formation as a lexical process, these words had best be regarded as resulting from the syntactic process of nominalization on the grounds that: (1) *pa* carries a neutral tone in these cases, just as in *pa*-nominalization; (2) the process is productive; (3) these so-called nouns express a uniformly syntax-based meaning, i.e. THEME participant; (4) most such nouns are not lexicalized and, therefore, not included in the dictionary; and (5) they can be analyzed as *pa*-phrases under argument ellipsis and/or suppression, as in §2.1.

- e. བྱས་པ་
byas-pa
do.PST-*pa*
'what is done'
- f. རྟོགས་པ་
rtogs-pa
understand.PST-*pa*
'what is understood'
- g. བསྒྲུབས་པ་
blabs-pa
learn.PST-*pa*
'what is learned'
- h. བཀོད་པ་
bkod-pa
arrange.PST-*pa*
'what is arranged'
- i. ཆད་པ་
chad-pa
lack.PST-*pa*
'what is lacked'

Moreover, *pa* can occur in nouns of the form of N-*pa*. In this case, *pa* is stressed. The constituent preceding *pa*⁵³ can be a noun or noun root, and the complex noun can refer to either a human or non-human object. Consider the examples in (40), cited from Yu (1983: 576) and Wang (1994: 31).

- (40) a. ཞིང་པ་
*zhing-pa*⁵³
field-*pa*
'peasant'
- b. བོད་པ་
*bod-pa*⁵³
Tibet-*pa*
'Tibetan'
- c. མཁས་པ་
*mkhas-pa*⁵³
expertise-*pa*
'scholar'
- d. འབྲོག་པ་
'*brog-pa*⁵³
pasture-*pa*
'herdsman'

- e. ཁང་པ
*khang-pa*⁵³
 root-pa
 ‘house’
- f. ལག་པ
*lag-pa*⁵³
 root-pa
 ‘hand’
- g. ཆར་པ
*char-pa*⁵³
 root-pa
 ‘rain’

5.2 *Pa* as a marker of adjectival nominalization

A small number of adjective stems can undergo nominalization and are marked with the unstressed *pa*, and such a nominalized adjective can serve as the object of a verb, as illustrated by the two sentences in (41) and (42).

- (41) རླུང་པ་མཐོང་རྒྱ་རང་རེད།
sdug-pa mthong-rgyu rang red
 bad-NMLZ see.PRS-NMLZ certainly be.PROSP.FAC.EV
 ‘Bad results will be seen.’ (adapted from Wang 1994: 492)
- (42) ཡག་པ་བཤད་མཁན་ཡོད་རེད།
yag-pa bshad-mkhan yod=red
 good-NMLZ speak.PST-NMLZ exist.PRF.FAC.EV
 ‘There is someone who said words of praise.’ (Wang 1994: 492)

Most adjectives in Lhasa Tibetan take the form of a monosyllabic stem suffixed with *po* (པོ) and a few are made up of a monosyllabic stem plus *pa* (པ), *ma* (མ), and *mo* (མོ) (Wang 1994: 197–198; Denwood 1999: 180). They occur most often in two syntactic positions: before an existential verb and after a nominal phrase (Goldstein 1991: 250). As these two positions are usually occupied respectively by a nominal phrase, including an NMLZ-phrase, and a relative clause, which is the same as a participant-oriented NMLZ-phrase (see (31) above for example as well as Footnote 9), it makes sense to treat the adjective suffix *po* (པོ) as a nominalizer as well, as Denwood (1999: 180) does. The aforementioned four suffixes are historically related (Zhang 1994). Classical Tibetan has a rough system of gender marking, with *pa* (པ) (and its variant *po* (པོ)) for masculine and *ma* (མ) (and its variant *mo* (མོ)) for feminine (see Francke & Simon 1929). The nominalizer *pa* in

Lhasa Tibetan is believed to have evolved from the gender marker *pa* in Classical Tibetan (DeLancey 2002: 58).

To the extent that both *pa* and *po* can nominalize an adjective stem, it is tempting to analyze the adjective stem as a verb stem (Denwood 1999: 179; Tournadre & Dorje 2003: 228). This issue, however, deserves a separate study.

5.3 *Pa* in ordinals

The stressed *pa*⁵³ can also be a marker of ordinals. All ordinals in Lhasa Tibetan have a uniform pattern, namely, cardinal numeral plus *pa*⁵³ except the form of “first”, as (43) shows. Ordinals are generally used to modify a nominal phrase in its wake, as in (44).

- (43) a. གཅིག
 gcig
 ‘one’
 b. དང་པོ་
 *dang=po*⁵³
 ‘first’
 c. གཉིས་
 gnyis
 ‘two’
 d. གཉིས་པ་
 *gnyis-pa*⁵³
 ‘second’
 e. གསུམ་
 gsum
 ‘three’
 f. གསུམ་པ་
 *gsum-pa*⁵³
 ‘third’
 g. བཅུ་གསུམ་
 bcu=gsum
 ‘thirteen’
 h. བཅུ་གསུམ་པ་
 *bcu=gsum-pa*⁵³
 ‘thirteenth’

- (44) ཁོང་སྤྱོང་ཚན་བཞི་པ་འབྲི་རྒྱ་བསྐྱོད་ཤག
 *khong sbyong=tshan bzhi-pa*⁵³ *'bri-rgyu bsdad-shag*
 3SG.HON exercise four-ORD write.PRS-NMLZ continue.PRS-PRF.EXP.EV
 ‘He hasn’t done the fourth exercise yet.’ (Zhou & Xie 2003: 209)

5.4 *Pa* as a marker of aspect

The unstressed *pa* can serve as a marker of aspect. Compare (45) and (46), where the presence of *pa* (together with *yin*) in (45) indicates the realis aspect, whereas its absence in (46) signals the resultative aspect. By the way, realis and resultative aspects are two subtypes of the general perfect aspect (see Footnote 4), the former expressing the happening of an event in the past while the latter highlights the result/current situation caused by an event in the past.

- (45) ངས་ཡི་གེ་གཅིག་བྲིས་པ་ཡིན།
nga-s yi=ge gcig bris-pa=yin
 1SG-ERG letter one write.PST-REAL.PERS.EV
 ‘I wrote a letter.’ (Zhou & Xie 2003: 110)

- (46) ངས་ཡི་གེ་གཅིག་བྲིས་ཡོད།
nga-s yi=ge gcig bris-yod
 1SG-ERG letter one write.PST-RES.PERS.EV
 ‘I have written a letter.’ (Zhou & Xie 2003: 110)

It should be noted that *pa* as a marker of aspect generally occurs after a verb in the past tense form and does not carry stress.

5.5 *Pa* as a marker of force

Pa can also be used as a marker of force. In this context, *pa* may carry a slightly different tone from that of the nominalizer *pa*. It can occur, with a neutral tone, at the end of a *wh*-question with a second-person subject and a past tense verb, as in (47). Also see examples in Denwood (1999: 130).

- (47) ག་རེ་བཟས་པ།
ga=re bzas pa
 what eat.PST SPF
 ‘What did you eat?’ (Wang 1994: 439)

When used at the end of a declarative sentence that repeats what is already said or expresses what is already done, *pa* performs a corroborative function, carrying a low rising tone, as in (48).

- (48) ད་གིན་ང་གཉིས་ལ་སྐད་ཆ་ཡོད་པ།
*da=gin nga gnyig-la skad=cha yod pa*¹³
 just_now 1SG two-POSS word exist-PRF.PERS.EV SPF
 ‘We two have just come to an agreement.’ (Wang 1994: 444)

Again, note that *pa* as a marker of force usually occurs in a sentence with a verb in the past tense. It is for this reason that I tend to think that the force-marking *pa* has a connection with the aspect-marking *pa* and nominalization-marking *pa*, which occur with past-tense verbs as well.

5.6 Summary

Pa has still other uses, especially in combination with other auxiliaries. But the aforementioned instances suffice to demonstrate its functional multiplicity. Table 2 summarizes the uses of *pa* in terms of its function, constituency, stress pattern, and productivity.

Table 2. Different uses of *pa*

Function	Constituency	Stress	Productivity
Forming nouns	noun/noun root- <i>pa</i>	stressed	not productive
	PRS/FUT verb- <i>pa</i>	stressed	not productive
	PST verb- <i>pa</i>	unstressed	productive
Marking <i>pa</i> -phrases	TP (PST verb)- <i>pa</i>	unstressed	productive
	adjective- <i>pa</i>	unstressed	not productive
Forming ordinals	cardinal- <i>pa</i>	stressed	productive
Marking aspect	PST verb- <i>pa</i>	unstressed	productive
Marking force	CP (PST verb)- <i>pa</i>	unstressed	productive

A natural question at this juncture is how *pa* has come to have these diverse functions. The most plausible mechanism that can link up these functions is grammaticalization: *pa* has been shifting from a lexical formative, i.e. a morpheme to form words in combination with others, to a grammatical marker, as evidenced by the variant stress/tone patterns of *pa*, the different degrees of productivity of these usages, and the different tense forms of the verb involved. I do not elaborate on the grammaticalization of *pa* here, preferring to leave it to a separate study. In fact, there has already been extensive research that views the nominalizers in East Asian and Tibeto-Burman languages as having evolved through grammaticalization (Noonan 1997, 2008; Horie 2008; Yap & Matthews 2008, and others). In particular, DeLancey (1986; 1999) has attempted a grammaticalization-based analysis of the multiple functions of Lhasa Tibetan *pa* as a nominalizer, a complementizer, a relativizer, a cleft marker, and a stance marker. The analysis, however, does not include all the uses of *pa* listed in Table 2. Nevertheless, the differential functions of the nominalizer *pa* could be attributed

to grammaticalization. On the one hand, it has arisen out of a lexical formative and hence still retains lexical content. On the other hand, it has become a grammatical marker that functions beyond a tense phrase. It is this two-in-one property that has endowed *pa* with two different roles in generating a *pa*-phrase and hence causes its semantic ambiguity.

6. Conclusion

A major difference in nominalization among the world languages lies in the way of morphosyntactic marking. For example, in European languages, nominalization usually targets verbs or verbal phrases and employs idiosyncratic suffixations, but in Lhasa Tibetan it makes use of dedicated nominalizing markers that target tensed clauses. While it is still at issue whether nominalization in European languages is syntactic or lexical by nature (Rozwadowska 2006), that in Lhasa Tibetan is definitely a syntactic process for its systematicity and productivity. Inspired by the existence of special nominalizers in this language, I have attempted a marker-centered syntactic account of the semantic ambiguity involved in the nominalization marked with *pa*. The history and status of *pa* as both a lexical formative and a grammatical marker may have endowed *pa* with an ambivalent category. In the syntactic process of nominalization, *pa* enters the derivation either as a grammatical item that shifts an AspP to an NP or a lexical one that binds an empty category in the THEME position within the source constituent AspP, thus giving rise to two different interpretations of a *pa*-phrase, i.e. a participant or an event.

This study focuses on an account of the semantic ambiguity that *pa*-nominalization in Lhasa Tibetan involves, and in so doing leaves some issues unsolved or untouched. For one thing, the selection relationship between *pa* and the past-tense verb in general and between *pa* and the THEME argument in the participant-reading cases is unexplained. Further research is needed that can elaborate the selection relationship by considering the use of all the other nominalizers in this language. For another, the proposal of grammaticalization is based on the research literature and linguistic data available, but it is not free of speculation. More evidence of the historical development of *pa* needs to be searched to consolidate the proposal. In addition, the derivational analysis of *pa*-nominalization leaves out quite a few details. As the syntax of Lhasa Tibetan is a fairly new research area, much contribution is expected of the syntax community.

Acknowledgements

The author is indebted to the National Social Sciences Fund of China for its support of a research project on Lhasa Tibetan syntax under grant No. 19BYY177 as well as support from the Center for Language Cognition and Assessment, Guangdong Provincial Key Research Base for the Humanities and Social Sciences in Universities and Colleges.

He also thanks the three reviewers of the manuscript for their insightful comments and generous help and the five exchange students from University of Tibet for their genuine evaluations and modifications of the data.

Abbreviations

1SG	first person singular	IMP	imperative
2SG	second person singular	IPFV	imperfective
3SG	third person singular	LOC	locative
4	fourth person	MP	Minimalist Program
ACC	accusative	NEG	negator
AGT	agent	NMLZ	nominalizer
ALL	allative	ORD	ordinal
BEN	benefactive	PERS.EV	personal evidentiality
COM	comitative	PL	plural
DNH	Differential Nominalizer Hypothesis	POSS	possessor
ERG	ergative	PRS	present tense
EVN	event	PRF	perfect(ive)
EXCL	exclusive	PROSP	prospective
EXPEV	experiential evidentiality	PST	past tense
FAC.EV	factual evidentiality	Q	question particle
FUT	future tense	REAL	realis
GEN	genitive	RES	resultative
HON	honorific	SFP	sentence-final particle
HUM	humilific	SBJ	subject
IND	indicative		

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Publication history

Date received: 20 October 2019

Date accepted: 8 October 2020

Published online: 12 September 2022