Antipassive derivations in Sino-Tibetan/Trans-Himalayan and their sources*

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Abstract: This paper presents an overview of antipassive constructions in the Sino-Tibetan/Trans-Himalayan family. It shows that all of these constructions are relatively recent developments, and originate from three distinct historical sources, including the incorporation of generic nouns, the verbalization of action nominalizations and reflexive/middle markers. All productive antipassive constructions in the family are found in languages with polypersonal indexation and ergative case marking.

Keywords: Antipassive, Denominal verbs, Nominalization, Grammaticalization, Middle voice, Incorporation, Gyalrongic, Kiranti, West-Himalayish, Old Chinese, Dulong-Rawang

Introduction

Although the existence of antipassive constructions has been mentioned in several Sino-Tibetan languages (Doornenbal 2009, 225-7, Jacques 2014, Bickel & Gaenszle 2015), this topic has not yet received as much attention as other voice constructions such as passive or causative.

This paper is a survey of antipassive constructions in the Sino-Tibetan family (henceforth ST). Since all of these constructions are historically transparent, they are classified by their diachronic source. Recent work on diachronic typology (Janic 2013, 235, Jacques 2014, Sansò 2017) has shown that antipassive constructions have four major sources in the world's languages:

- Agent nominalizations ('he is the hitter' → 'he hits (intr)')

- Generic nouns/Indefinite pronouns in object position ('he hits things/stuff' → 'he hits (intr)')

- Action nominalization + light verb (Creissels 2012) / denominal verbalizer (Jacques 2014) ('he does hitting' → 'he hits (intr)')

- Reciprocal (or reflexive with an intermediate stage as 'co-participation', in the case of languages using the same marker for reciprocal and reflexive) Creissels & Nouguier-Voisin 2008) ('they hit themselves/each other' → 'they partake in hitting actions' → 'they hit (intr)')

In this paper, I first present a definition of antipassive and discuss related antipassive-like constructions in several languages of the ST family. Then, I provide evidence of antipassive derivations originating from three out of the four main attested sources: action nominalization, generic nouns and reflexives. These derivations are all of recent origin, but some are argued to be reconstructible to lower branches of the family. Finally, I present an overview of the distribution of antipassive construction throughout ST.

1 Antipassive and indefinite objects

Since transitivity is overtly (and often redundantly) marked in the morphology-rich languages of the ST family, I propose for this paper the following definition of antipassive (closely based on Dixon 1994, 146):

(1) An antipassive construction is an overtly-marked inflexion, derivation or periphrastic construction which (possibly among other functions) turns a transitive verb into an intransitive one. The agent-like argument of the base verb becomes the sole core argument of the intransitive verb, and has the same morphosyntactic properties as the sole arguments of underived intransitive verbs, while the patient-like argument is either deleted or demoted to non-core argument function.

This definition excludes (i) agent-preserving lability (since even if one could argue that the intransitive use of the verb is derived from the transitive one, it would be a zero derivation),[1] (ii) constructions where the verb remains morphologically transitive, or maintaining an obligatory ergative

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[1] The reason for excluding lability, in the case of the Sino-Tibetan family, is that it is very common in languages with reduced morphology like modern Sinitic. Including all cases of agent-preserving lability in this survey would not be practically feasible, and would dilute the focus of this work.

marker on the A and (iii) other detransitivizing constructions such as passive, anticausative, reciprocal or reflexive. It can be applied to languages without morphological marking of transitivity if explicit criteria to distinguish transitive from intransitive construction are provided.

Although this definition is independent of the alignment of the case marking, antipassive constructions are more easily detectable in languages with ergatively-aligned case marking, as the agent-like argument of the transitive base verb and the sole argument of the intransitive derived verb receive different case marking in antipassive constructions. In languages with accusative alignment in case marking, case marking cannot be used as a criterion to define antipassivization.

While some ST languages do have ergative syntactic pivots (for instance **?**), no language in the family has syntactic ergativity of the Dyirbal type, requiring the use of the antipassive to convert the A of a transitive verb to S status to allow for instance relativization (Dixon 1994, 170). Antipassive constructions in the Sino-Tibetan family are mainly used to express indefiniteness of the object.

In most languages with polypersonal indexation and/or obligatory marking of transitivity, non-overt arguments are understood as definite. For instance, a Japhug sentence like (2), with the transitive verb *χtɯ* 'buy' (note the unambiguous past transitive *-t-* suffix), can only be interpreted as meaning 'I bought it' with a definite (and previously mentioned) object.

(2) *tɤ-χtɯ-t-a*
     PFV-buy-TR:PST-1SG
     'I bought it.' (Japhug)

In order to express an indefinite object, it is therefore not an option to simply leave the object position empty. Antipassive, as in (3; note the absence of transitive *-t-* suffix), is one way to express indefiniteness.

(3) *tɤ-ra-χtɯ-a*
     PFV-ANTIP-buy-1SG
     'I bought things.' (Japhug)

Other strategies are however possible; in this section, I present four competing constructions used to to express indefinite objects in ST, which should not be confused with antipassive: lability, indefinite objects, light verbs and incorporation.

1.1 Agent-preserving lability

ST languages with polypersonal indexation all present some degree of lability, i.e. constructions where the same verb root can be conjugated either transitively or intransitively, with effect on case marking on the arguments.

The intransitive use of the verb can be patient-preserving (the sole argument of the construction corresponding to the patient-like argument of the transitive construction), or agent-preserving (when it corresponds to the agent-like argument). Limbu can be used to illustrate these constructions, which are attested with a few verbs such as *kʰutt* 'steal' (van Driem 1991, 527), which can be conjugated transitively (4) or intransitively with preservation of the patient (5) or the agent (6).

(4) *A-ndzum-ille   sapla khutt-aŋ*
     1SG.POSS-friend-ERG book steal-1SG.P.PST
     'My friend robbed me of my book.' (Limbu)

(5) *Sapla khutt-ɛ*
     book steal-PST:INTR
     'The book was stolen.' (Limbu)

(6) *A-ndzum-in   khutt-ɛ*
     1SG.POSS-friend-DEF steal-PST:INTR
     'My friend committed a theft.' (Limbu)

In addition to effects on verbal morphology and person indexation, lability also affects case marking: thus, in the case of agent-preserving lability, the agent-like argument receives ergative case in the transitive construction (4), and absolutive case in the intransitive one (6). Not all ST languages allow both types of lability; in Japhug, only agent-preserving lability is attested (Jacques 2012a, 218).

While some scholars such as Schackow (2015, 359) use the term 'antipassive' to refer to agent-preserving lability, in the more restricted definition proposed in (1), a detransitivizing construction without overt marking cannot be referred to as antipassive.

Agent-preserving lability is a marginal phenomenon in languages such as Limbu or Japhug (where it concerns a restricted set of verbs, see Jacques 2012a, 218), but it is quite productive and prominent in some Kiranti languages, such as Puma (the ∅-detransitive construction described in Bickel et al. 2007, 9; see Bickel 2011 for an examination of the various potential analyses of this construction).

In Hakha Lai, a Kuki-Chin language, Kathol & VanBik (2001) have proposed to analyze as antipassive the alternation between stem I and stem II with transitive verbs. Hakha Lai verbs have two stems (I and II); stem I is obligatory with negative and interrogative markers, stem II obligatorily occurs in some subordinate clause, but in affirmative indicative main clauses, stem alternation is determined by transitivity: intransitive verbs have stem I, while transitive verbs have stem II when the A takes the ergative marker =*niʔ*, as in example (7) (Peterson 2003, 413)

(7) *paalaw=niʔ thil   khaaʔ ʔa-baʔ*
     p.n=ERG   clothes DEM 3SG-hang.up:II
     'Paalaw hung up the clothes.' (Hakha Lai)

Transitive verbs can also be used in affirmative independent clauses in Stem I, as in example (8). In this case, the A does not take ergative case. This is the construction which Kathol & VanBik (2001) analyze as antipassive.

(8) *paalaw khaaʔ thil   ʔa-bat*
     p.n   DEM clothes 3SG-hang.up:I
     'Paalaw hangs up/hung up the clothes.' (Hakha Lai)

In this construction, stem alternation is not by itself a mark of voice derivation. Since intransitive verbs occur with stem I in affirmative independent clauses, stem alternation between examples (7) and (8) rather reflects the same verb stem conjugated transitively and intransitively respectively, ie agent-preserving lability, and thus not antipassive proper according to the definition proposed in this paper.[2]

1.2 Indefinite/generic objects

Indefinite patient-like arguments can be expressed by indefinite pronouns in object position (such as *tʰuci* 'something' in 9), or in some languages by an indefinite/generic marker on the verb (as the generic *kɯ-* in 10).

(9) *ɯ-jaʁ   nɯtɕu   tʰuci   ɲɤ-kʰo   tɕe*
     3SG.POSS-hand DEM:LOC something IFR-give LNK
     '(Smanmi) gave him something in his hand.' (2011-4-smanmi, 105) (Japhug)

(10) *nɯnɯ kɯ tɯrme wuma ʑo   ɲɯ-kɯ-nɯɣ-mɯ.*
     DEM ERG people really EMPH IPFV-GENR:S/P-APPL-be.afraid
     'That (bird) is very afraid of people.' (hist-24-ZmbrWpGa, 26) (Japhug)

In both of these examples, the verb remains transitive, the patient-like argument is still overt (in the case of the generic construction in 10, only the noun *tɯrme* 'people' or the generic pronoun *tɯʑo* 'oneself' can be used with a verb taking the *kɯ-* prefix) and the agent-like argument takes the ergative marker.

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[2]Note also that the object of the transitive construction is not demoted to oblique status in the detransitive construction in (8), an observation that Peterson (2003, 413) uses as argument against the antipassive analysis. Peterson (2007, 37) explicitly states that 'Hakha Lai has no valence-affecting constructions which target objects, such as passive or antipassive.'

However, some languages present constructions intermediate between fully transitive constructions as in (9) and (10) and canonical antipassives.

In Bantawa, Doornenbal (2009, 226;335) refers to the construction illustrated by example (11) as an 'explicit antipassive'. In this construction, the verb conjugated intransitively (*hitt* 'burn'), the agent-like argument is marked with the ergative and indexed one the verb with the same marking as an intransitive subject, and the indefinite *kʰa* 'something' is obligatorily present in object position.

(11) *nam-ʔa*   *kʰa*   *hit-yaŋ*
     sun-ERG something scorch-3SG:INTR:PROG
     'The sun is scorching.' (Bantawa)

While this construction is certainly the source for the antipassive constructions found in Puma (see section 2), the presence of the ergative on the agent-like argument precludes from treating it as a canonical antipassive in the sense given in (1) above.

1.3 Light verb construction

An alternative construction used by some languages to avoid an explicit patient-like argument is to replace the transitive verb by a construction combining a nominal form derived from the transitive verb and a light verb. This construction is illustrated by Japhug (13), with the nominal *tɯtsʲe* related to the verb *ntsʲe* 'sell' of the simple transitive construction in (12).[3]

(12) *ɯ-me*   *nɯ* *kɯ* *andi paχɕa ɲɯ-ntsʲe* *ŋu*
     3SG.POSS-daughter DEM ERG west pork IPFV-sell be:FACT
     'Her daughter sells pork there.' (hist-17-lhazgron, 118) (Japhug)

(13) \<ali\> *kɯ-rmi*   *nɯnɯ kɯ, tɯtsʲe*   *tɯ-βze*   *tɕe*
     Ali   NMLZ:S/A-be.called DEM ERG commerce IPFV-do[III] LNK
     nɯ *kɯ-fse*   *kɯ-rɣzi*   *pjɤ-ŋu.*
     DEM NMLZ:S/A-be.like IPFV-stay IFR.IPFV-be
     'The person who was called Ali did commerce and lived like that.' (hist140516 yiguan ganlan, 4) (Japhug)

Although the construction in (13) removes the patient-like argument, it cannot be considered to be an analytic antipassive, as the main verb of the construction *βzu* is still transitive, and the agent-like argument takes the ergative *kɯ*.

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[3]The irregular correspondence between *tɯtsʲe* 'commerce' and *ntsʲe* 'sell' is explained in Jacques (2014).

1.4 Noun incorporation

Noun incorporation can affect verbal transitivity. We commonly find examples of incorporation in which a transitive verb becomes intransitive, and the incorporated noun corresponds to the patient-like argument of the base verb and saturates its place in the argument structure.

In Japhug for instance, the intransitive incorporating verb *ɣɯ-sɯ-pʰut* 'chop firewood' derives from the transitive verb *pʰut* 'cut, chop' and the noun *si* 'wood, tree' (incorporated in *status constructus* form *sɯ-* with the denominal prefix *ɣɯ-*, see Jacques 2012b). Example (14) shows the transitive construction, with the subject taking the ergative *kɯ* and the verb with the progressive prefix *asɯ-/ɣsɯ-/osɯ-* which only appears on transitive verbs, while (15) show the corresponding incorporating construction, without ergative marking on the subject and progressive on the verb.

(14) *a-wa   kɯ si kɯ-osɯ-pʰut*
      1SG.POSS-father ERG tree EGOPH.PRES-PROG-fell
      'My father is felling trees/the tree.' (Japhug)

(15) *a-wa   kɯ-ɣɯ-sɯ-pʰut*
      1SG.POSS-father EGOPH.PRES-DENOM-tree-fell
      'My father is felling trees.' (Japhug)

Constructions of the type illustrated by example (15) have been referred to as antipassive (Say 2008, 47-48) and indeed fulfil the definition proposed in (1). Note the parallelism between (15) and the antipassive (19) below.

However, a full examination of antipassive-like incorporation in ST is not possible until a survey of incorporation in the family has been undertaken, and has therefore to be deferred to future research. In particular, the presence of noun incorporation in Kiranti languages such as Puma or Chintang crucially depends on one's analysis of the zero detransitive construction (Bickel 2011).

2 Incorporation of generic noun / indefinite element

Puma has an antipassive *kʰa-* prefix whose function can be illustrated by examples (16) and (17) taken from Bickel et al. (2007, 7-9). The base verb *enn-* 'hear' in (16) is transitive; it indexes both subject and object, and the subject takes the ergative suffix *-a*.

(16) *ŋa-a   kho-lai enn-u-ŋ*
      1SG-ERG 3SG-DAT hear.N.PST-3SG:P-1SG:A
      'I hear him/her.' (Puma)

The corresponding form with prefixed *kʰa-* in (17) is morphologically intransitive, only indexes one argument, and the only argument (1SG) is in the absolutive.

(17) *ŋa   kʰa-en-ŋa*
      1SG ANTIP-hear-1SG:S/P
      'I hear someone/people.' (not 'I hear something') (Puma)

The demoted object argument cannot be relativized (Bickel et al. 2007, 10), while the subject presents all the properties of a intransitive subject; this construction unambiguously fulfils all criteria of a canonical antipassive (1).

A particularity of the Puma antipassive is that the demoted object can only refer to humans; to refer to indefinite non-human, a labile construction (the ∅-detransitive) is used instead.

The Puma antipassive prefix *kʰa-* is obviously related to the 'antipassive' construction (Doornenbal 2009, 226;335) with the indefinite *kʰa* 'something' mentioned in section 1.2. The Bantawa and the Puma constructions differ in several regards:

- In Bantawa the agent-like argument is marked with the ergative (resulting in a mismatch between case marking and indexation, since the subject is indexed as the sole argument of an intransitive verb), while in Puma it is in the absolutive.

- In Puma, the demoted object is necessarily interpreted as human, while no such constraint exists in Bantawa.

- The element *kʰa* is phonologically less integrated into the verbal word in Bantawa than in Puma.

The etymology of the indefinite element *kʰa* still deserves additional discussion (Bickel & Gaenszle 2015, 67 argue that the Puma antipassive is related to the etymon reflected as Khaling *kʰøle* 'all', proto-Kiranti *kʰale* in Jacques' 2017a system). In any case, within South Kiranti (the branch to which Bantawa and Puma belong), the following stages can be postulated:

1. X-ERG   INDEFINITE:ABS   V:X→3SG (fully transitive construction)

2. X-ERG   INDEFINITE:ABS=V:X:INTR (Bantawa)

3. X:ABS   ANTIP-V:XINTR (Puma)

While a canonical antipassive in *kʰa-* is only attested in Puma, Bickel & Gaenszle (2015) point out that the first inclusive object marker *kʰa-* in Chamling and Western Chintang is historically related, and that an intermediate stage as an antipassive could be postulated. The Western Chintang

2/3→1N.SG forms are in particular exactly identical to the corresponding second or third person intransitive forms with the addition of the *kʰa-* prefix. Since however no mention is made of a constraint against ergative marking on the subject with these verb forms, its is likely that a Bantawa-like construction (stage 2) rather than a full-grown antipassive as in Puma (without ergative marking) has to be postulated as the ancestor of the inclusive *kʰa-* marker.

3 Action nominalization + denominal verbalization

The Northern Gyalrong languages, Tshobdun (Sun 2006, 2014), Japhug (Jacques 2012a, 2014) and Zbu, have a pair of antipassive prefixes *rɤ-* and *sɤ-* (in Tshobdun) and *rɤ-/ra-* and *sɤ-/sa-* (in Japhug), respectively used to indicate non-human and human indefinite patient. No cognate antipassive prefixes have been reported in the closely related languages Situ (Zhang 2016, 98), Khroskyabs (Lai 2013) and Stau (Jacques et al. 2017), and they could be a northern Gyalrong innovation.

The following examples illustrate the use of the antipassive prefix *rɤ-* in Japhug; the base verb *tʂuβ* 'sew' requires the subject to take the ergative *kɯ*, and has to take the transitive progressive prefix *asɯ-/ɤsɯ-* to be used in inferential imperfective form (18) (see Jacques 2017b on this restriction), while the derived intransitive verb *rɤ-tʂuβ* 'sew things; do sewing' cannot take an overt patient, does not select the ergative on the subject and cannot take the progressive prefix *asɯ-/ɤsɯ-*.[4]

(18) **rgɤnmɯ   nɯ   kɯ   li   iɕqʰa   <yuwang> nɯ**
old.woman DEM ERG again the.aforementioned fish.net   DEM

pjɤ-k-ɤsɯ-tʂuβ-ci
IFR.IPFV-EVD-PROG-sew-EVD

'The old woman was sewing the fish nets.' (hist140430 yufu he tade qizi, 297) (Japhug)

(19) **iɕqʰa   kɯ-rɤ-tʂuβ   nɯ   pɤjkʰu**
the.aforementioned NMLZ:S/A-ANTIP-sew DEM already

pjɤ-rɤ-tʂuβ   ɕti.
IFR:IPFV-ANTIP-sew be:AFFIRMATIVE:FACT

'(Very early in the morning), the tailor was already sewing.' (hist140512 alibaba, 151) (Japhug)

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[4]Note that in the text corpus at my disposal, antipassive verb forms are mainly attested in either imperfective finite forms or nominalized forms. Although perfective forms of these verbs can be elicited (see example 3 above), they are not commonly employed (on the interaction of antipassivization and aspect, see in particular Cooreman 1994).

Table 1: The denominal prefix *rɤ-* in Japhug

Base Noun	Denominal verb
ta-ma 'work (noun)'	*rɤ-ma* 'work (intransitive)'
tɯ-krɤz 'discussion'	*rɤ-krɤz* 'discuss (intransitive)'

Jacques (2014) accounts for the *rɤ-* prefix as originating from the reanalysis of the intransitive denominal *rɤ-/rɯ-* prefix. This reanalysis took place in two steps.

First, an action or patient nominal is derived from the intransitive verb (for instance, *ɕpʰɤt* 'patch (transitive)' → *tɤ-ɕpʰɤt* 'a patch (noun)'). Such nominals take either a nominalization *tɯ-* prefix or combine the bare verb root with a possessive prefix (which can be either a definite possessive such as *ɯ-* 'his/her/its' or an indefinite possessor *tɤ-/ta-* as in the example 'patch' above). This nominalization neutralizes the valency of the base verb.

Second, this nominal undergoes denominal verbalizing derivation by means of the prefix *rɤ-*. The possessive or nominalization prefixes are removed during this derivation, as is the case with nouns that are not derived from verbs, as in Table 1.[5]

The second stage of the derivation *tɤ-ɕpʰɤt* 'a patch (noun)' → *rɤ-ɕpʰɤt* 'patch, do patching (intransitive)') is thus still transparent; *rɤ-ɕpʰɤt* is synchronically ambiguous between a denominal derivation from the noun 'patch' and an antipassive derivation of the base verb patch 'transitive'. The intermediate noun is however not clearly attested for all verbs, and the antipassive *rɤ-* is synchronically a distinct morpheme from the denominal *rɤ-*.

Note that the antipassive is not isolated among voice derivations in Gyalrong languages to originate from a denominal prefix; the same source has been proposed for causative, applicative and passive prefixes (see Jacques 2015, Lai to appear).

The antipassive in *rɤ-* is semantically very close to the light verb construction mentioned in 1.3, with the verb *ntsɯe* 'sell' and the nominal *tɯ-tsɯe* 'commerce'. Note that the antipassive *rɤ-tsɯe* 'do commerce, sell things' is irregular in that its root *tsɯe* slightly differs from that of the base verb *ntsɯe* 'sell', an irregularity shared with the action nominal *tɯ-tsɯe* 'commerce'. This common irregularity is a further clue that the antipassive in *rɤ-* diachronically comes through a action nominal stage.

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[5]The prefix *ta-* in *ta-ma* 'work (noun)' is the indefinite possessor prefix, required because *ta-ma* is an inalienably possessed noun. The prefixal element *tɯ-* in *tɯ-krɤz* 'discussion' is synchronically unanalyzable, but could be a fossilized indefinite possessor. The root *-krɤz* is borrowed from the Tibetan noun *gros* 'discussion'.

4 Reflexive/Middle

One of the most common sources of antipassive constructions, in particular in languages with accusatively aligned case marking, are reflexive/middle markers (Janic 2016).

Most of the morphology-rich branches of the family, including Kiranti, Thangmi, Dulong-Rawang, Kham and West-Himalayish (but not Gyalrongic), share a reflexive suffix with a dental fricative followed by a high fronted vowel (Limbu *-siŋ*, Khaling *-si*, Kham *-si*, Rawang *-shì* etc), which is likely to be reconstructible to proto-ST (Bauman 1975, 94, van Driem 1993b, 320, Jacques 2017[2016]).

There is some diffuse evidence for antipassive-like uses of these suffixes in some ST languages, as presented below. In Kham and Thangmi, despite the existence of detailed descriptions of the function of the reflexive/detransitive *-si* suffix, no evidence of antipassive use are found in Watters (2002, 105;240-7) and Turin (2012, 372-6).

4.1 Kiranti

In Kiranti, we find a few lexicalized examples of antipassive-like use of the reflexive in Khaling, Thulung and Limbu.

In Khaling (Jacques et al. 2016), the *-si* derivation in Khaling, alongside reflexive, reciprocal, autobenefactive and generic subject, also has an antipassive value when applied to transitive verbs expressing a feeling (whose A and P are experiencers and stimuli respectively). As shown by examples (20) and (21), the *-si* derivation removes the P (the stimulus) and changes the A of the base verb into an S. The stimulus is still recoverable, but must be assigned oblique case (the ablative *-kʌ*).

(20) *lokpei ghrɛ̄md-u.*
      leech be.disgusted.by-1SG→3

      I am disgusted by leeches. (Khaling)

(21) *gʰrɛ̄m-si-ŋʌ*
      be.disgusted.by-REFL-1SG:S/P

      I feel disgust. (Khaling)

Another example of antipassive in Khaling is the verb |*mim-si*| 'think', derived from |*mimt*| 'think about'.

The same examples are also found in Thulung, where the cognate reflexive verbs *gʰram-si-* 'be disgusted' and *mim-si-* 'think' also have an antipassive reading (Lahaussois 2016, 56).

In Limbu, the transitive *khɛtt-* 'chase' has a reflexive form *khɛt-chiŋ-* whose meaning is 'run'; van Driem (1987, 87) points out that the relationship between the reflexive verb and its base verb is not felt by native speakers.

Here the patient of the base verb is semantically completely deleted in the reflexive form, unlike what is observed in Khaling.

In Kiranti languages other than Khaling, Thulung and Limbu, no clear example of antipassive use of the reflexive/middle suffix have been found, for instance in Wambule (Opgenort 2004, 305-306), Kulung (Tolsma 2006, 61-62), Yakkha (Schackow 2015, 307-309) and Chintang (Schikowski et al. 2015). Dumi has one example that could be interpreted as a frozen antipassive: *waːt-nsi* 'put on jewellery' (van Driem 1993a, 125-129), which derives from the verb *waːt* 'bear (children)' (which probably formerly also meant 'put on (clothes)', as its Limbu cognate *waːt-* 'wear').

4.2 Dulong-Rawang

Dulong and Rawang have cognate reflexive suffixes (respectively *-çǔ* and *-shì*, see LaPolla & Yang 2004). Rawang shows a few examples of the use of the reflexive/middle *-shì* as an antipassive marker, when applied to transitive experiencer verbs (**?**, 287 states that there are no antipassive constructions in Rawang, by which he probably means the absence of *dedicated* antipassive markers). The transitive construction in (22) has agentive marking on the subject, and third person object *-ò* on the verb, while the reflexive/middle construction in (23) has the subject in the absolutive and complete deletion of the stimulus, without reflexive, reciprocal or autobenefactive meaning.

(22) *àːng-i   àng-sʋ̀ng shvngō-ò-ē*
     3sg-AGT 3sg-LOC hate-3:TR.N.PST-N.PST

     'He hates him.' (**?**, 294) (Rawang)

(23) *àng nʋ̄   shvngō-shì-ē*
     3sg TOP hate-REFL-N.PST

     'He's hateful.' (**?**, 294) (Rawang)

4.3 Kuki-Chin

While Kuki-Chin languages do not appear to preserve cognates of the Reflexive/middle *-si* suffix, most languages of this group have a detransitive *ŋə-* prefix with passive, reciprocal and reflexive functions (see for instance So-Hartmann 2009, 203-209 on Daai Chin). This prefix is related to the *a-* (← **ŋa-*) passive/reciprocal prefix in Japhug, the *ʁ-* passive prefix in Khroskyabs and the *ŋə-* reciprocal prefix in Tangkhul (Jacques & Chen 2007, 904-5) and is possibly ultimately of denominal origin (see Lai to appear).

In K'cho, Mang (2006, 57) describes, in addition to the passive, reflexive and reciprocal functions, an antipassive use of the *ŋ-* prefix (orthographic *ng-*) in examples such as (25) (compare with the transitive construction in 24).

(24) *Páihtïim noh a   pó   pyéin-ci.*
      Paihtiim ERG 3SG.POSS friend tell.I-NON.FUTURE
      'Paihtiim gossiped about her friend.' (K'cho)

(25) *Páithïim   ng-pyéin-ci*
      Paithiim DETRANSITIVE-tell.I-NON.FUTURE
      'Paithiim gossips.' (K'cho)

Given the fact that in this language the same prefix also has a productive reflexive and reciprocal functions (Mang 2006, 55-6), it is likely that the antipassive use also derives from them; one could conceive an intermediate reciprocal stage *'gossip about each other', then reinterpreted as meaning 'gossip' when used with a singular subject.

4.4 West Himalayish

In West Himalayish, antipassive uses of the reflexive/middle suffix are found in a few examples in Darma and Bunan.

In Darma, the form of the reflexive/middle suffix is *-çi/-ɟi* (Willis 2007, 367). In addition to reflexive, reciprocal and autobenefactive functions, this suffix derives in one case an unambiguous antipassive verb: *jɛb-* 'wait for someone (vt)' → *jɛp-çi-* 'wait (vi)'.

In Bunan, we find one example in Widmer (2014, 452;466) of the reflexive/middle *-s* suffix: *broŋ-* 'to make fun of' → *broŋ-s-* 'to prance' (one of two verbs with *-s* and simple intransitive, rather than reflexive conjugation).

Finally, in another West-Himalayish language, Shumcho, we find an *-s* suffix marking first or second person object, which can also be used in some case to express impersonal objects (Huber 2013, 240). In it thus possible that this suffix originates from the antipassive use of the reflexive suffix, further grammaticalized as an impersonal and SAP object marking.

4.5 Old Chinese

Old Chinese has several examples of the departing tone derivation which can be interpreted as antipassive, as indicated in Table 2 (data from Downer 1959, 287-288).

It is one of the many functions of the departing tone derivation, which include causative, applicative, nominalization, denominal verbalization, adverbialization, passive and antipassive (Downer 1959), most of which are attested as early as the Oracle Bone Inscriptions (**?**).

Table 2: Antipassive derivation in Old Chinese

Base verb	Meaning	Derived verb	Meaning
覺 *kæwk*	'be conscious of'	覺 *kæwH*	'awake'
知 *ṭje*	'know'	知智 *ṭjeH*	'be wise'
射 *ʑek*	'shoot at'	射 *ʑœH*	'practise archery'
勝 *ɕiŋ*	'overcome'	勝 *ɕiŋH*	'be victorious'

Antipassive derivations in Old Chinese, as shown by the examples in Table 2, are highly lexicalized. Antipassive forms are in some cases dynamic verbs, but there are also stative ones like 'be wise' (from 'know things, be knowledgeable').

Unlike the other languages discussed in this paper, Old Chinese lacks person indexation morphology and transitivity marking (see DeLancey 2013; at least no observable trace of it subsists in the material at hand). The transitivity of a verb can only be determined by its ability to take an overt object (since Old Chinese has SVO basic word order except in very specific constructions, the object follows the verb).

As examples of antipassive verbs in Old Chinese, compare for instance the transitive verbs 射 *ʑek* 'shoot at' and 知 *ṭje* 'know' (examples 26 and 27) with their intransitive equivalents 射 *ʑœH* 'practice archery' and 知 *ṭjeH* 'be wise' (examples 28 and 29) in the departing tone.[6]

(26) 祝聃射王中肩，王亦能軍

祝	聃	射	王	中	肩	王	亦	能	軍
tɕuk	*tʰam*	*ʑek*	*hjwaŋ*	*ṭjuŋH*	*ken*	*hjwaŋ*	*jek*	*noŋ*	*kjun*
p.n.	p.n.	shoot	king	hit	shoulder	king	also	can	army

'Zhu Dan shot at the king and hit his shoulder, but the king was still able to lead his army.' (Zuozhuan, Huan 5) (Old Chinese)

(27) 秦晉圍鄭，鄭既知亡矣

秦	晉	圍	鄭	鄭	既	知	亡	矣
dzin	*tsinH*	*hjwij*	*djeŋH*	*djeŋH*	*kjijH*	*ṭje*	*mjaŋ*	*hi*
Qin	Jin	encircle	Zheng	Zheng	already	know	disappear	particle

'The country of Zheng is besieged by Qin and Jin, and already knows that it will perish.' (Zuozhuan, Xi 30) (Old Chinese)

(28) 君使士射，不能，則辭以疾；言曰：「某有負薪之憂。」

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[6]The readings of the examples are given in Middle Chinese (in an IPA-based version of Baxter's 1992 transcription) rather than Old Chinese, since Middle Chinese is the earliest stage of Chinese whose phonological system is completely understood.

君	使	士	射		不	能	則	辭	以
kjun	*ṣiX*	*dẓiX*	*ʑæH*		*pjuwX*	*noŋ*	*tsok*	*zi*	*jiX*
ruler	cause	officer	practice.archery	NEG	can	then	decline	because

疾	言	曰	某	有	負	薪		之	憂
dzit	*ŋjon*	*hjwot*	*muwX*	*hjuwX*	*bjuwX*	*sin*		*tɕi*	*ʔjuw*
ill	word	say	some	have	carry	firewood	GEN	worry

'When a ruler wishes an officer to take a place at an archery meeting, and he is unable to do so, he should decline on the ground of being ill, and say, 'I am suffering from carrying firewood.' (Liji, translation by Legge) (Old Chinese)

(29) 失其所與，不知

失	其	所	與	不	知
ɕit	*gi*	*ṣjoX*	*joX*	*pjuwX*	*tjeH*
lose	3:POSS	NMLZ:OBLIQUE	be.allied	NEG	be.wise

'Loosing an ally is not wise.' (Zuozhuan, Xi 30) (Old Chinese)

In some cases, the Jingdian shiwen (the document where alternative readings of characters in received classical texts is indicated) hesitates between the two forms, as in (30), where both alternative readings *ʑæH* and *ʑek* are indicated,[7] presumably with a difference of interpretation ('each time he shot an arrow' vs 'each time he shot at them', both being possible in the context).

(30) 每射，抽矢菆，納諸厨子之房

每	射	抽	矢	菆	納	諸	厨子	之
mwojX	*ʑek/ʑæH*	*tʰjuw*	*ɕijX*	*tʂjuw*	*nop*	*tɕo*	*dju.tsiX*	*tɕi*
each	shoot	take.out	arrow	good.arrow	put.in	it:to	p.n.	GEN

房
bjaŋ
quiver

'Each time (Xun Shou) shot an arrow/shot at them, if the arrow he had taken was a good one, he would put it into Chuzi's quiver.' (Zuozhuan, Xuan 12) (Old Chinese)

The departing tone derivation (which has many other functions, see Downer 1959) is known to originate from an *-s* suffix (Haudricourt 1954). For instance, the pair of verbs 射 *ʑek* 'shoot at' → 射 *ʑæH* 'practise archery' is reconstructed as *Cə-lAk* → *Cə-lAk-s* by Baxter & Sagart 2014)).

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[7]In the original "食夜反，又食亦反".

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Jacques (2017[2016]) proposes that the diverse functions of the departing tone derivation can be accounted for by assuming that it originates from several unrelated suffixes, and hypothesizes that the antipassive and passive functions of this derivation are remnants of the reflexive/middle *-si* (described in the previous sections on Kiranti and Dulong-Rawang) in Old Chinese. Even if this historical interpretation is not accepted, the direction of derivation and its meaning are not in doubt.

5 Conclusion

This survey has only found evidence for antipassive constructions in a few subgroups of Sino-Tibetan, indicated in Table 3; languages with productive antipassive constructions are indicated in bold.

Table 3: Antipassive constructions in ST

Branch	Language	Type	Section
Kiranti	**Puma**	Indefinite	2
	Limbu	Reflexive/Middle	4.1
	Khaling	Reflexive/Middle	4.1
	Thulung	Reflexive/Middle	4.1
Gyalrongic	**Tshobdun**	Nominalization + verbalization	3
	Japhug	Nominalization + verbalization	3
	Zbu	Nominalization + verbalization	3
Nungish	Rawang	Reflexive/Middle	4.2
West Himalayish	Bunan	Reflexive/Middle	4.4
	Darma	Reflexive/Middle	4.4
Kuki-Chin	K'cho	Reflexive/Reciprocal	4.3
Sinitic	Old Chinese	Reflexive/Middle?	4.5

However, few grammars (see Tournadre 1996, 83, Genetti 2007, 108 for instance) explicitly indicate the *absence* of detransitivizing constructions. It is possible that constructions analyzable as antipassive in other languages of the ST family have been overlooked by the present work.

Antipassive constructions in ST are all of relatively recent origin. The *rɤ*-antipassive in Gyalrongic is restricted to the three northern Gyalrong languages (Tshobdun, Japhug and Zbu), and probably a local innovation. The *kʰa-* antipassive in Puma is a language-specific innovation, not even shared with its closest relatives Bantawa and Chamling (within the South Kiranti group). The antipassive uses of the *-si* reflexive suffixes are always limited and restricted to a few lexicalized examples, and never became productive antipassive constructions. It is also clear that this antipassive use of *-si* results from parallel development in all the languages that have it, since no cognate antipassive verbs are found between even closely related languages.

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Apart from Old Chinese, all languages with antipassive derivations in Sino-Tibetan also have ergative or agentive case marking.

Despite their rarity, antipassive constructions in ST are highly diverse, and exemplify three out of the four main sources of antipassives (Sansò 2017). The fact the language groups studied in this paper (Rgyalrong, Kiranti, Nungish, West-Himalayish, Kuki-Chin, Old Chinese) are located in non-contiguous areas indicates that the existence of antipassive constructions results from parallel developments: contact can only have played a role in the developments of antipassive markers within Kiranti or Rgyalrong.

References

Bauman, James John. 1975. *Pronouns and Pronominal Morphology in Tibeto-Burman*: University of California, Berkeley dissertation.

Baxter, William H. & Laurent Sagart. 2014. *Old Chinese: a new reconstruction.* Oxford: Oxford University Press.

Baxter, William H. III. 1992. *A Handbook of Old Chinese Phonology* Trends in Linguistics, Studies and Monographs 64. Berlin: Mouton de Gruyter.

Bickel, Balthasar. 2004. Hidden syntax in Belhare. In Anju Saxena (ed.), *Himalayan languages: past and present*, 141–190. Berlin, New York: Mouton de Gruyter.

Bickel, Balthasar. 2011. Multivariate typology and field linguistics: a case study on detransitivization in Kiranti (Sino-Tibetan). In Peter K Austin, Oliver Bond, David Nathan & Lutz Marten (eds.), *Proceedings of Conference on Language Documentation and Linguistic Theory 3*, 3–13. London: SOAS.

Bickel, Balthasar & Martin Gaenszle. 2015. First person objects, antipassives, and the political history of the Southern Kirant. *Journal of South Asian Languages and Linguistics* 2(1). 63–86.

Bickel, Balthasar, Martin Gaenzle, Arjun Rai, Prem Shoj Rai, Shree Kumar Rai, Vishnu Rai & Narayan P. Sharma. 2007. Two Ways of Suspending Object Agreement in Puma: Between Incorporation, Antipassivization, and Optional Agreement. *Himalayan Linguistics Journal* 7. 1–19.

Cooreman, Ann. 1994. A functional typology of antipassives. In Barbara Fox & Paul Hopper (eds.), *Voice: Form and Function*, 49–87. Amsterdam: Benjamins.

Creissels, Denis. 2012. The origin of antipassive markers in West Mande languages. In *45th Annual Meeting of the Societas Linguistica Europaea*, Stockholm.

Creissels, Denis & Sylvie Nouguier-Voisin. 2008. Valency-changing operations in Wolof and the notion of co-participation. In Ekkerhard König & Volker Gast (eds.), *Reciprocal and Reflexives, Theoretical and typological explanations*, 289–305. Berlin, New York: Mouton de Gruyter.

DeLancey, Scott. 2013. The Origins of Sinitic. In Zhou Jing-Schmidt (ed.), *Increased Empricism: Recent Advances in Chinese Linguistics*, 73–99. Amsterdam: Benjamin.

Dixon, Robert W.M. 1994. *Ergativity.* Cambridge: Cambridge University Press.

Doornenbal, Marius. 2009. *A Grammar of Bantawa: Grammar, paradigm tables, glossary and texts of a Rai language of Eastern Nepal.* Leiden: Leiden University dissertation.

Downer, G. B. 1959. Derivation by Tone-Change in Classical Chinese. *Bulletin of the School of Oriental and African Studies* 22(1/3). pp. 258–290.

van Driem, George. 1987. *A Grammar of Limbu.* Berlin and New York: Mouton De Gruyter.

van Driem, George. 1991. Tangut verbal agreement and the patient category in Tibeto-Burman. *Bulletin of the School of Oriental and African Studies* 54.3. 520–534.

van Driem, George. 1993a. *A Grammar of Dumi.* Berlin and New York: Mouton De Gruyter.

van Driem, George. 1993b. The Proto-Tibeto-Burman verbal agreement system. *Bulletin of the School of Oriental and African Studies* 61(2). 292–334.

Genetti, Carol. 2007. *A Grammar of Dolakha Newar.* Berlin: Mouton de Gruyter.

Haudricourt, André-Georges. 1954. Comment reconstruire le chinois archaïque. *Word* 10. 351–364.

Huber, Christian. 2013. Subject and object agreement in Shumcho. In Nathan W. Hill & Thomas Owen-Smith (eds.), *Trans-Himalayan Linguistics*, 221–274. Berlin: Mouton De Gruyter.

Jacques, Guillaume. 2012a. Argument demotion in Japhug Rgyalrong. In Katharina Haude & Gilles Authier (eds.), *Ergativity, Valency and Voice*, 199–226. Berlin: Mouton De Gruyter.

Jacques, Guillaume. 2012b. From denominal derivation to incorporation. *Lingua* 122(11). 1207–1231.

Jacques, Guillaume. 2014. Denominal affixes as sources of antipassive markers in Japhug Rgyalrong. *Lingua* 138. 1–22.

Jacques, Guillaume. 2015. The origin of the causative prefix in Rgyalrong languages and its implication for proto-Sino-Tibetan reconstruction. *Folia Linguistica Historica* 36(1). 165–198.

Jacques, Guillaume. 2016. How many *-s suffixes in Old Chinese? *Bulletin of Chinese Linguistics* 9(2). 205–217.

Jacques, Guillaume. 2017a. A reconstruction of Proto-Kiranti verb roots. *Folia Linguistica Historica* 38. 177–215.

Jacques, Guillaume. 2017b. Japhug. In Graham Thurgood & Randy LaPolla (eds.), *The Sino-Tibetan Languages, second edition*, 614–634. London: Routledge.

Jacques, Guillaume, Anton Antonov, Yunfan Lai & Lobsang Nima. 2017. Stau (Ergong, Horpa). In Graham Thurgood & Randy LaPolla (eds.), *The Sino-Tibetan Languages (2nd edition)*, 597–613. London: Routledge.

Jacques, Guillaume & Zhen Chen. 2007. 茶堡话的不及物前缀及相关问题. *Language and Linguistics* 8(4). 883–912.

Jacques, Guillaume, Aimée Lahaussois & Dhan Bahadur Rai. 2016. Reflexive paradigms in Khaling. *Linguistics of the Tibeto-Burman Area* 39(1). 33–48.

Janic, Katarzyna. 2013. *L'antipassif dans les langues accusatives*: Université Lyon 2 dissertation.

Janic, Katarzyna. 2016. *L'antipassif dans les langues accusatives.* Bruxelles: Peter Lang.

Kathol, Andreas & Kenneth VanBik. 2001. The syntax of verbal alternations in Lai. In *Linguistic Society of America Annual Meeting, Washington, DC*, .

Lahaussois, Aimée. 2016. Reflexive derivations in Thulung. *Linguistics of the Tibeto Burman Area* 39(1). 49–66.

Lai, Yunfan. 2013. *La morphologie affixale du lavrung wobzi.* Université Paris III MA thesis.

Lai, Yunfan. to appear. The Denominal Origin of Causative and Passive Derivations in Rgyalrongic languages Rgyalrongic languages. In Michela Cennamo (ed.), *Voice systems in diachrony: a comparative perspective*, Amsterdam: Benjamins.

LaPolla, Randy. 2000. Valency-changing derivations in Dulong/Rawang. In R.M.W. Dixon & A.Y. Aikhenvald (eds.), *Changing valency: Case studies in transitivity*, 282–311. Cambridge: Cambridge University Press.

LaPolla, Randy & Jiangling Yang. 2004. Reflexive and middle marking in Dulong/Rawang. *Himalayan Linguistics* 2. 1–13.

Mang, Kee Shein. 2006. *A syntactic and pragmatic description of verb stem alterntion in K'cho, a Chin language.* Payap University MA thesis.

Michailovsky, Boyd, Martine Mazaudon, Alexis Michaud, Séverine Guillaume, Alexandre François & Evangelia Adamou. 2014. Documenting and researching endangered languages: the Pangloss Collection. *Language Documentation and Conservation* 8. 119–135.

Opgenort, Jean-Robert. 2004. *A Grammar of Wambule.* Leiden: Brill.

Peterson, David. 2003. Hakha Lai. In Graham Thurgood & Randy LaPolla (eds.), *The Sino-Tibetan Languages*, 409–426. London: Routledge.

Peterson, David A. 2007. *Applicative constructions.* Oxford: Oxford University Press.

Sansò, Andrea. 2017. Where do antipassive constructions come from? A study in diachronic typology. *Diachronica* 34(2). 172–218.

Say, Sergey S. 2008. *K tipologii antipassivnyx konstrukcij: semantika, pragmatika, sintaksis*: Rossijskaja akademija nauk, Institut lingvisticheskix issledovanij, St-Petersburg dissertation.

Schackow, Diana. 2015. *A grammar of Yakkha* Studies in Diversity Linguistics 7. Berlin: Language Science Press. http://langsci-press.org/catalog/book/66.

Schikowski, Robert, Balthasar Bickel & Netra P Paudyal. 2015. Flexible valency in Chintang. In Andrej Malchukov & Bernard Comrie (eds.), *Valency Classes in the World's Languages*, 669–708. Berlin: Mouton De Gruyter.

So-Hartmann, Helga. 2009. *A Descriptive Grammar of Daai Chin.* Berkeley: STEDT Monograph.

Sun, Jackson T.-S. 2006. Jiāróngyǔ dòngcí de pàishēng xíngtài 嘉戎語動詞的派生形態 Derivational morphology in the Rgyalrong verb]. *Minzu yuwen* 民族語文 4(3). 3–14.

Sun, Jackson T.-S. 2014. Sino-Tibetan: Rgyalrong. In Rochelle Lieber & Pavol Štekauer (eds.), *The Oxford Handbook of Derivational Morphology*, 630–650. Oxford: Oxford University Press.

Takashima, Ken-ichi. 2013. A Few Morphological Functions of the Suffix *-s in Shang Chinese. In Gang Peng & Feng Shi (eds.), *Eastward Flows the Great River: Festschrift in Honor of Professor William S. Wang*, 355–373. Hong Kong: City University of Hong Kong Press.

Tolsma, Gerard Jacobus. 2006. *A Grammar of Kulung.* Leiden: Brill.

Tournadre, Nicolas. 1996. *L'ergativité en tibétain.* Louvain: Péeters.

Turin, Mark. 2012. *A grammar of the Thangmi Language.* Leiden: Brill.

Watters, David E. 2002. *A Grammar of Kham.* Cambridge: Cambridge University Press.

Widmer, Manuel. 2014. *A descriptive grammar of Bunan.* Bern: University of Bern dissertation.

Willis, Christina Marie. 2007. *A Descriptive Grammar of Darma: An Endangered Tibeto-Burman Language*: The University of Texas at Austin dissertation.

Zhang, Shuya. 2016. *La phonologie et la morphologie du dialecte de Bragdbar du rgyalrong situ.* Université Paris III MA thesis.