A Grammar of Bantawa : grammar, paradigm tables, glossary and texts of a Rai language of Eastern Nepal

Doornenbal, M.A.

Chapter 6

Transitivity Operations

This chapter discusses the various types of grammatical and semantic role patterns in Bantawa. The focus is on transitivity. First I survey the field of transitivity in §6.1. In §6.2, we review a morphological procedure that reduces the transitivity or valency of verbs. This simple procedure reduces the number of participants by changing the agreement on the verb, i.e. conjugating a verb intransitively instead of transitively. Deleting a participant from the verbal agreement does not necessarily imply that this participant cannot be mentioned. It turns out that verbs differ in the semantic effect of morphological category change. In §6.3, we discuss formation of causatives. There are different lexical and morphological procedures that introduce a new participant to a verb frame. These new participants have different semantic roles, dependent on the procedure and morphosyntactic make-up of the new verbal derivations or constructions. In §6.4, we discuss procedures for reducing the number of participants, i.e. the formation of reflexives and reciprocals.

6.1 Simple clause syntax

6.1.1 Grammatical roles, valence and conjugation

The first basic intuitive concept is that of *valency*. Valency is the number of arguments that a verb takes or, in other words, for which a verb is subcategorised[1]. In §6.1.1 we shall review the standard grammatical roles in simple clauses, i.e. clauses without embedded clauses. After that, we survey the clause types that are found in Bantawa.

In the more or less standard clause types, viz. intransitive, transitive and bitransitive clauses, there is quite a predictable relationship between grammatical marking and semantic roles. The grammatical shape of roles remains consistent, even

[1]Valency is sometimes referred to as 'arity' as well, and in that sense refers to the plain number of arguments in the clause. I intend to use the word 'category' primarily for the morphological class of the verb, whether the verb conjugates transitively or intransitively. The morphological class of a verb expresses its 'transitivity', but this concept will be defined more precisely later in this chapter.

b. mɨna-lai ɨ-law-a-ki ɨ-cʰekt-a.
man-*DAT (N)* 3AM-catch-PT-SEQ 3AM-lock-PT
'Grabbing the man, they locked him in (jail)'

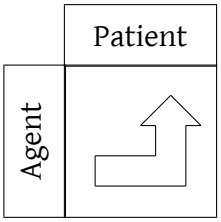
Transitive patients pattern with intransitive subjects and do not get overt case marking, cf. (415a) *haŋkaŋsi*, (415b) *kəreli*, *gʰoɖa*, (416a) *kiwa*. However, in the instances where there may be potential confusion or where emphasis is felt to be necessary, the dative marker <-lai> (DAT) may be added to the patient (416b). This is even more so for dative objects in bitransitive sentences. The ergative marker appears on the agent noun in transitive sentences, if an agent noun phrase is present (416a). The ergative is required to make a sentence grammatical.

Intransitive verbs only have a grammatical subject, both in the clause as well as marked on the verb as agreement. However, the semantic role of that subject with respect to the action is ambiguous: The subject may have more or less control over the action. In action verbs, from a semantic point of view, the subject can have roles ranging from passive patient to active agent. For static verbs, predicating a state or attribute over the subject, the contrast between patient and agent seems hardly applicable. However, where we can contrast state verbs with their causative counterparts, it becomes obvious that grammatically subjects of state clauses fit in the patient category. Subjects of intransitive clauses may align with either patients or agents of corresponding transitive clauses.

For a normal transitive verb, the action can be pictured as originating from the agent and affecting the patient, say A→P. The normal case is where the syntactic and semantic roles of the participants coincide.

In this grammar, transitive verb agreement paradigms are presented as tables, cf. Tables 4.5, 4.6 and the appendix. These tables implicitly state that the verb forms represent actions performed by the agent upon the patient. The proper interpretation of the participant roles and course of action of these tables is pictured in Figure 6.1.

Figure 6.1: Transitivity as A→P



6.1.2 Transitivity

So far, we have referred to 'valency' as being almost synonymous with (in-) transitivity. From a morphological point of view, however, we find that verbs may be conjugated transitively without obvious clue or without overt participants to agree

with, and we find that verbs may be conjugated intransitively even when there are two or more nominal constituents in the clause standing in an obvious argument relationship with the verb.

As a matter of terminology, while 'valency' only refers to the number of participants in a certain frame, 'transitivity' is a concept that finds expression on the verb and in case marking, that is wider than valency alone.

Stretching the concept of transitivity to become a property of clauses is not a novel idea, as it is explained in an article by Hopper and Thompson (1980). Semantically, transitivity is not an absolute. There are scales of transitivity. Hopper and Thompson (1980: 252) split the concept of transitivity into several components. Their work is based on research in a multitude of languages, where they find that, across languages, certain semantic properties pattern together as triggers for transitive morphology, whereas other properties do not.

I have repeated a part of their list of features triggering transitivity below.

parameters	*HIGH*	*LOW*
A. Participants	two or more participants, agent and object	1 participant
E. Volitionality	volitional	non-volitional
F. Affirmation	affirmative	negative
G. Mode	realis	irrealis
J. Individuation of object	object highly individuated	object non-individuated

The prototypically most transitive clause is where the parameters all fit in the *HIGH* category. I shall not discuss this scheme as such but refer to it in discussing certain phenomena in the Bantawa language. One of Hopper and Thompson's central hypotheses is the following (1980: 255):

> If two clauses (a) and (b) in a language differ in that (a) is higher in Transitivity according to any of the features 1A-J, then, if a concomitant grammatical or semantic difference appears elsewhere in the clause, that difference will also show (a) to be higher in Transitivity.

In other words, the coding of transitivity is consistent: if a clause rates higher on the scale of transitivity, then other, concomitant grammatical features in the same clause will agree with that transitivity, provided any such feature relating to transitivity is present. Some clauses are more transitive than others. The most transitive situation is where a voluntary agent inflicts an effect upon a known and animate passive patient that undergoes the action to completion. This widens the concept of transitivity from strictly a relation between an *n* number of participants to encompass semantic features, time and aspect as well.

For example, in Hindi the ergative marker on the agent in transitive clauses <-ne> is only required in the past tense. A past action having more reality than non-past actions, this can be associated with feature (G) in the list . The hypothesis of Hopper and Thompson (1980) then predicts that we would not expect, for example, a situation in Hindi where <-ne> appears in non-volitional actions but not with volitional actions.

This widened concept of transitivity is helpful in understanding the selection of case and verb conjugation in Bantawa. The semantic notion of transitivity is

mapped onto the morphological marking and syntactical positions and relations that exist in the clause. The transitivity is apparent in morphology in the participant agreement on the finite verb. Syntactically, the relevant parameters are a) overt presence of participants as arguments to the verb and b) the case marking on these nominals. The pattern for Bantawa is presented in (417). Subscripts signal syntactic participant, either subject (S), agent (A) or patient (P). The markers A_S, A_A and A_P denote participant agreement, either expressed in prefixes or suffixes.

(417) **intransitive clauses**
Subject$_S$-ABS Verb-A_S

(bi-) transitive clauses
Agent$_A$-ERG Patient$_P$-ABS (Recipient-DAT) Verb-A_A-A_P

How the agreement on the verb is realised is discussed in §4.4. Transitivity is not merely a matter of valence. Verbs may project two or three grammatical roles into the clause but may nevertheless be conjugated intransitively, motivated by a perceived or expressed lower transitivity of the entire clause. The less transitive form may express a) incompleteness of the action, b) less affectedness of the patient or c) non-individuation of the object, i.e. generic statements. Also in Bantawa, we find that d) the verbal suffix <-u> expressing a third person patient is absent from negated forms. In summary, morphological transitivity as shown on the verb agreement does not just reflect the number of participants alone.

Intransitive clauses

In this section, we treat clauses that are intransitive from a syntactical as well as a morphological viewpoint. The semantically intransitive expressions that get a morphologically or syntactically transitive realisation are treated in 6.1.3. Intransitive clauses in this sense are truly simple. The interpretation of the subject ranges between agentive or patientive. This is not a void semantic observation because many verbs that appear in an intransitive clause can conjugate transitively as well. If that is the case, more agentive subjects will correspond to the agent of the transitive verb[3], and more patientive subjects will correspond to the patient[4]. Some verbs do not allow for a transitive conjugation, e.g. 'to sleep'.

(418) eat

a. caŋ
'I ate.' antipassive: whatever I ate is not important.

b. coŋ
'I ate it.' transitive: something known, at a certain time, and I finished it.

(419) snap

[3]Intransitive verbs with a subject that corresponds to the agent of the verb in transitive conjugations can be called 'antipassive'.

[4]Intransitive verbs with a subject that corresponds to the patient of the verb in transitive conjugations can be called 'middle'.

a. samba kera
'the bamboo snapped'

b. samba keru
'he snapped the bamboo'

(420) sleep

a. imsaŋ.
'I slept'

b. *imsuŋ.
**'I slept (him?)'

More on causativisation in is to be found in section 6.3.

Transitive clauses

In transitive clauses, the agreement marking on the verb normally corresponds to both agent and patient. This pattern is most common and transparant to understand and examples are found throughout the corpus. There are some variations on the pattern that deserve attention.

Bitransitive clauses

For bitransitive verbs, there is ambiguity as to which of the two objects will agree with the patient markers on the verb. It is useful to semantically distinguish between the dative object, that is the recipient of the action, and the direct object, that usually fulfils a role closer to an instrument or a passive manipulated object. In keeping with this line of thinking it is helpful to refer to the 'Hierarchy of topicality of semantic roles', as formulated by Givón (2001: 200).

- Agt > Dat/Ben > Pat > Loc > others

This semantic hierarchy is coupled with preferential accessibility to the grammatical roles dished out by the verb, i.e. the syntactic subject, agent and patient roles. This preferential accessibility is stated as follows:

(421) preferential accessibility

a. Access to subject grammatical role
If a simple clause has an agent argument, this argument has the highest claim to the subject grammatical role. Otherwise, the claim passes down the above hierarchy in order.

b. Access to object (here: patient) grammatical role
If the simple clause has a dative/benefactive argument, this argument has the highest claim to the direct object grammatical role. Otherwise, the claim passes down the above hierarchy in order.

From the examples given by Givón (2001: 220), it appears that there is considerable cross-linguistic variation in how the hierarchy of works out. In Bantawa, the access

of dative objects to the direct object position is a matter of lexical subcategorisation rather than a rule. It depends on the type of bitransitive verb whether the dative object or direct object will be reflected in the verb agreement. Some verbs have a pattern where the dative object controls the agreement marking on the verb, while for other verbs the direct or patient object corresponds to the agreement on the verb.

The verbs *loma* 'to speak' and *ṗima* 'to give' pattern with one another in that the dative object gets the agreement marking on the verb, but *inma* 'to sell' is different in that verbal object agreement agrees with the direct object rather than with the recipient participant.

(422) to give

a. iŋka-ʔa ram badde-ka-tet cʰapdani-ci pi-ŋ.
I-ERG Rām many-NUM-QUAL pen-PL give-1s
'I gave Rām many pens'

b. * iŋka-ʔa ram badde-ka-tet cʰapdani-ci pi-ŋ-ci-ŋ.
I-ERG Rām many-NUM-QUAL pen-PL give-1s-DUP-1s
** I gave Rām many pens

c. * iŋka-ʔa ram rə syam ik-tet cʰapdani pi-ŋ
I-ERG Rām and Śyām one-QUAL pen give-1s
** I gave Rām and Śyām one pen

d. iŋka-ʔa ram rə syam ik-tet cʰapdani pi-ŋ-ci-ŋ
I-ERG Rām and Śyām one-QUAL pen give-1s-DUP-1sc
'I gave Rām and Śyām one pen'

Example (422b) is ungrammatical because the plural marking on the verb conflicts with the singular dative recipient. Example (422c) is ungrammatical because the non-singular marking <-ci>, required for dual recipients, is absent.

(423) to sell

a. iŋka-ʔa ram hwa-tet gadi-ci in-uŋ-ci-ŋ.
I-ERG Rām two-QUAL car-PL sell-1s-DUP-1s
'I sold Rām two cars'

b. iŋka-ʔa ram-da hwa-tet gadi-ci in-uŋ-ci-ŋ.
I-ERG Rām-LOC two-QUAL car-PL sell-1s-DUP-1s
'I sold two cars to Rām'

With the verb *inma* 'to sell' however, relations are expressed differently. The verb must agree with the direct object. Sentences without plural object marking on the verb as in example (423) are ungrammatical. In this type of sentence, the direct object can be demoted even further, by suffixing the dative object with a locative marker <-da>. This demotion is possible or required for bitransitive verbs of motion, such as *tatma* 'to bring' or *kʰatma* 'take', as well. The fact that the verb *inma* 'to sell' shares this agreement pattern with motion verbs, clarifies that *inma* is perceived as a member of the motion class of verbs, where the dative object refers to the location of the action.

Pars pro toto

For agreement purposes, body parts are considered to stand for the whole. In English, the noun 'head' is the nominal head of the phrase 'my head', and determines its agreement features. By contrast, in Bantawa the agreement features of a noun phrase reflect the speaker's understanding of the situation. The patient of the situation in (424) only finds explicit mention in the possessive pronoun. However, the agreement features on the verb depict the situation such that the owner of that body part is the recipient and seem to agree with the possessive pronoun. The body part represents the whole of its owner, the recipient.

(424) a. am-dʰeŋ-yɨwa ot-na.
your^{s}-back-bone snap-2P
'I shall break your backbone'

b. am-kʰomtaŋma-da mok-na
your^{s}-cheek-LOC slap-2P
'I shall slap you on the cheek'

(425) a. anka-ʔo som tuk-nin.
we^{pe}-GEN heart hurt-1ns2
'we like you' (lit. our heart hurts 'to' you)

b. anka-ʔo som tuʔ-a.
we^{pe}-GEN heart hurt-PT
'we feel compassionate' (lit. our heart hurts)

The latter two examples show that it is not a hard and fast rule that the possessive prefix or pronoun determines the person and number features of a noun phrase. Specifically in transitive contexts where a relation between two animate participants is expressed via body parts, the full person agreement emerges.

Agreement with participants in the embedded clause

Similarly, the agreement on a matrix verb may express the participants in the embedded clause rather than those of the main clause. Consider the following examples.

(426) thinking

a. di tɨ-sen-ŋa?
what 2AS-ask-1s
'what will you ask me?'

b. di sen-ma tɨ-mit-ŋa-Ø-ŋa.
what ask-INF 2AS-think-1s-PROG-1s
'what are you thinking of asking me?'

c. di sen-ma tɨ-mitt-u-ŋ-o?
what ask-INF 2AS-think-3P-PROG-PT.3P
'what are you thinking of asking him?' .

In a simple clause (426a), the verb *senma* 'to ask' simply agrees with the agent and dative object. However, when someone is thinking of a question and we ask what it is he is thinking of asking, the patient marking of the thinking verb appears to reflect the patient of the asking, e.g. (426b, 426c). Agreement with embedded arguments is regular on verbs governing infinitive subordinate clauses. The agreement on a matrix verb with participants embedded in an infinitive phrase points at a close integration with the matrix clause.

6.1.3 Impersonal clauses

The grammatical roles in simple intransitive clauses and transitive clauses are relatively clear. This is less so for a quite extensive class of verbal expressions that express emotions, diseases and situations where there is one participant more or less undergoing an emotion, with or without an obvious other participant as the cause of this condition. These *verba sentiendi* are impersonal verbs that conjugate according to a specific area in the agreement matrix of the transitive verb.

Part of the paradigm used by impersonal verbs

	1s	1d	1p	id	ip	2s	2d	2p	3s	3d	3p
1s											
1d											
1p											
id											
ip											
2s											
2d											
2p											
3s											
3d											
3p											

Diseases: 3s →patient

Diseases and feelings are not entirely under the control of the person subject to them, which is reflected in the verbal forms that express these situations. The typical agreement present on the verb is that of a third person singular agent representing the disease or feeling, and a variable patient, cf. the schema above.

(427) get fever

a. iŋka maŋdʰin i-mett-a-ŋ.
I fever 3AM-affect-PT-1s
'I have a fever'

(428) get the hiccups

a. saŋa-ʔa i̵-mitt-a-ŋ-ki hi̵kdi̵kpa i̵-met-ŋa-Ø-ŋa?
who-ERG 3AM-remind-PT-1s-SEQ hiccups 3AM-affect-1s-PROG-1s
'thinking of whom did I get the hiccups?'
lit. 'reminded by whom did the hiccups befall me'

(429) get a cold

a. kʰana kʰalampa ni̵-pukt-a.
you^{s} cold 3A-start-PT
'you caught a cold'

(430) sweat

a. hakluŋwa i̵-mett-aŋ.
sweat 3AM-affect-1s
'I am sweating'

(431) be surprised

a. kʰanaci-na ni̵-domt-a-da-Ø-ci.
you^{d}-TOP 3A-surprise-PT-eff-PT-PL
'you^{du} were surprised'

(432) be tired

a. i̵-hott-a-ŋ
3AM-tire-PT-1s
'I got tired'

Intransitives with an object

To wish, to want badly: intransive verb with an object The two ways of expressing desire in Bantawa are conjugated intransitively, in spite of the fact that an object must be mentioned. This agreement pattern puts the subject of the verb alone in the spotlight, reflecting the fact that the desire or volition expressed by these verbs primarily is a feature of the subject and hardly, if at all, affects the object. The verb *si̵ma* 'to want badly' is an intransitive verb that is homophonous with and related to the verb *si̵ma* 'to die'[5]. In spite of this, *si̵ma* 'to want badly' requires an object. Both object and subject of *si̵ma* are in the absolutive case. Similarly, the verb *caha metma* 'to want (to have)' consists the intransitive conjugation of *metma* 'to apply', accompanied by a complementary noun *caha*, which is a loan from Nepali *cāha* 'want, liking'. With this verb too, all nominals in the sentence are in absolutive case.

(433) want

a. kʰana cʰapdani caha ti̵-met-yaŋ?
you pen wish 2AS-apply-PROG
'Do you want a pen?'

(434) to be hungry, to desire

[5] Compare the English idiom 'to die for'.

a. ogəri kʰananin sa ti-si-n-y-in he maʔaŋ
this.time you.pl *hunger* 2AS-die-12plSP-PROG-12plSP or NEG.be
'are you (pl) hungry or not?'

b. badde ciya duŋ-ma ti-si-yaŋ
much tea drink-INF 2AS-die-PROG
'Do you want to drink more tea?'

Emotions: verbs with an additional noun

There is a quite large group of verbs or verbal idioms that contains an extra nominal argument with or without corresponding agreement marking on the verb. First let us consider some examples where the nominal argument agrees with the verb marking. Many of such expressions can be called body part emotion verbs, as the emotion is expressed as if it were located in a certain body part, e.g. mind, lung or heart.

The emotions of 'to like' or 'to dislike' are located in the mind. In Bantawa, these emotions are expressed by an idiom that literally means that the mind can *cʰitma* 'leave' or *noma* 'be good', depending on the mood of the owner. In a similar vein, the relationship between people can be expressed by what the mind does. Even when it is only the mind of the experiencer that gets affected *pars pro toto*, two participants can be marked on the verb, cf. §6.1.2.

(435) iŋ-niŋa no-ŋa.
my-mind be.good-1s
'I am pleased.' (with ...)

(436) am-dum-ʔa iŋko iŋ-niŋa cʰir-a-ŋ-a.
your^{s}-word-ERG my my-mind leave-PT-PROG-PT
'Your words made me angry' (lit. 'by your words, my mind leaves')

(437) iŋka-ʔa kʰana-lai iŋ-niŋa cʰit-na-ŋ-na
I-ERG you^{s}-DAT my-mind make.leave-2P-PROG-2P
'I do not like you.' (lit. I make my mind leave for you)

(438) kʰana-ʔa am-niŋa ti-nos-a-ŋ he ti-cʰir-a-ŋ?
you^{s}-ERG your^{s}-mind 2AS-make.good-PT-1s or 2AS-make.leave-PT-1s
'Do you like me or hate me?'

(439) kʰana kʰoci-ʔo i-niŋa ni-no-yaŋ
you^{s} they^{ns}-GEN his/her-mind 3A-make.good-PROG
'They like you.'

Example (435) is the simple case: The intransitive verb agrees with the experiencer. In example (436), the ergative marker marks the source of the event. However, as the verb is intransitive and grammatically agrees with the mind, the instrumental reading is required for the ergative in *amdumʔa* 'by your word'. In this example, the dislike is ascribed to the second person by the possessive prefix <am-> (YOUR^{S}) on *dum* 'word'. In the third example, the dislike is more volitional, and the transitive counterpart of *cʰitma* 'to leave' is used. The last examples show the transitive usages of both *noma* 'to be good' and *cʰitma* 'to leave'.

The verb does not always agree with the experiencer, e.g. in the following metaphorical use of *lokma* 'to boil', which conjugates differently from the literal use.

(440) ɨŋ-lawa lok-Ø.
my-mind boil-NPT
'I am scared.'

Bantawa also has many idiomatic expressions in which the verb does not agree with its argument noun at all. Instead, the agreement on the verb reflects the participant relationship.

(441) to feel for someone
a. ɨŋka-ʔa som tuk-na.
I-ERG lung hurt-2P
'I feel for you.'
b. ɨŋ-som tuk-na
my-lung hurt-2P
'I feel for you.'
c. ɨŋka-ʔa kʰo-lai som tukt-u-ŋ
I-ERG he-DAT lung hurt-3P-1s
'I feel for him.'
d. kʰo-sa-ʔa som nɨ-tuk-yaŋ
he-PRN-ERG lung 3A-hurt-PROG
'He feels for you.'

There are two alternatives in usage: Either the feeler is expressed as agent, e.g. (441a, c, d) or simply as the owner of the seat of emotion, e.g. (441b). In either case, the verb agreement reflects the relationship.

Semantics All of these predicates somehow express an emotion or experience. The experiencer may be cast either as a) the owner of the emotion, e.g. (440, 442), or b) the owner of the body part of the emotion, e.g. (435), or c) the agent of the emotive operation on a body part, e.g. (438, 441).

(442) ɨŋ-cɨrpa kat-Ø
my-anger feel-NPT
'I am angry' (lit. 'my anger is felt')

The experience predicates all consist of a combination of a nominal and verbal part. For some verbs of experience, the verb is meaningful in expressing the emotion or sensation, while for other predicates the non-verbal part of the predicate is the semantic center of gravity. The way the semantics are composed can be either a) the noun contains most of the semantics, i.e. the emotion, and the verb is just the host for tense and agreement, e.g. (442), b) the noun denotes a body part that undergoes some movement or operation, together they constitute the emotion, e.g. (440,436), or c) the verb has a definite emotive meaning, the noun in the construction mostly hosts the owner, by possessive marking (441). A detailed study into these patterns for Belhare is found in Bickel (1997).

Intransitive verbs, conjugating transitively

To boil Some verbs, in spite of seeming to be semantically intransitive, still emerge as syntactically transitive. The example of this is 'to boil', *lokma*.

(443) boil

a. cakwa lokt-u
water boil-3P
'the water boils.'

b. * cakwa lokt-a
water boil-PT
'the water boiled'

c. * cakwa lokt-u-ŋ
water boil-3P-1s
'I boiled the water'

d. cakwa lok-mett-u-ŋ.
water boil-CAUS-3P-1s
'I make the water boil.'

In spite of the transitive form, there is no perceived object of the boiling, but one cannot use the verb intransitively, cf. sentence (b), nor can the verb be interpreted transitively. The formal transitivity perhaps reflects the violent nature of the bubbling, which makes the water seem the agent. To express a causative 'to make boil', one has to resort to a circumscribed morphological causative, cf. §6.3.3. Irregular transitive conjugation was also reported for Thulung, interestingly for the cognate verb <lok/t-> 'to boil': *loḍḍiu* 'it has boiled' (Allen 1975: 42, 220)[6]. .

6.2 Verb transitivity operations

This section discusses operations on verbs that change valency or, more generally, transitivity as expressed in the verbal morphology.

6.2.1 Antipassive and middle verb conjugation

The notion of transitivity not only refers to the number of participants as expressed on the verb, i.e. arity or valency. There are also other aspects of transitivity of the predicate, such as completion, definiteness, etc. (See above, §6.1.2) Transitivity is expressed in morphology, primarily in the stem type and participant agreement of the verb. Normally, all participants in the predicate event, with a maximum of two, are expressed in verb agreement as outlined in the previous paragraphs. There are some regular variations to this pattern.

One deviation from the general pattern is that many verbs conjugate both transitively and intransitively. These verbs may have marking and agreement typical for two-participant clauses as well as subject-only clauses. A two-way verb

[6] Also in Limbu, cf. (van Driem 1987: 451)

classification into transitive and intransitive verbs is insufficient. We would need a more specific verb classification to capture the fact that some verbs only conjugate transitively, some conjugate in two ways and some conjugate intransitively only.

There are different ways in which we can analyse this phenomenon. Syntactically, we can observe that verbs are transformed from one valency class into another by some morphological zero operation. In an analysis of that kind, it may be hard to decide which verbs are roots and which are derived. Are the intransitives more basic or the transitive forms? To decide this, one may look at transitive-intransitive pairs and try and identify formal characteristics that distinguish one verb pair from another. There may also be semantic clues to whether a verb is basically transitive or intransitive.

6.2.2 Antipassive: object demotion or omission

The antipassive is a valence decreasing operation that downgrades or deletes the patient of the verbal predicate. In English, demotion of the patient may be effected by either putting the object in an oblique case or, more drastically, by omitting the object. Compare the English examples in (444).

(444) make the sentence less transitive

a. he shot the deer

b. he shot at the deer

c. he shot

In Bantawa, both possibilities (444b) and (444c) are available as well. An example of (b) was already shown in §6.1.2, where the locative takes the place of zero marking in certain bitransitive clauses. The replacement of an absolutive case by a locative is a marginal procedure in Bantawa. A more common strategy of patient demotion is simple omission. The prime antipassive formation strategy in Bantawa is to put a transitive verb in an intransitive form. In Bantawa, therefore, the antipassive has clear morphological reflexes on the verb and usually only on the verb.

Implicit antipassive

Many transitive verbs that allow antipassive usage can conjugate as if they were intransitive, while the agent argument remains in the ergative case or is not mentioned but understood. We shall call the intransitive conjugation of transitive verbs the implicit antipassive because, except in the agreement marking, there is no signal that the object is less relevant to the speech situation. The implicit antipassive contrasts with the explicit antipassive, where an extra morpheme is added to signal argument deletion (See §6.2.3). In the implicit antipassive, the agreement on the verb refers to the agent and the agent is still understood as such. This contrasts with the middle conjugation of transitive verbs as discussed in a following section.

(445) *ukma* ‘to peel’

a. ɨ-kʰot uʔ-u-kʰo.
his/her-skin peel-3P-see:3P
'peel off the skin' (lit. peel its skin and see, i.e. finish it)

b. ɨŋka-ʔa uʔ-a-ŋ
I-ERG peel-PT-1s
'I peeled (it)'

(446) *cʰoma* 'to plough'

a. cʰoʔ-u-ŋ
plough-3P-1s
'I ploughed it.'

b. cʰoʔ-a-ŋ
plough-PT-1s
'I have been ploughing.'

c. jəmma-ŋe wɨk cʰos-u-ŋ-ciʔ-u-ŋ
all (N)-EMPH land plough-3P-1s-finish-3P-1s
'I finished ploughing all of the land.'

As we see in the first example above, the normal imperative for a transitive verbs ends in the marker <-u> (3P) that is typical for the transitive conjugation only. However, if one has been peeling already, it is acceptable to say 'I have peeled' in an intransitive form, omitting the object.

For verbs where the object is less specific or less obviously affected, it is the standard to use the antipassive forms of the verbs. With a process such as ploughing, it is not clear where exactly the object is affected. The object, the soil, is inanimate and diffuse. If the object is mentioned at all next to an antipassive form, it will be understood as the location of the action. However, if the action has been performed on a specific object and has been completed, it is incorrect to use the antipassive, and the full transitive form must be used, cf. (446c).

Consider the following example sentences on catching fish and listening.

(447) *ŋa lapma* 'to catch fish'

a. ŋa laʔ-u-ŋ.
fish catch-3P-1s
'I caught a fish (the fish)'

b. * ŋa laʔ-a-ŋ
fish catch-PT-1s
'I caught a fish'

c. ŋa laʔ-a-ci-ʔa.
fish catch-PT-DU-e
'We (dual, excl) went fishing.'

d. kʰo-sa-ʔa ŋa laʔ-u.
he-PRN-ERG fish catch-3P
'He caught a fish.'

e. ? kʰo-sa-ʔa ŋa laʔ-a
he-PRN-ERG fish catch-PT
? He went fishing.

(448) *kʰa enma* 'to listen, to hear'

a. ɨk-tat kiwa mo-yu ta-ki kʰa-en-a-ŋ-a ni-ʔo rəcʰə.
one-qual tiger that-down come-SEQ thing-hear-PT-PROG-PT NAR-NOM MIR
'One tiger, coming below (from there) was listening, it so happened, ...'

The basic grammatical pattern is found in (447a), where both agent and patient are clearly discernible. The verb *lapma* 'to catch' cannot be conjugated intransitively and then mean 'I caught a fish', let alone, 'I caught the fish', e.g. (447b). However, if we went fishing as an activity without a clear object, it is fine to leave the object out and use the verb antipassively, e.g. (447c). The case marking of the agent or subject in simple, declarative antipassive clauses is doubtful. While a sentence such as (447d) is acceptable, example (447e) is understood but raises eyebrows. However, the alternative *kʰo ŋa laʔa* 'he caught fish' does not sound very good either. The basic and frequent usage is where the pronouns are left out altogether. In citation forms elicited from language teachers, the antipassive form is often mentioned first[7]. When time reference is less relevant, antipassive forms are also preferred over transitive forms.

(449) *kʰɨma* 'to steal'

a. syam kʰɨs-a
Śyām steal-PT
'Śyām steals.'

b. * syam o pəisa kʰɨs-a
Śyām this *money (N)* steal-PT
'Śyām stole this money.'

c. syam-ʔa ɨ-pa-ʔo ɨ-yaŋ kʰɨs-u
Śyām-ERG his/her-father-GEN his/her-money steal-3P
'Śyām stole his father's money.'

d. (kʰosaʔa yaŋ) kʰɨs-a-ki ɨ-law-a ɨ-cʰekt-a.
... steal-PT-SEQ 3AM-catch-PT 3AM-close-PT
'... having stolen money, they caught him and locked him in.'

The verb *kʰɨma* 'steal' behaves according to the described pattern, not allowing for antipassive usage when the object is present, e.g. (449b). When someone habitually steals, though, it is the norm to conjugate the verb intransitively (449a). When used in a subordinate embedded clause, object and time reference are irrelevant again, and the intransitive conjugation is preferred (449d).

This corresponds to the intuition of one of my teachers who remarked the following about *kɨkma* 'to hold'. If one says *kɨkta* it is as if it has been long ago or any time, really, while if one says *kɨktu*, it only just happened. Using the transitive form

[7] As matter of fact, Rai (1985: p.88 *et passim*) mentions antipassive forms only in his grammar, giving, for instance, *mokta* for 'he kicks'.

brings in a notion of perfectivity. The form *kɨkta* would be translated as 'he held it,' suggesting that he has been holding it for a while. By contrast, the form *kɨktu* would translate as 'he grabbed it', 'he got hold of it'.

Another notion that is important in selecting the conjugation type is the amount of control over the object. For example, the verb *manma kʰanma* 'to forget' clearly denotes some loss of control. Both transitive and intransitive forms are acceptable for conjugating *manma kʰanma*.

(450) *manma kʰanma* 'to forget'

a. mantuŋ kʰaĩsuŋ
'I forgot'

b. mantaŋ kʰaĩsaŋ
'I forgot'

As a more general case, negated forms, where control is inherently less, are prone to lose the transitive conjugation marking. Finally, not all transitive verbs can be used this way. Some verbs that are more transitive than others resist antipassivisation.

(451) no antipassive?

a. * sera
*he kills

b. * kʰatta
*he takes

c. ? dʰatta
?he kicks

Specifically, as a class, the resulting verbs of lexical or morphological applicative or causative derivations resist antipassive usage. Obviously, for these verbs an intransitive alternative is available, viz. the root of the derivation.

6.2.3 Explicit antipassive

The explicit antipassive is a grammatical construction that contains a free antipassive marker <kʰa> in the object position to signal that the object of the verbal situation is not relevant.

marker	*gloss*	*function*
<kʰa>	ANTP	Explicit antipassive, dummy object marker

The antipassive marker <kʰa> (ANTP) is very versatile and explicitly pre-empts any ambiguity to what argument structure is intended. Phonologically, the morpheme *kʰa* is a word, but this word always appears immediately in front of the verb form. Consider the following examples.

(452) hɨtma 'to scorch'

a. nam-ʔa mɨ-hɨt-yaŋ.
sun-ERG 3pl-scorch-PROG
'The sun is scorching us.'

b. am-taŋ-mɨwa hɨtt-a?
your^{s}-head-hair burn-PT
'Did your hair get burnt?'

c. nam-ʔa kʰa hɨt-yaŋ.
sun-ERG AntP scorch-PROG
'The sun is scorching.'

d. kʰo-sa-ʔa kʰa hɨt-Ø.
he/she-PRN-ERG AntP scorch-NPT
'He burns.'

e. kʰo-ci-ʔa kʰa hɨt-ci.
he/she-PL-ERG AntP scorch-DU
'They (du) burn.'

f. kʰo-ci-ʔa kʰa mɨ-hɨt.
he/she-PL-ERG AntP 3pl-scorch
'They (pl) burn.'

Normally, the verb *hɨtma* 'to scorch' is transitive (452a). *Hɨtma* 'to scorch'cannot be just conjugated intransitively to render an antipassive meaning, because this verb is a middle verb and will be understood as 'be burnt' when conjugated intransitively, cf. example (452b). To render an antipassive reading, the explicit antipassive marker <kʰa> must be added to serve as the verb's direct object, cf. example (452c). The verb must conjugate intransitively, but the ergative markers are required on the agent noun phrase, e.g. (452d-452f). Verbs with explicit antipassive marker are translated as other antipassives, with an understood or implicit object. A distinctly indefinite meaning aspect is added, approximately rendered by 'to do X around'.

(453) kʰa mokma 'to hit around'

a. han kʰa mok-ŋa.
now AntP hit-1s
'Now I shall hit, start hitting around'

b. deki kʰa tɨ-mok-yaŋ.
why AntP 2AS-hit-PROG
'Why are you hitting?'

c. deki kʰa tɨ-moʔ-in?
why AntP 2AS-hit-12plSP
'Why are you (pl) hitting?'

d. deki tɨ-moʔ-u-m?
why 2AS-hit-3P-12plA
'Why are you (pl) hitting him?'

e. deki kʰa man-mok tɨ-da-n?
why AntP NEGPTp-hit 2AS-NEGsfx-12plSP
'Why have you (pl) not hit (someone)?'

Many perception verbs almost obligatorily take the *kʰa* object and are given with *kʰa* in their citation forms, as forms without an object sound unnatural.

(454) kʰa kʰaŋma
'to see'

(455) kʰa enma
'to hear'

In regular usage though, verbs of perception are like any verb.

(456) kʰa kʰaŋ-ma si-ŋa-Ø-ŋa.
AntP see-INF wish-1s-PROG-1s
'I would like to see some.'

(457) kʰa i-en-niŋ.
AntP NEGNPp-hear-NEG1
'I cannot hear a thing'

(458) kʰo i-en-niŋ
he/she NEGNPp-hear-NEG1
'I cannot hear it.'

Note that the negated verb forms for transitive verbs with third person patient and intransitive verbs are very similar or even identical. For first person forms, however, only the object pronoun or antipassive marker tells us the difference.

Transitivity resumed

The way that transitive verbs in Bantawa are used either in transitive conjugation or intransitive conjugation stresses the importance of widening the notion of transitivity. Transitivity in the narrow senses of morphological coding on the verb or the syntactical make-up of the sentence refers to the coding of the number of participants only. However, usage of transitive verb forms signals more than just arity. The transitive verb codes participants, but also the tense and aspect as well as specificity of the object[8]. The correlation of multiple meaning facets with transitive morphology apparently is not a quirk of Bantawa but corresponds to universal facts as pointed out by Hopper and Thompson, as mentioned in §6.1.2.

6.2.4 Middle or zero causative derivation

A middle verb is one that renders a meaning closer to the passive even when it is grammatically active. The class of middle verbs is also referred to as the 'break' class of verbs. The verb 'break' has very similar behaviour cross-linguistically. As opposed to other transitive verbs, the subject of the verb 'break', when only one participant is mentioned, in intransitive usage, corresponds to the patient rather than to the agent in the transitive clause.

[8]Hopper and Thompson (1980) use the terminology 'Individuation of the Object' for specificity or perhaps definiteness of the object.

(459) Transitive vs. middle

a. He breaks the vase

b. The vase breaks

(460) Transitive vs. antipassive

a. He eats porridge

b. He eats

Indeed, most of the various Bantawa 'break' verbs are in this class, though not all. For the sake of description, let us assume that middle verbs, that conjugate in two ways, are basically intransitive verbs that undergo a zero causative derivation to become transitive verbs. When middle verbs conjugate transitively, an additional participant is added to the verb frame that denotes the causer of the process or state. The verbs that participate in this derivation typically describe processes and states. By this type of causative derivation, verbs turn into action-process verbs that express a grammatical relation for the agent.

To posit an active derivational process for this 'minimal' causative construction is consistent with the finding that this derivation is not available for all verbs, even where we would expect it. The transitive conjugation of process-state verbs is ungrammatical when a competing morphological or lexical causative derivation is available.

(461) *ketma* 'break, snap' (middle)

a. samba ker-a.
bamboo break-PT
'The bamboo broke'

b. kʰo-sa-ʔa samba ker-u
he-PRN-ERG bamboo break-3P
'He broke the bamboo.'

(462) *otma* 'break, fracture' (intransitive)

a. ɨŋ-cʰuk or-a.
my-arm fracture-PT
'My arm broke.'

b. * kʰosaʔa ɨŋcʰuk oru
* 'he broke my arm'

(463) *otma* 'break, fracture' (transitive, causative)

a. kʰo-sa-ʔa ɨŋ-cʰuk ɨ-ott-a-ŋ.
he-PRN-ERG my-arm 3AM-fracture-PT-1s
'He broke my arm.'

For the verb <ot ~ or> 'to break' a regular lexical derivation <ot ~ ott> is available, which invalidates the transitive use of the intransitive verb. Example verbs in the class of middle verbs are listed below.

infinitive	*gloss*	*middle*	*— active*
ketma	break, snap (of sticks)	kera	— keru
pʰutma	break, snap (of wires)	pʰutta	— pʰuttu
buŋma	break down, destroy	buŋsa kʰara	— buŋsu
bɨŋma	explode	bɨŋsa kʰara	— bɨŋsuŋ
hutma	be pierced, pierce	hutta kʰara	— huttu

Middle verbs typically denote a process. As a class, state verbs also show middle derivation behaviour[9]. Not all state and process verbs allow for middle derivation. There are two exceptions to the rule. The first is the simple situation where a verb does not allow for zero causative derivation because there are other simpler and unambiguous grammatical alternatives. The alternative may be either lexical or a morphological causative non-zero derivation. See *otma* 'to break' above, where a competing derivation process is in the way.

The other instance where middle conjugation of verbs is illegal is where a semantic specialisation stands in the way. If the transitive form of some verb renders a different specialised meaning, this form cannot be used as a simple causative. For example, consider *kʰɨkma* 'to be bitter'.

(464) *kʰɨkma* 'to be bitter' (intransitive and derived causatives)

a. kʰɨk-yaŋ-ʔo pakt-u.
be.bitter-PROG-NOM make-3P
'She made it bitter' (of a mother and the food)

b. seluwa-ʔa o ŋa-lai kʰɨkt-u.
bitter.herb-ERG this fish-DAT make.bitter-3P
'The herbs numbed the fish.'

c. seluwa-ʔa kʰaŋ kʰɨk-mett-u.
bitter.herb-ERG vegetables be.bitter-CAUS-3P
'The herbs made the vegetables bitter.'

The first example (464a) shows the normal intransitive usage as well as a very lengthy causative. The normal intransitive form is used to create a finite, third person singular progressive and then nominalised form, resulting in a reified adjective that means 'bitter'. This nominal denotes the bitter stuff, perhaps herbs, that she put in the food in order to make it bitter. Example (464b) shows that the transitive use of this verb has a very specialised meaning. The herb *seluwa* (Nep: *tītepātī*) *'Artemisia'* is used for catching fish[10]. The procedure is to collect a lot of the herb and then pound it into a mush. After that, a section of a river or creek is blocked and the mush is thrown in. The fish are numbed by the herb's juices and can be caught at leasure. The fish can simply be grabbed or hammered on the head with stones. If we wish to say that some herb caused the vegetables to be bitter, a periphrastic causative construction (464c) must be used.

[9]Note that attributes and qualities, such as size, colour and taste are typically predicated by verbs in Bantawa.

[10]The piscicidal usage of *Artimisia indica* has also been reported by Joshi and Joshi (2006).

6.3 Causative formation

6.3.1 Lexical causatives

Upon investigation of the verb inventory, it becomes obvious that many verb stem pairs are related to one another. There are lexical rules that form transitive verb stems out of other intransitive or transitive roots. The most obvious pairs that can be found in the data are listed in Table 6.1. Sprigg (1987) and Rai (1985) similarly have listed many example pairs of this phenomenon.

There are two derivational processes that both have been attested in many Tibeto-Burman languages. These derivational processes reflect stem formation procedures that were already present in proto-Tibeto-Burman[11].

Stem-final consonant addition or change

Adding <-t> The first process involves adding a suffix <-t> to the verb root, resulting in an applicative, benefactive, causative or directive (ABCD) reading for the resulting verb. It is hard to assign a single semantic function to the stem extender <-t>. Some verbs derived by addition of <-t> have a definite causative reading, e.g. *c^{h}etma* 'make urinate' is used for taking a child outside in order to induce it to perform the job. Other verbs of this group do not allow a causative reading, e.g. *b^{h}etma* 'fart at' is a clear example of a strict applicative in the sense that an new participant is brought on stage that otherwise would appear in an oblique case. Some <-t> verbs do not allow another than a benefactive reading, e.g. *t^{h}opma* 'dance for someone else'. These verbs are a special instance of applicatives.

Adding <-s> The second derivation process adds a suffix <-s> to the verb root and results in a causative reading for the resulting verb. I consider the rare applicative readings to be reinterpreted exceptions. The semantic effect of the <-s> transitivisation is much more transparent than that of the <-t> operation.

The common denominator for these processes is the introduction of another participant in the verb matrix. The addition of a new participant role does not imply that this participant is always realised. Many transitive verbs allow for intransitive inflection, and in many cases the grammatical object participant is not mentioned.

Morphology For the stem derivation processes, the pre-consonantal stem of each verb is taken as input. For the <-s> stem derivation process, the final consonant of the verb stem root is nasalised, so that the rule would be as in (465).

(465) CAUS(v) = v [+nasal] + s_2

The resulting verb stem always conjugates according to the s-conjugation class.

For the <-t> stem formation the picture is not so clear. Most frequently, the root consonant can be retained and the resulting verb is in the t-conjugation class, so that the rule could read as in (466).

[11] Cf. Michailovsky (1999), Matisoff (2003: 452, 471).

(466) ABCD(v) = v + t_1

However, for a significant number of verbs, some additional changes happen to the verb final consonant. Table 6.3 shows that there is a lot of traffic between nasal and non-nasal consonants within the class of verbs derived by addition of <-t> to another root. Also, some results of the t-stem formation are in the zero conjugation class. The subscript t_1 as in (466) incorrectly suggests that all resulting stems are in the t-conjugation class. Rule (466) must corrected into the form below.

(466) ABCD(v) = v ([+nasal]) + t

Active morphological causative or lexical causative?

The question arises whether we consider this derivation process as an active morphological causative formation or consider the derived stems as lexical causatives, where the roots and formation process are still traceable. As mentioned previously, Sprigg (1987) makes derivation processes an informing factor in his analysis of verb stem conjugations. To explain the variation in the formation processes as in Table 6.1, he fits the conjugation class assignments to make them match this derivation process. *op. cit.* p.4: 'Part of the justification for distinguishing [...] classes [...] is not purely syntagmatic [...] but grammatical: it aims to associate lexical items by such functions as transitive, intransitive, causative [...]'

As a method to reconstruct historical forms, the deep analysis of derivational processes is helpful. For example, based on the observed /ms/ ~ /pt/ alternation in the verb pair *imma* vs. *ipma* 'to sleep' in Table 6.1, a proto-form <*ip ~ *iʔ> could be posited. Logically, both of the surfacing forms would derive from this root form. This reconstruction has two problems. First, conceptually it is hard to think of a gloss for a detransitivised 'sleep', but, more significantly, there are no examples of a verb 'to sleep' that has the simple form *ip* in any of the surrounding languages: Thulung <əms>, Kulung <im ~ ims>, Athpahariya <ims>. Rather, the form in Limbu <im ~ ips> points the other way. The stem final /s/ in <ims> is everywhere and the consonant change p→m is secondary. We can then conclude that the class membership of <ims> and of many other intransitive members of conjugation classes 1 and 2 is a result of its original form <*ips>, and not of some derivation.

Sprigg (1987: 25) draws the same conclusion via a shortcut, stating that there is actually a /ps/ junction type that surfaces as /ms/. The assumption behind this putative junction type is that there is an active grammatical relationship between the verb pairs that are in a lexical causative relationship.

Whether causative forms based on a <t-> or <s-> derivation result from an active process or are lexical causatives is hard to decide, but there are some clues. Firstly, it is questionable to posit phonemes such as t_3 that are never audible, but only fill a slot ($Ø_3$) in the conjugation type matrix just to feed the derivation process. Secondly, the change of /*ps/ → /ms/in verb endings reflects a historical process only. In present day Bantawa /ps/ sequences are not uncommon in intervocalic position, e.g. *bʰepsa* 'sheep', and verb suffixes in *s-* affix without problem to stems ending in *-p*, cf. the supine <-si> (SUP), see (467).

(467) Supine formation causing a /ps/ sequence

a. am-nic^{h}a ip-si k^{h}att-u
your-younger.brother put.to.sleep-SUP bring-IMP
'bring your younger brother to bed'

b. im-si k^{h}ar-a
sleep-SUP go-IMP
'go and sleep'

These facts make the change of an underlying /ps/ into /ms/ an idiosyncratic process without independent motivation. Thirdly, the semantic operation associated with these processes is not unambiguous or even always predictible.

Even if the formation process could be shown to be instantiated anew, that should not distract from the fact that conjugation class assignment and derivational history must not be confused for any verb. The conjugation class of verbs is not predictable from the pre-consonantal stem final consonant. So we cannot say that all root verbs for the t- and s-stem derivations are members of the zero conjugation class, which indeed turns out to be the fact. Similarly, causative derivation result verbs are not necessary a member of one or the other conjugation class. By far most resulting verbs are members of the t- and s- conjugations.

In this context it is relevant to stress again that conjugation class membership is not at all associated with transitivity. Obviously ABCD verbs are transitive, though most of them allow for intransitive inflection anyway, but many members of the s- and t- classes are true intransitives. As verb stems in the t- and s- conjugation classes are assigned to these classes for formal reasons only, it is logical to expect that they are part of lexical causative relations with other verbs.

In our data, there is also a number of verb pairs that are obviously related, while both members of the pair are transitive members of the first or second conjugation. It is quite possible to reconstruct historical forms for these verbs that once fed the derivation process. Particularly for the *ms ~ pt* alternation this can be done unambiguously, e.g. **reps* 'sprinkle around', **kaps* 'to meet'. However, for the *ŋt ~ kt* and *mt ~ pt* pairs, where an obvious consonant change is the only surfacing reflex of the derivation operation, the method for reconstruction is less obvious, cf. Table 6.3.

There are also examples of intransitive-intransitive relationships without other obvious semantic differences, e.g. *kima* 'to be afraid' ~ *kitma* 'to be afraid'. There are a few irregular examples too. Derivations that have only one example in Table 6.1 might be considered irregular, but not if they can be traced back to a regular derivation. However, when both root and result of a derivation have changed conjugation class membership, that derivation certainly is not regular, e.g. *c^{h}otma* (c^{h}ottu) 'to pay' > *c^{h}onma* (c^{h}oru) 'to pay for someone else'. The verb *c^{h}onma* 'to pay for (on behalf of) someone else' is obviously the benefactive for *c^{h}otma* 'to pay'. *C^{h}otma* 'to pay', however, conjugates according to class t_1, while *c^{h}onma* 'to pay for' may have been in n_2, but now conjugates as n_{3c}.

Table 6.1: Verb Stem Alternations

Transitivity		*Examples*	*# in*	*effect*	*class change*
Less	*More*		*data*		
ŋ/ŋ	k/kt	tʰaŋma ~ tʰakma (come up, bring up)	[4]	APPL	$ŋ_3$ -> k_1
		waŋma ~ wakma (enter, put in)		CAUS	
t/r	t/tt	kʰatma ~ kʰatma (go, take)	[2]	CAUS	t_3 -> t_1
		cʰitma ~ cʰitma (leave, leave for someone else)			
n/l	t/tt	konma ~ kotma (walk, make walk)	[2]	CAUS	n_{3a} -> t_1
		bʰinma ~ bʰitma (squeeze, make squeeze)			
n/n	t/tt	banma ~ batma (come, bring)	[2]	CAUS	n_{3b} -> t_1
		henma ~ hetma (remain, bind)			
n/y	t/tt	kʰunma ~ kʰutma (carry, carry for someone)	[1]	BEN	n_{3d} -> t_1
n/ns	t/tt	cʰenma ~ cʰetma (urinate, make urinate)	[1]	CAUS	n_2 -> t_1
Ø/s	t/tt	bʰema ~ bʰetma (fart, fart at someone)	[13]	APPL	$Ø_2$ -> t_1
		kuma ~ kutma (heat, heat for someone)		BEN	
		rima ~ ritma (spread, make spread)		CAUS	
Ø/Ø	t/tt	ima ~ itma [ittu ~ ia] (laugh, laugh at)	[5]	APPL	$Ø_3$ -> t_1
Ø/w		kɨma ~ kɨtma (rot, make rot)		CAUS	
		tima ~ titma (guide, reach)			
		numa ~ nutma (be auspicious, be good)		BEN	
Ø/Ø	t/r	tama ~ tatma (bring, come)	[3]	CAUS	$Ø_3$ -> t_3
		lama ~ latma (take out, reach)			
		setma ~ sɨma (kill, die)[12]			
m/m	p/pt	tʰomma ~ tʰopma (dance for s.o. / dance)	[2]	BEN	m_3 -> p_1
		kumma ~ kupma (sit on eggs / hide (oneself))		CAUS	
m/ms	p/pt	imma - ipma (sleep, put to sleep)	[1]	CAUS	m_2 -> p_1
p/Ø	p/pt	tʰapma ~ tʰapma (winnow, spread wide)	[4]	APPL, CAUS	p_3 -> p_1
Ø/s	n/nt	pʰima ~ pʰinma (break off)	[1]	CAUS	$Ø_2$ -> n_1
n/l	n/nt	pʰɨnma ~ pʰɨnma (get loose, unstitch)	[1]	CAUS	n_{3a} -> n_1
n/ns	n/nt	lonma ~ lonma (go outside, take out)	[1]	CAUS	n_1 -> n_2
t/tt	n/nt	kitma ~ kinma (be afraid, frighten)	[1]	CAUS	t_1 -> n_1
m/m	m/mt	semma ~ semma (rest, make quiet)	[2]	CAUS	m_3 -> m_1
		lemma ~ lemma (be sweet, flatter)			
p/Ø	m/mt	mapma ~ mamma (grab, grab hair)	[1]	APPL	p_3 -> m_1
p/pt	m/mt	pupmu ~ pumma (get tangled, hold tightly)	[1]	CAUS	p_1 -> m_1
ŋ/ŋ	ŋ/ŋs	yuŋma ~ yuŋma (sit, put)	[3]	CAUS	$ŋ_3$ -> $ŋ_2$
k/Ø	ŋ/ŋs	hokma ~ hoŋma (begin, begin)	[3]	CAUS	k_3 -> n_2
n/l	n/ns	hinma - hinma [hila ~ hinsu] (shake, shake)	[1]	CAUS	n_3a -> n_2
t/r	n/ns	kʰanma ~ kʰatma (go, send)	[3]	CAUS	t_3 -> n_2

Table 6.2: Verb Stem Alternations *continued*

Transitivity		*Examples*	*# in*	*effect*	*class change*
Less	*More*		*data*		
m/m	m/ms	kumma ~ kumma [kuma - kumsu] (hide, hide) namma ~ namma [nama - namsu] (reek, smell)	[2]	CAUS	m_3 -> m_2
p/Ø	m/ms	apma - amma [au - amsu] (shoot, shoot at (aimlessly, if vi))	[5]	APPL	p_3 -> m_2
p/w		tupma ~ tumma [tuʔu ~ tumsu] (meet, join together) kʰapma ~ kʰamma [kʰawa - kʰamsu] (cry, make cry) epma ~ emma (stand, make stand)		CAUS	
p/pt	m/ms	tapma ~ tamma (fill, fill up)	[1]	CAUS	p_1 -> m_2
Ø-Ø	Ø-s	muma ~ mɨma [mɨa ~ musu] (fight, fight one another) numa ~ numa [nua ~ nusu] (be good, make better)	[2]	CAUS	$Ø_3$ -> $Ø_2$

Table 6.3: Irregular Verb Stem Alternations

Stem consonant pair		*Examples*	
m/ms↔p/pt	m_2↔p_1	kamma ~ kapma	[kamsa ~ kapta] ‘join, put together’
		remma ~ repma	‘sprinkle around, sprinkle’
ŋ/ŋt↔k/kt	$ŋ_1$↔k_1	aŋma ~ akma	[aŋtu ~ aktu] ‘tolerate, feel pain’
m/mt↔p/pt	m_1↔p_1	bumma ~ bupma	[bumtu ~ buptu] ‘fold’
		momma ~ mopma	‘lose sense, lose sense’
		bomma ~ bopma	‘put on top, cover’
		domma ~ dopma	‘be senseless, worship’
		pemma ~ pepma	‘press, be timid’
		bʰomma ~ bʰopma	‘make round, make bundle’

Semantics

The semantics of causative derivations must be understood as logical operations on verb roots.

As mentioned, the semantics of the t-derivation can be summed up with the acronym ABCD: applicative, benefactive, causative and directive. For the ABD parts of this acronym, the bottom line is that an extra actant enters the stage. The event denoted in the verb root is applied to this new participant. The agent or source of the resulting verb form is the same as that of the root.

The derivation rule (466) was formulated as a production rule forming an ABCD verb from a source verb. The operator morpheme in that derivation is <-t>, that could be glossed as ABCD if we see it as an independent morpheme. The transitiviser <-t> works as a functor, taking a verb root as input, modifying it phonologically and producing a new verb root with increased valency. The new participant takes the role of undergoer or patient in the new verb frame. The agent of the source is the same as the one in the target.

S-derivations and some of the t-derivations, however, are different in that the agent of the newly formed verb was not present in the original. The agent or cause is the new participant to the event[13]. The subject[14] of the source verb is moved into the causee of the target and the causer is the new participant. The patient marking on inflected forms of the resulting verbs agrees with the causee while the original direct object of this verb is shifted out of the agreement pattern. More of these semantic aspects will be discussed when all different causatives will be compared. See below.

6.3.2 Reflexes of the causativising prefix *s-

The prefix *s- with a directive or causativising function is extremely old and can be reconstructed to Proto-Tibeto-Burman (Watters 2004: 3, citing LaPolla). In most languages of the family, the prefix is no longer productive, but in languages all across the family fossilised pairs of verbs can be readily found in which the vocalism of the more transitive verb of a transitive vs. intransitive pair is attributable to a lost prefix *s-. Reflexes of the prefix <*s-> are harder to find in Bantawa verbs than in the Limbu verbal inventory (Michailovsky 1999). The following pairs emerge from our data:

d—dʰ		
<dam ~ dams>	<dʰam ~ dʰamsu>	‘thrash, throw to the ground’
<dan ~ dant>	<dʰan ~ dʰantu>	‘trip, bring down’
<di ~ dis>	<dʰi ~ dʰis>	‘reach, be tall’
k—kʰ		
<kon ~ kola>	<kʰon ~ kʰolu>	‘walk, move’
<kum ~ kumsa>	<kʰum ~ kʰumtu>	‘hide, bury’
p—bʰ		
<pin ~ pil>	<bʰin ~ bʰil>	‘squeeze, squeeze’

[13] Payne (1997: 176).

[14] The word ‘subject’ for verbs undergoing causativisation subsumes subject for intransitive verbs and agent for transitive roots. In causative derivations, verbs follow an accusative pattern.

t—dʰ		
<ten ~ tens>	<dʰen ~ dʰel>	‘fall over / uproot, uproot’
t—tʰ		
<tep ~ tept>	<tʰep ~ tʰept>	‘add, add to cooking food’

Remnants of this old process seem much more marginal in Bantawa than in Limbu (Michailovsky 1999), Thulung (Allen 1975) or Wāmbule (Opgenort 2002: 255-256). This may be partially due to replacement of old causatives, e.g. Michailovsky lists the pair *pɛːr* ‘fly’ ~ *pʰɛs* ‘cause to fly’ for Limbu, while in Bantawa the cognate verb *pinma*, *piʔa*, ‘fly’ has a new causative *pinma*, *pinsu*, ‘make fly’.

6.3.3 Complex causative predicates

In this section, two types of analytical causative construnctions will be discussed. Both involve a construction that combines a bare verb root with fully conjugated verb stem. That stem carries flection and agreement and indicates the type of causation, while the root verb brings the lexical meaning. The root verb functions as a deverbative complement noun in this type of construction. There are many examples of underived elements in exactly the same position, which naturally must lead to the conclusion that these regularly derived deverbatives and nouns are of one kind. For that reason, the use of deverbatives with *mett-* and *mu-* is discussed before the causatives are explored. The discussion of the verb *muma* continues in the section on reciprocals.

Muma and *metma* as light verbs

The verbs *muma* ‘to do’ and *metma* ‘to apply, to affect’ both occur independently. These verbs have no special formal characteristics but are special in function as they are the first choice for use in verbal constructions that operate on transitivity. Also, the verbs *muma* ‘to do’ and *metma* ‘to apply, to affect’ function in many constructions as a verbal host for agreement without further semantic import. In these constructions, the semantic content is expressed by a complement, cf. §7.3.1.

Muma The verb *muma* ‘to do’ is used for the analytical causative (§6.3.3) as well as for the reciprocal forms (§6.4.3). This verb *muma* also serves as an inchoative auxiliary (§4.2.2). In borrowing words from Nepali, the verb *muma* ‘to do’ serves as a host for finite flection.

(468) *muma* in Nepali loans

a. bakəs watni bənya mu-ma-ki ...
box (E) like *make (N)* do-INF-SEQ ...
‘Making it like a box, ...’

b. jupe mu-ŋ-ki
mutter (N) do-1s-SEQ
‘while I was muttering’

Any Nepali verb can be borrowed in the construction shown in (469):

(469) Syntax of Nepali verb loans

- Nepali second perfect participle[15] + finite form of *muma*
  <root>-*e muma*

This usage of *muma* 'to do' is best understood as only an instance of a more general auxiliary function for making verbs out of nouns (see 470).

(470) *muma* as a light verb

a. yɨŋ mɨ-lat-Ø dowa-ci puja mɨ-mu-Ø, maŋ mɨ-mu-Ø.
prayer 3pl-take.out-NPT sorcery-PL *worship (N)* 3pl-do-NPT godhead 3pl-do-NPT
'They pray, the priests do the ritual, they do the ritual.'

b. heŋmawa mu-ma tərika onŋa.
liquor do-INF *method (N)* only
'This much only is the way to make liquor.'

Metma The verb *metma* 'to apply, to affect' is used for the analytical causative (§6.3.3) as well as for impersonal constructions (§6.1.3). Independently, *metma* 'to apply, to affect' can be glossed as 'to apply', indicating that a property or action applies to a recipient, an undergoer. The verb *metma* 'to apply, to affect' contrasts with *muma* 'to do' in that there is necessarily a recipient of the action.

(471) ə̃ ɨŋka abo o-ko pala-da-ŋka-ŋa kʰana-lai puja met-na-ne
yes I *now (N)* this-ref *turn (N)*-LOC-ABL-EMPH you^{s}-DAT *worship (N)* cause-2P-OPT
ni lo-Ø-ki-na mo-ko əməla-raŋ bʰen-da kʰar-a-ki-na
NAR say-3P-SEQ-TOP that-ref *lemon (N)*-plant root-LOC go-PT-SEQ-TOP
ɨ-pa-ʔa caɦĩ rãga-ci bʰale-ci
his/her-father-ERG *swTOP (N) buffalo.bull (N)*-PL *rooster (N)*-PL
tʰakt-u-ci-ki-na puja mett-u.
bring.up-3P-DUP-SEQ-TOP *worship (N)* cause-3P
'Now, let me worship you right from this time, he said, and going to the foot of the lemon tree, her father brought up buffalo bulls and roosters, and worshipped.' [Gn]

If we contrast example (471) with (470a), we see that in both these constructions, the noun *puja* 'worship' is a kind of complement of the verb. However, the semantic make-up of the sentences are different. The verb *metma* 'to apply, to affect' agrees with the recipient of the worship, while the verb *muma* 'to do' in this usage preferably conjugates intransitively.

The verb *metma* 'to apply, to affect' also appears in different idiomatic expressions, e.g. *caha metma* 'to want', cf. §6.1.3, e.g. (433a). Impersonal examples are found in §6.1.3, e.g. (427a, 428a, 430a).

[15] The Nepali second perfect participle is formed with a <-e> or <-ya> suffix after the past tense stem (Clark 1989: 234).

Status of complements of *muma* and *metma* The status of the complements to *muma* 'to do' and *metma* 'to apply' is rather special. a) There is never any kind of agreement with these complements in the agreement affixes present on the finite verb, as we saw above. If there is agreement, it is with participants in the verb phrase. b) Where there are no intervening prefixes, there is a tendency to pronounce these verb complements as one single word with the verbal root, such that they could be written together, viz. *maŋmuma* 'to worship', *jupemuŋki* 'I muttered'. c) For these forms, we have a clear intuition that these are lexical units rendering a single semantic concept.

These facts lead me to give these complements a special label, viz. 'verbal complement'. Verbal complements will be treated more elaborately in §7.3. The complement roots in the causative constructions discussed below, behave the same way in phonological and morphological respect as the ordinary complements to *muma* 'to do' and *metma* 'to apply' discussed above.

Analytical causatives with mett-

The periphrastic analytical formation of verbal causatives is done as follows. An pre-consonantal stem of a verb is placed in front of a fully transitively inflected form of the verb *metma* 'to apply', then operating as a grammatical causative marker <mett ~ met> (CAUS).

marker	*gloss*	*function*
<Σ> <metma>	<Σ> CAUS	analytical causative

The ensuing composite form can generally be rendered as 'to cause to X'. The way this causative is understood ranges from 'to force to X' to more neutral translations such as 'to make X'.

(472) kaci mu-met-ma
work do-CAUS-INF
'make s.o. do the work'

On structure and word-hood Analytical causatives of this kind can be understood as a verbal complex, where the second verb takes the embedded verb as an argument. This reflects the semantic relationship (see below) in which, obviously, the meaning of the embedded verb is sunk into the matrix.

The two verbs form one verbal complex, but only the second verb is conjugated. The person and number agreement markers on the second verb correspond to the causer as agent agreement and to the causee in patient agreement. The two roots fuse into one phonological word, but not when prefixes on the second verb intervene. Verbal prefixes introduce a word boundary with the result that the embedded word splits off (476).

(473) belun mut-met-ma
balloon blow-CAUS-INF
'make someone blow up a balloon'

(474) iŋka-ʔa cʰa-ci belun mut-mett-u-ŋ-c-u-ŋ.
I-ERG child-PL balloon blow-CAUS-3P-1s-DUP-3P-1s
'I let the children blow up the balloon'

(475) kʰat-met-ma[16]
take-CAUS-INF
'to let take'

(476) kʰat i-mett-a-c-u
take 3AM-CAUS-PT-DU-3P
'he let them take it'

Semantics The following examples will help the discussion. Examples (477) are analytical causatives. In contrast, the examples in (478) are lexical s-derivations (§6.3.1): *canma* 'to make eat' derives from *cama*, and *kʰanma* 'to send' derives from *kʰatma* 'to go'.

(477) Analytical causatives with mett-

a. jəbər ca i-mett-aŋ
force (N) eat 3AM-CAUS-1s
'he forced me to eat'

b. kʰaŋ-met-ma
see-CAUS-INF
'to show'

c. ca-met-ma
eat-CAUS-INF
'to make someone eat' (*खान लगाउनु (N)*)

d. kʰat-met-ma
go-CAUS-INF
'to make go'

e. ram-ʔa i-nicʰa-ci-lai kaʈʰmaɳɖu-ya kəmpyuʈər
Rām-ERG his/her-younger.brother-PL-*DAT (N)* Kath.-LOC.level computer
kʰit-si kʰat-mett-u-ci
buy-SUP go-CAUS-3P-DUP
'Rām made his younger brothers go to Kathmandu to buy a computer'

(478) Lexical causatives with s-derivation

a. momo can-na
momo feed-2P
'I shall give you momos to eat'

b. momo can-ma ni mit-na-ŋ-na
momo feed-INF REP think-2P-PROG-2P
'I have the idea to give you momos to eat'
म तपाईँलाई मःमः खुवाउनु विचार गर्छु (N)

[16] *kʰatmetma* is ambiguous between 'let take' and 'let go', but is usually understood as the first.

c. ram-ʔa ɨ-nicʰa-ci-lai kaʈʰmaɳɖu-ya kəmpyuʈər
Rām-ERG his/her-younger.brother-PL-*DAT (N)* Kath.-LOC.level computer
kʰit-si kʰaĩs-u-ci
buy-SUP send-3P-DUP
'Rām sent his younger brothers to Kathmandu to buy a computer'

(479) T-derivations are not causatives

a. catma pɨma (<*ca 'eat')
'to eat for someone else'

b. tɨ-catt-a-ŋ pɨ-a-ŋ
2AS-eat.BEN-PT-1s give-PT-1s
'You ate it for me, you have eaten my food!'

c. kʰatt-u
take-3P
'he took it' (<*kʰat 'go')

Where causative constructions of the analytical kind compete with alternative shorter lexical constructions as described above, the connotation of involuntariness and remoteness of the causer and causee are obvious. This is consistent with the iconicity principles governing different types of causatives. There is a strong relationship between the conceptual integration of cause and effect, and the structural integration. The difference can be expressed in terms of direct and indirect integration. 'Direct causation is where the causer is directly, instantly and probably physically responsible for the effect' (Payne 1997: 181). Thus, the first examples with *metma* 'to cause' leave more room for protesting by the causees than the latter ones.

(480) There are at least three different ways in which the relationship between structural and conceptual integration is instantiated:

a. Structural distance

b. Finite vs. non-finite verb forms

c. Morphological case of the causee [(Payne 1997: 182), also (Givón 2001: Ch.12)]

For the analytical causatives with *metma* 'causative', there is less control of the causer over the events to occur. This results in readings with connotations of forceful causation, see samples (477), but not necessarily in a negative sense, e.g. *kʰaŋmetma* 'to show'. The s-derivations in (478) are structurally more closely integrated, resulting in more immediate causation: *cama* 'to eat' → *canma* 'to feed' and *kʰatma* 'to go' → *kʰanma* 'to send'. The t-derivations in (479) seem, on this scale, to be more closely integrated still if and when they are interpreted as causatives. The object is controlled completely by the causee or agent of the resulting verb. It is instructive to see the different derivations of some verbs next to one another.

(481) to eat

a. cama *root*
'to eat'

b. canma$_2$ *s-derivation*
'to feed'

c. catma$_1$ *t-derivation*
'to eat for someone else'

d. cametma *morphological causative*
'to make eat'

(482) to go

a. kʰatma$_3$ *root*
'to go'

b. kʰanma$_2$ *s-derivation*
'to send'

c. kʰatma$_1$ *t-derivation*
'to take'

d. khatmetma *morphological causative*
'to make go'

We are now able to analyse the difference in meaning between s- and t-derivations in terms of control. Derivations in <-t> generally signal more direct control of the agent over the object. As a result, if derivations in <-t> have a causative reading and an s-derivation alternative, the object is as a rule inanimate for the t-derivations.

Analytical causatives with *muma* <mu ~ mus->

Apart from the very productive causative in *metma* 'causative', there is a morphological operation with verb *muma* 'to make do', which is the s-derivation of *muma* 'to do'. Formally this causative aligns with the derivation by *metma* 'causative'.

marker	*gloss*	*function*
<Σ> <muma>	(Σ) MAKE.DO	analytical causative with mus-

The resulting participant reorganisation of this causative contrasts with that of the causative formed with *metma* 'causative'.

(483) kʰaŋmuma

a. kʰaŋ-mu-ma
see-make.do-INF
'to display' (*देखाउनु, प्रदर्शन गर्नु (N)* 'to show, to display, to exhibit')

b. o dum kʰaŋ-mus-u-ŋ
this thing see-make.do-3P-1s
'I put that on display'

(484) kʰaŋmetma

a. kʰaŋ-met-ma
see-CAUS-INF
'to show' (*देखाउनु (N)* 'to show')

b. ʔo dum kʰaŋ-met-na
this thing see-CAUS-2P
'I show that to you'

Remarkably, the agreement the agent of *kʰaŋmuma* is reflected as the displayer, and the patient is the object on display. The agent of *kʰaŋmetma*, however, is the causer of the seeing, while the patient is the seer. The thing on display can still be added to the clause in absolutive case.

The causatives in *muma* 'make do' are probably not strictly causatives in the sense that someone is *caused to do X*, but rather something is *caused to be Xed*. The agent of the action is not mentioned. Rather, in the agreement pattern, the agent is replaced by the causer. These forms can be described as passive causatives.

The agent argument of both causatives causes the event as denoted by the root verb to happen. However, the causative verb *metma* 'causative' expresses that the agent causes someone to be the subject[14] of the root verb, while the passive causative verb *muma* 'make do' expresses that the agent causes someone to be the object of the root verb. Actants that are not included in the resulting causative formation, i.e. not in the morphological agreement, can be realised as an extra participant in the absolutive case for *metma* 'causative', as is in fact the case in example (484b), or in an oblique source case, i.e. ablative, for the passive *muma* 'make do'.

The causatives in *muma* 'make do' can again be reflexivised by the ordinary morphological means. In this case, my informant's intuition prescribed that the constituents be written as two words, which may be explained by the weight of the resulting matrix verb.

(485) kʰaŋ mumancin 'to show oneself'

a. kʰaŋ mu-ma-n-ci-n
see make.do-INF-REFL-DUP-REFL
'To appear, to show oneself'

b. kʰaŋ mu-ŋaŋ-ci-ŋ.
see make.do-1sNP-DUP-1s
'I shall show myself.'

In summary, it appears that the verb *muma* 'to do' is an auxiliary verb that forms the verbal nucleus of verb phrases that denote actions named by a nominal or deverbal root. The causative of *muma* 'to do' is *muma* 'make do'. This causative involves someone else who is caused to do what is further circumscribed by a deverbative root that is prefixed to the inflected verb root. Yet another usage of *muma* 'to do' as a sort of catch-all auxiliary verb to describe actions that have no independent verb root is further discussed in the chapter on reciprocals, cf. the next section.

6.4 Valence decreasing operations

6.4.1 Passive

Bantawa does not have a passive construction as such. There are several means to express passive meanings, however. The passive function here is understood to a) leave out the agent of the verbal event, demote it or leave it out, and b) turn the patient into the subject of the clause.

Middle conjugation As we saw in §6.2.1, a passive form for a verb is readily available for middle verbs, i.e. an intransitive conjugation of the verb immediately turns the transitive patient into the subject of the sentence without mention of the agent.

First person inclusive plural

First person inclusive plural as default agent For active verbs that have no natural middle conjugation, an alternative means to render passive is to use first person inclusive plural forms to express things that would otherwise be put in a passive form. A sentence that literally would translate 'we do ...' often must be translated as 'one does ...'. The first person inclusive plural serves as the impersonal pronoun, much like *on* in French or *men* in Dutch.

(486) lɨttɨm tokt-in.
guava receive-12plSP
'You can get guavas.'

(487) dekinalo ni yɨŋ-in-nalo yɨŋ-ma dat-Ø-nalo o cakwa
because NAR say-12plSP-COND say-INF be.seen-NPT-COND this water
jətika kʰepi tatəi li-Ø ʔa, mo lat-ma kʰat-ma
how.much (N) time *hot (N)* become-NPT EMPH that take.out-INF take.away-INF
yak-ma dot-Ø.
be.in-INF must-NPT
'Because, we say, one should say, every time that water gets hot, you must continuously throw it out.' [Hm]

The strategy is to conjugate a transitive verb in the inclusive plural intransitive form. The resulting meaning is that of an impersonal action: the inclusive plural person is the impersonal, default person.

First person inclusive as default patient Similarly, the inclusive plural can be construed as the patient in a construction with a third person agent. Forms that correspond to 'it happens to us' then amount to 'it is done ...', cf. (488). In impersonal constructions with an anonymous agent, the patient corresponds to a passive undergoer, the typical subject of a passive clause. For verbs such as *hɨtma* 'to scorch', the forms with first person plural patient pattern with dummy subject forms in English, such as 'it rains'.

(488) nam-ʔa mɨ-hɨt-yaŋ
sun-ERG 3pl-burn-PROG
'The sun is burning.' (lit. 'the sun scorches us')

(489) kʰo-so-ʔo deŋ kʰokpa yɨŋ-a ni mɨna nulok cɨ-n-nalo,
he/she-PRN-GEN back old.man say-PT NAR man well do-12plSP-COND
sɨ-n-da-n-nucʰaŋa la-ma-hɨŋ-ma topt-u-m-ʔo
die-12plSP-eff-12plSP-even.though return-INF-live-INF receive-3P-12plA-NOM
rəcʰə.
MIR.
'After this, the old man said: "it appears, that if a man does well, even though he dies, he will get to live again." ' [Om]

Inclusive plural forms serve as impersonal forms and are used to form generic statements without a specific object. However, it is more correct to say that antipassive forms, i.e. those without specific object, have come to serve as inclusive plural forms.

In the transitive paradigm, the first person non-singular exclusive forms are typically formed by adding <-ʔa ~ -ka> (E) to the form to the first person plural inclusive forms. The inclusive plural patient forms are the exception to this general scheme. These forms select the third person plural prefix <mɨ-> (3PL) only, and therefore are formally equal to third person plural forms of the intransitive or to third person plural antipassive forms. This formal correspondance is not an accident because the first person inclusive patient frequently has the reading of the default, impersonal person. Most often, 3→ip forms are understood as having no object at all.

Third person plural agent

Another strategy to express a passive meaning is to choose a third person plural agent and then not mention the agent explicitly.

(490) nɨ-kʰatt-a-ŋ.
3A-take-PT-1s
'I was taken.' (lit. they took me)

(491) ɨ-ser-a.
3AM-kill-PT
'He was killed' (lit. they killed him)

There are no further morphosyntactical complications with this usage of dummy third person plural agent forms.

6.4.2 Reflexives

Reflexive morphology is applied to transitive verbs only. Transitive verbs code a verbal event that has both an agent and a patient. Reflexive forms express that the agent and patient participants are the same by identity. In plural forms, some speakers allow for a reciprocal interpretation of reflexive forms, which is not

unnatural if we consider the definition of the reflexive. Nevertheless, most speakers have separate reflexive and reciprocal forms in their repertoire. Reflexives can be used in all available finite and non-finite forms for a verb. The formation of the reflexive has been discussed in §4.5.6.

6.4.3 Reciprocal

Reciprocal with complement and *muma*

Reciprocal verbs are formed by taking a bare verb root and using it as a complement to the auxiliary verb *muma* 'to do'. The auxiliary verb is conjugated intransitively. The verb root must be transitive or else there could be no reciprocity.

marker	*gloss*	*function*
Σ mu-	Σ RECIP-	Reciprocal root, 'to X one another'
Σ-ka-Σ mu-	Σ-RECIPP-Σ RECIP-	Reciprocal, emphatic: 'to X one another'

The Σ-ka-Σ forms are best understood as a complex complement to the verb, a participle consisting of reduplicated root with the active participle prefix <ka-> wedged in between. There is no semantic difference between the two variants, but the participial forms more iconically express the reciprocity of the action and perhaps repetition.

While preferably and most meaningfully the reciprocal only occurs in plural forms, it is not illegal to use singular forms. Singular forms signal that the action is repetitive and transitive, i.e. someone unmentioned is returning the action.

(492) simple reciprocal

a. Cino cʰok-muw-a-ci di bʰəne jəigəla-buŋwa əni
gift (N) move-RECIP-PT-DU what *saying (N)* jəigəla-flower *then (N)*
doŋ-kʰola doŋ.
mouth.harp-cover mouth.harp
'Sending presents, what to say, a *jaigala* flower and a mouth harp with a cover.' [Sm]

b. masɨŋ pasɨŋ cʰit-muw-a-ci.
wife husband leave.for.someone.else-RECIP-PT-DU
'The couple split up.'

c. kʰon-ki-na pɨ-muw-a-ci kʰo-da-ŋka cino pəhile
he/she-SEQ-TOP give-RECIP-PT-DU he/she-LOC-ABL *gift (N) before (N)*
pɨ-muw-a-ci-kina niŋa no-ka-no muw-a-ci
give-RECIP-PT-DU-CAUS mood be.happy-RECIPp-be.happy do-PT-DU
'Then, they gave it to one another. After they had given it to one another, they liked one another.'

(493) extended (participial form) reciprocal

a. mok-ka-mok muw-a-ŋ-a.
beat-RECIPp-beat do-PT-PROG-PT
'He was in a fight' (beating and being beaten)

b. lak lu-kʰa-da bihe mɨ-mu-Ø. niŋa
religious.dance feel-PNOM-LOC *marriage (N)* 3pl-be.pred-NPT mood
no-ka-no mɨ-mu-Ø, warisa tʰaŋna-ci.
be.happy-RECIPp-be.happy 3pl-be.pred-NPT girl young.man-PL
'On the dance floor they get engaged. They like one another, the young girls and boys.'