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## Chapter 2 The Lexicon and Predicate Formation

### 2.1 The Kankanaey lexicon

Kankanaey lexical items may be syntactically categorized as content or function lexemes. Content lexemes include roots in both open and closed categories. The first section of this chapter deals with open classes of content roots. Small closed classes of independent syntactic standing, comprised of adverbs, modals and semantic particles, are discussed elsewhere, as are function lexemes, including conjunctions, determiners, interrogative markers, and a wide array of inflectional and derivational affixes.

#### 2.1.1 *Roots*

As in other Philippine languages, many Kankanaey content roots allow both referring and predicating usages, depending on the affixation. This study considers the roots to be pre-categorical as far as syntactic category or “part of speech” is concerned. Content roots are divided into broad categories—classes, properties, statives (including perception statives), actions and physicals. Erstwhile ‘nouns’ are termed ‘classes’ to reflect the fact that when they function as predicates they indicate a classification rather than an object instantiating that classification. Physicals are given a separate classification because they involve their participant in self-affecting ways. They also take unique predicating affixes, as will be seen in §2.2 on predicate formation.

Phonologically, Kankanaey has only two syllable types—CV and CVC. Glottal stops are not orthographically represented when intervocalic or word-initial, and cannot occur syllable-final. In this study, they are written only word-medially after another consonant, or when relevant to the discussion.

Table 2.1 lists the Kankanaey lexical content categories.

**Table 2.1. Lexical root categories in Kankanaey**

Class
Property
Stative
Perception-stative
Physical
Action

#### 2.1.1.1 Class roots

Following Reid's label (2004:436) class roots indicate a class of entities by physical or other sensory characteristics. Typical examples are seen in Examples 1) to 3).

- 1) *babai*  
'female, especially human'
- 2) *beey*  
'house, home of person or animal; container where something is usually kept'
- 3) *begas*  
'hulled rice'

#### 2.1.1.2 Property roots

Property roots indicate an essential characteristic, such as size, color, texture etc.

- 4) *em?ek*  
'soft (easily cut)'
- 5) *emis*  
'sweet, tasty'
- 6) *ando*  
'tall, long'

#### 2.1.1.3 Stative roots

Stative roots indicate a changeable physical condition, not necessarily permanent. States that specifically follow a change induced by an outside effector are termed result-stative roots in the discussion.

- 7) *tey*  
'dead'
- 8) *gadgad*  
'mangy'
- 9) *kemi*  
'dented in, partially crushed'
- 10) *beteng*  
'drunk'

#### 2.1.1.4 Perception-stative roots

Perception roots indicate a perception by an animate being, including physical, emotional and mental perception-states. Because animate beings are able to actively perceive, with control, intent and cognition, these roots may form predicates of a wider range than those based on simple stative roots.

11) *ila*

‘see, look at’

12) *bongot*

‘angry’

13) *kibtot*

‘startled’

14) *kiyapot*

‘rushed, stressed’

#### 2.1.1.5 Physical roots

Physical roots indicate movement and position—natural movements as well as body movements and positions. (They do not include body functions.) These roots may denote a location or direction as in 15) to 18) or indicate manner of movement, as 19) and 20).

15) *tedted*

‘drip’

16) *ali*

‘move toward speaker, come’

17) *saa*

‘go home’

18) *balalong*

‘move downwards, descend’

19) *sekad*

‘stamp, stomp’

20) *tagtag*

‘run’

### 2.1.1.6 Action roots

Action roots indicate activity by an animate, usually intentional participant. Some action roots denote the trajectory of that action to a second participant; some specify a participant as an entity involved in the action but not as the end-point. Rather than a generic type of action root modified by phrases, Kankanaey uses roots that are highly specific as to manner of action and properties of the target of the action, giving an undergoer-orientation that fits well with the ergative syntactic alignment. The specificity of Kankanaey roots may be noticed in many of the examples that follow.

21) *togda*

‘eat lunch’

22) *tilid*

‘carry something on one shoulder’

23) *tobʔong*

‘put a relatively small amount of something into a relatively large amount of water’

24) *todyok*

‘jab or poke upwards at something’

### 2.1.2 Word-building processes

#### 2.1.2.1 Reduplication

Several types of reduplication are used to build words in Kankanaey<sup>8</sup>. Reduplication may be applied to unaffixed or affixed roots, and involve either the first CV, CVC, or CV(C)CV, with different functions expressed by each type. These functions will be explained in §2.2 on predicate formation; the examples in **Error! Reference source not found.** to **Error! Reference source not found.** are not exhaustive. Intervocalic glottal stops (required) have been shown where relevant.

25) *beey* ‘house’ + CV- → *bebeey* ‘houses’

26) *padas* ‘try’ + CVC- → *padpadas* ‘experiences’

27) *saʔig* ‘stack in rows’ + CVC(C)V- → *saʔisaʔg* ‘stacking more and more rows’

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<sup>8</sup> Kankanaey has numerous roots whose canonical shape contains apparent reduplication. Some of these irreducible roots consist of two identical syllables, as in *taktak* and *baba*. Other roots, such as *togingging* and *wagawag*, have two identical syllables with an apparent prefix or infix. These roots do not exemplify reduplication as a word-building process.

### 2.1.2.2 Prefixes

Many predicating and nominalizing affixes are prefixes, attaching directly to the front of the root as in 28). Most reduplicative affixation applies before prefixation, as seen in the derivation in 29), but some functions of CVC reduplication are applied to already-prefixed stems, as seen in the derivation in 30). (See Lawrence Allen, 1980 and Paterson, 2007, for fuller analyses.) Some roots drop their first vowel when prefixed, as in 31), where the glottal then metathesizes with the second consonant under phonological constraints. With one-syllable or vowel-reduced roots, reduplication is applied after the predicative affixation. The derivation in 32) gives an example.

- 28) *tokdo* ‘sit’ + *ka-* → *katokdo* ‘seat-mate’  
 29) *beteng* ‘drunk’ + *CV-* + *na-* → *nabebeteng* ‘was drunk’  
 30) *geyek* ‘tickle’ + *ma-* + *CVC-* → *magmageyek* ‘ticklish’  
 31) *?emis* ‘sweet, tasty’ + *ma-* → *mam?is* ‘sweet, tasty’  
 32) *tey* ‘dead’ + *ma-* + *CVC-* → *matmatey* ‘dying’

### 2.1.2.3 Suffixes

Two predicating affixes are suffixes, *-en* and *-an*. Some roots drop their last vowel when suffixed, as in 33).

- 33) *dateng* ‘arrive’ + *-an* → *datngan* ‘come upon, find’

### 2.1.2.4 Infixes

One predicating affix, *<om>* and a perfective affix *<in>* are infixed following the first consonant of the root. Two examples are seen in 34).

- 34) *?ayos* ‘flow down’ + *<om>* → *?<om>ayos* ‘flows down’  
*kaan* ‘remove’ + *<in>* → *k<in>aan* ‘removed’

Reduplication precedes the predicating infixation, which precedes the aspect infixation, as seen in 36), the step-by-step construction of the word *pinmanapanakpak*. (Vowel reduction occurs when the two infixes co-occur before a vowel, thus *<in>* + *<om>* → *<inm>*). In 36), the reducible vowel in the root re-orders the reduplication to follow predicating affixation.

- 35) *panakpak* ‘hit with slapping sound’  
 + *CVCV-* → *panapanakpak*  
 + *<om>* → *pomanapanakpak*  
 + *<in>* → *pinmanapanakpak* ‘was repeatedly hitting/slapping’

36) *betak* ‘explode’

+ <om> → *bomtak*

+ CVC- → *bombomtak*

+ <in> → *binombomtak* ‘were exploding’

A few highly marked affixes include an infixated glottal stop before the second vowel, as in 37).

37) *banga* ‘pot’ + CVC- <?> → *bangbang?a* ‘little old pots, toy pots’

### 2.1.2.5 Circumfixes

A number of affixes have two parts, a prefix or infix and a suffix (most often *-an*). The functions of these circumfixes are unique, not a sum of the functions of the two parts. They are tagged by glossing the prefix or infix, and using a left-pointing chevron for the suffix. Two examples are seen in 38).

38) *ila* ‘see’ + *ka-...-an* → *ka-ila-an* ‘appearance’

NOM-see<

*oto* ‘cook’ + *i-...-an* → *i-oto-an* ‘cook for someone’

UNDD-cook<

### 2.1.2.6 Co-occurring affixes

A few prefixes can occur in combination with other prefixes or infixes at the front of the root. One of these, the prefix *i-*, has several functions, one of which is to indicate the presence of a second argument as in 39). Other more specialized prefixes include those exemplified in 40).

39) *payag* ‘set down’ + *ka-* + *i-* → *kaipayag* ‘set it down suddenly’

40) *ila* ‘see’ + *man-* + *asi-* → *man?asiila* ‘see each other’

*ila* ‘see’ + *man-* + *pa-* → *manpaila* ‘appear, show oneself’

*esa* ‘one’ + CVC- + *mang-* + *i-* + *pan-* → *mangipan?es?esa* ‘concentrate on it’

As has been shown, the mechanics of word formation in Kankankaey is complex and multi-functional. The semantics and subsequent syntactic constructions utilizing these complex words will be covered in the next section and in the following chapters.

## 2.2 Predicate formation

VVLP (1997: 154) notes that "the information contained in lexical entries is very important, as it consists of the crucial semantic, morphosyntactic and other properties which

determine how a lexical item will behave grammatically. The logical structure of the verb is the heart of its lexical entry." As detailed in §2.1.1 above, the lexicon of Kankanaey is arranged by root morphemes, and indicates the crucial semantic properties of each root.

Kankanaey roots depend on affixation to license their function in a phrase or clause. This section deals with predicate formation, the process that creates a word that is able to function grammatically in its context, although it does not specify what that function is. Predicating affixes abound in Kankanaey, and may license a word to either predicate or refer, depending on the construction in which it appears. The predicates that each may form are a function of the interaction of affixation with the properties of the root that are relevant in each specific context.

One system of classifying predicates in terms of event semantics is *Aktionsart*, proposed by Vendler (1967), which categorizes states of affairs by whether they are ‘happenings’ or static situations, and distinguishes the ‘happenings’ by their temporal properties and the dynamicity of the event. VVLP (1997) and Van Valin (2005) expanded the list of categories to reflect resultant situations, adding semelfactives and complex predicates—active accomplishments and causatives. To accommodate the full range of predicates, this study includes classificational and attribute predicates as subtypes of states.

### 2.2.1 *Aktionsart logical structures*

Table 2.2. Predicate types in Kankanaey

<i>Aktionsart</i> class	Logical Structure
CLASS/ATTRIBUTE	<b>be'</b> (x,[root'])
EXPERIENCE-STATE	<b>feel'</b> (x,[root'])
STATE	<b>root'</b> (x,(y))
PROCESS	PROC <b>root'</b> (x)
ACHIEVEMENT	INGR <b>root'</b> (x)
ACCOMPLISHMENT	PROC + INGR <b>root'</b> (x)
SEMELFACTIVE	SEML <b>root'</b> (x,(y)) SEML <b>do'</b> (x, [root' (x,(y))])
ACTIVITY	<b>do'</b> (x, [root' (x,(y))])
ACTIVE ACCOMPLISHMENT	<b>do'</b> (x, [root' (x,(y))]) & INGR <b>root'</b> (z, x,) or (y)
CAUSATIVE	$\alpha$ CAUSE [root' (x,(y))] where $\alpha$ is an unspecified predicate



*Aktionsart* predicate classes are shown in Table 2.2. Their labels have been adapted for Kankanaey to account for morphosyntactically consequential generalizations and distinctions. *Aktionsart* predicates are described in terms of their ‘logical structures’ (LS) which include the minimum number of semantic arguments that each predicate may require. The following discussion includes the representation of these logical structures. The conventions of LS representation include predicates in boldface with a prime (in Kankanaey these are root categories), predicate modifiers in all caps, arguments as x, y, z, etc., and parentheses and brackets enclosing arguments of the predicate(s).

### 2.2.2 Tests for *Aktionsart* classes

The *Aktionsart* classes may be determined in any given language by tests that isolate relevant semantic features of each class. The tests used for Kankanaey are adapted from VanValin (2005: 35-40).

Table 2.3. Kankanaey Tests for *Aktionsart* classes

Criterion	State	Achiev	Seml	Process	Activity	Act- Accomp	Causative
1. CVC interpretation	-	plural	iterative	progress	progress	progress	+/-
2. CV	+	-	-	-	-	+	+/-
3. Pace modifier	-	-	-	+	+	+	+/-
4. Time designation	FOR	AFTER	FOR	FOR	FOR	AFTER	+/-
5. Stative modifier	+	+	-	-	-	+	+/-
6. ‘Cause’ paraphrase	-	-	-	-	-	-	+
7. Negator	<i>baken</i>	<i>adi</i>	<i>adi</i>	<i>adi</i>	<i>adi</i>	<i>adi</i>	<i>adi</i>

Tests 1 and 2 ask whether the predicate occurs with temporal aspect marking. In Kankanaey, CVC reduplication serves several functions, among them indicating progressive aspect. The availability and function of CVC reduplication is crucial to answering Test 1, as it must read iteratively for semelfactives, as an ongoing situation for activities and changes of

state, and indicate plurality for achievements. Test 2, unique to Kankanaey, asks whether the predicate occurs with CV reduplication, which generally indicates continuity in terms of duration of a temporary static situation, including the relevant effect of actions, providing evidence for the presence of a state predicate in the semantic structure.

Test 3 asks whether expressions of pace can co-occur with the predicate. Such ‘pace’ designations exclude stative and punctual predicates. Kankanaey has very few adverbs, none regarding pace; modifying pace verbs however can be used for Test 3. The tests suggested for English (Van Valin 2005) include ‘manner’ adverbs such as ‘vigorously.’ but no general verbs of manner such as ‘do vigorously’ have been attested in Kankanaey. A reduplicative ‘intensive’ affix (CVC(C)V) can intensify either vigor or repetition. This affix may differentiate predicates with an activity component but is not crucial, as other tests also provide sufficient contrasts.

A time word with the indefinite oblique marker *si* can indicate duration if the predicate allows duration. If the predicate is punctual, it indicates the time span before the event. Test 4 asks how time designations interact with the predicate in question—whether the time phrase will indicate duration (‘FOR x minutes’) or end-point (‘AFTER x minutes’) in relation to the predicate. Kankanaey does not have prepositions parallel to the English ‘for,’ ‘in’ or ‘after,’ so this test only asks for the interpretation. Time duration of a state of affairs that culminates in an end-point is not expressed as a phrase within the clause.<sup>9</sup> Thus no test is available in Kankanaey to identify predicates that involve both duration and an end-point.

Test 5 asks whether a predicate can be used as a stative modifier. It identifies process, semelfactives and activities as those that cannot be so used. Relative clauses formed with passive constructions are ideal for examining this criterion, and §2.3.4.1 includes examples of stative modification.

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<sup>9</sup> Natural modes of expression are exemplified by the following sentences:

- 1) *At?atik di maobla mon enggay piga ay agew asi ma-kdeng.*  
 little RMI work but even how.many LK day and.then UNDS-finish  
 ‘There is only a little work to be done, but still it will be several days before it’s finished.’
- 2) *Man-balin na ay tapey ma-pa-labas di esa=y bowan.*  
 ACT-turn.into DEM1I LK wine UNDS-CAUS-pass RMI one=LK month  
 ‘This will turn into wine (when) one month has been allowed to pass.’

Test 6 asks whether the predicate can be paraphrased with ‘cause’. Although Kankanaey has an overt ‘cause’ prefix that easily identifies many causative predicates, causative predicates that are not morphologically marked may be identified by this test.

Test 7, also unique to this study, asks for the form of negator that is used with the predicate, since Kankanaey has two forms, *adi* and *baken*, that modify different predicate types. This test uncovers state predicates.

The following sections look at each type of predicate with its logical structure and examine how Kankanaey builds such predicates.

A note is in order here for understanding the glossing. One syntactic function of predicating affixation is to index one argument of the predication. This function depends not only on the predicate type but also on factors that range from phrase and clause formation to discourse-level considerations. The tags for the affixes reflect this indexing function, as will be clarified in later chapters. The examples will include tags to identify the relevant affix. Affixation that is irrelevant to a given example may not be separately identified.

Table 2.4 lists the basic predicating affixes of Kankanaey and indicates the number of arguments they allow. This number will not be greater than the number of arguments in the logical structure. (A few exceptions such as weather predicates will be noted as needed.) The table also includes a second form for each affix that includes perfective aspect. Some morphophonemic processes create alternate forms.

**Table 2.4. Basic predicating affixes in Kankanaey  
including perfective aspect**

1 Argument	2-3 arguments
<i>man-</i> , <i>nan-</i>	<i>i-</i> , <i>in-</i>
<i>maN-</i> , <i>naN-</i> <sup>10</sup>	<i>-en</i> , <i>&lt;in&gt;</i>
<i>ma-</i> , <i>na-</i>	<i>-an</i> , <i>&lt;in&gt;...-an</i>
<i>&lt;om&gt;</i> , <i>&lt;in(o)m&gt;</i>	<i>i-...-an</i> , <i>in-...-an</i>

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<sup>10</sup> *N-* represents a nasal consonant that replaces the first consonant of the following morpheme and assimilates to its place of articulation: bilabial, alveolar, or velar (includes *ʔ*).

### 2.2.3 *Identificational and attribute state predicates*

State predicates depict states of affairs that are static and atelic. This section covers identificational and attributive state predicates that are unaffixed. They are subtypes of *Aktionsart* states.

#### 2.2.3.1 *Identificational states*

Identificational states have the logical structure **be'(x, [class'])** .

The single argument is an entity being identified by the predicate. These states are formed with class roots and no affixation. The class root indicates a classification and does not refer to any particular instance of that class, as in 41) and 42). Overt plurality is not normally expressed in identificational state predicates. Membership in a classification reflects an inherent state of affairs, and CV-reduplication does not apply. Negation of identificational predicates is expressed by *baken*, as in 43). (Note: see p. xii-xiv for abbreviations on the gloss lines).

41) *Babai        din        anak = da.*  
female/girl RMd child = 3pII  
'Their child is a girl.'

42) *Anak = mi    si        Martin.*  
child = 1pII PRM Martin  
'Martin is (one of) our child(ren).'

43) *Baken    anak    si        Marjane.*  
NEG child PRM Marjane  
'Marjane is not a child.'

#### 2.2.3.2 *Attribute states*

Attribute states have the logical structure: **be'(x,[property'])**.

The single argument is an entity bearing the specific individual-level property denoted in the root. Attribute states do not occur with time phrases or with reduplication that indicates time duration. These predicates are formed with two classes of property roots—a small group that takes no affixation to form attribute state predicates, and those that take predicating affixes. Many in the first group of unaffixed state predicates begin with the letter *a*, leading to a speculation of an historical aspect-neutral prefix. The resistance of some of these forms to affixation may be due to the fact that they express very common attributes, as in 44).

- 44) *addawi* ‘near’ and *asagʔen* ‘far’  
*adʔado* ‘many’ and *atʔatik* ‘few’  
*aptik* ‘short’ and *ando* ‘tall’ and *annawa* ‘wide’  
*asʔasi* ‘dirty’ and *ayʔayyo* ‘still good’

#### 2.2.3.2.1 Attribute-state affixation

Most property roots form attribute state predicates with affixation that is arbitrarily specified by the property root. Three affixes *ma-*, *na-*, *man-* (tagged ATT) may form these state predicates, as in 45) to 47). Consistent with the logical structure that specifies only one argument, these affixes indicate an intransitive predicate. When these affixes occur with property roots, they are identical to each other in function, and do not indicate aspect.<sup>11</sup>

- 45) *Na-kayang din dontog.*  
ATT-high RMd mountain  
‘The mountain is tall.’
- 46) *Ma-ngetit din bistida.*  
ATT-black RMd dress  
‘The dress is black.’
- 47) *Man-kilat din sabsabong.*  
ATT-white RMd flower  
‘The flower is white.’

#### 2.2.3.2.2 CVC reduplication on unaffixed attribute predicates

When an unaffixed property root is being used as a predicate, reduplication of the initial CVC often occurs without adding any semantic information. CVC reduplication is evident with numerals and a few other instances. See 48) and 49).

- 48) *Doddowa(dow~dowa) da.*  
CVC-two 3pI  
‘There are two of them (lit. they are two).’

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<sup>11</sup> When prefixed to other roots, these affixes indicate aspect and differ significantly in function.

- 49) *Law~law* *din* *aso* *ay* *nay*.  
 CVC-bad RMd dog LK this  
 ‘This dog is bad.’

For some unaffixed attribute predicates, the initial CVC reduplication has frozen into a required form, as may be noticed in 44) above and in 50).

- 50) *Dakdake* *din* *aso* *ya* *kitkitoy* *din* *oken=na..*  
 large RMd dog and small RMd puppy = 3sII  
 ‘The dog is big and its puppy is small.’

#### 2.2.3.2.3 CVC Reduplication for comparative form

Attributes build their comparative form with CVC reduplication of the root.

- 51) *Dak~dakdake* *din* *oboan=yo* *mo* *din* *kawwitan*.  
 CVC-large RMd hen = 2pII than RMd rooster  
 ‘Your hen is larger than the rooster.’
- 52) *Ma-bik~bikas=ka* *mo* *si* *Margit*.  
 ATT-CVC-strong = 2sI than PRM Margit  
 ‘You are stronger than Margit.’

#### 2.2.3.2.4 Negation of attribute predicates

Negation of attribute predicates uses *baken*, as in 53) through 55).

- 53) *Baken na-dayetdet* *din* *bab?a=k*.  
 NEG ATT-evenly.spaced RMd tooth = 1sII  
 ‘My teeth are not evenly spaced.’
- 54) *Matekyeng* *din* *eges=tako* *et* *baken=tako* *man-dagaang*.  
 full RMd stomach = 1 + 2pII and NEG = 1 + 2pI ATT-hungry  
 ‘Our stomachs will be full (of water) and we won’t feel hungry.’
- 55) *Baken=ak* *ma-bikas* *ay* *mandan*.  
 NEG = 1sI ATT-strong LK walk  
 ‘I’m not a good hiker (lit. strong to walk).’

## 2.2.4 Other state predicates

### 2.2.4.1 Experience states

Physical, emotional or mental experiences are temporary, stage-level states that have come about for an EXPERIENCER argument. State experiences do not denote cognitive attention or direction, the EXPERIENCER having no control over that state of affairs. Experience states may be used as stative modifiers in a reference phrase.

Experience states have the logical structure: **feel'** (x,[root']).

Formed with stative roots of non-directable experience, they are formed with the affix *ma-*, tagged UND(ergoer)s(tate) which can take perfective marking (P) as *na-*. The EXPERIENCERS of these predicates are animate beings, most often human, as in 56) and in the second clause of 57). 58) and 59) show other experience states.

56) *Nasdaaw(na-sedaaw)=ak sin kaad?ado =n di pilak=na.*  
UNDs.P-amazed=1sI ORMd large.quantity =BRMi money=3sII

‘I was amazed at how much money he had (lit. the large quantity of his money).’

57) *Istay=ak en maitapi tan anggay ay ma-skaw=ak.*  
almost=1sI go join because already LK UNDs-chilled=1sI

‘I almost went<sup>12</sup> to join (them at the fire) because I was really cold.’

58) *Masnit(ma-sinit)/Nasnit si Aden sin songbat=mo.*  
UNDs/UNDs.P-offended PRM Aden ORMd answer=2sII

‘Aden is/was offended by your answer.’

59) *Na-sngang=ak isonga adi=ak makakali.*  
UNDs.P-mental.block=1sI therefore NEG=1sI able.speak

‘I had a mental block, therefore I couldn’t speak.’

Root reduplication and time phrases are pragmatically incompatible with many experience-state predicates, as inner experiences are not often thought of in linear terms. Some examples, however, show that with these predicates a time phrase indicates duration, ‘for x time,’ as seen in 60) and 61). In the latter example, the intensive CVCV reduplication indicates repeated rather than extreme attacks of dizziness.

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<sup>12</sup> Completion of a state of affairs in Kankanaey (usually translated with past tense in English) is often set by perfective aspect marking on one clause, and the following clauses may be interpreted within that time frame, even though, as in this example, they are not marked with perfective aspect.

60) *Na-olaw=ak si dowa ay agew.*

UNDS-dizzy = 1sI ORMi two LK day

‘I was dizzy for two days.’

61) *Enggay maka-bowan ay ma-ola~olaw=ak.*

already ABIL-month LK UNDS-CVCV-dizzy = 1sI

‘It’s been a month that I have been having dizzy spells.’

Negation of inadvertent experiences is expressed with *baken*, as in 62) and 63) from a text translated from English, where the context gives a ‘habitual’ interpretation to the *ma-* affixed predicate.

62) *Baken=takon ma-sdaaw tan say iyat di ipogaw.*

NEG = 1 + 2p UNDS-amazed because that’s way BRMi person

‘We aren’t surprised, since that’s how people are.’

63) *Din ogali=na abe et masapol ay baken ma-bonget Ø.*

RMd custom = 3sII PART PART necessary LK NEG UNDS-anger 3sI

‘As for his character, it is necessary that he not be short-tempered.’

#### 2.2.4.2 Physical states

‘Physical’ roots in this study are those that denote movement generally in or through space, and those that denote physical positions. Physical position predicates may express static situations, especially with CV reduplication. Physical states have the simple logical structure:

**physical' (x)**

Physical states of body position may be formed with a variety of affixes: *ma-* is used when no intentionality is possible, *man-* and *<om>* are more ambiguous. The latter two affixes can also form change-of-state predicates such as process or accomplishment (see §2.2.6.2.3). CV reduplication specifies durative aspect, ensuring a stative interpretation. Note the various affixes in 64) to 67).

64) *Nan-do~dodlon=da ay pasya.*

ACT-CV-positioned.close = 3pI LK extreme

‘They are stacked/lined up too close together.’

65) *Ma-bo~bok?ong=ak tan mansakit gitang=ko.*

UNDS-DUR-arched = 1sI because hurt lower.back = 1sII

‘I am hunched over because my lower back hurts.’



- 66) *T<om>o~tokdo=kami sin baliwang.*  
 UNDM-CV-sit = 1pI ORMd front.yard  
 ‘We were sitting (for a long time) in front of the building.’
- 67) *Siga-a(n)=k ay pag ?<om>alagey.*  
 dislike-UND = 1sII LK PART UNDM-stand  
 ‘I hate to just stand.’ (e.g. in line)

#### 2.2.4.3 Perception states

Perception states have a PERCEIVER and a STIMULUS corresponding to the two arguments in the logical structure: **perception-stative'** (x, y). In Kankanaey these predicates are built with the suffix *-en* (perfective *<in>*). Perception states are usually unambiguously non-volitional, as in (68) to (70).

- 68) *Dengng-e(n)=m di palato ay mankilis.*  
 hear-UND = 2sII RMi plate LK clink  
 ‘You will hear some plates clinking.’
- 69) *<In>ila=k si Mrs. Mantad sin bas.*  
 UND.P-see = 1sII PRM Mrs. Mantad ORMd bus  
 ‘I saw/\*looked at Mrs. Mantad on the bus.’
- 70) *Ay d<in>law=mo din yegyeg?*  
 Q UND.P-feel = 2sII RMd earthquake  
 ‘Did you feel the earthquake?’

#### 2.2.4.4 Result states

Result state predicates have the logical structure: **stative'** (x).

Result states are non-inherent situations that come about by some process and are stage-level states. Because they follow a change of state, they are often morphologically ambiguous with achievement predicates, especially when given perfective affixation. The pragmatic context usually disambiguates the two. Result-states take as their argument an entity such as a THEME or PATIENT that has come to be in that state, generally due to a change in location or condition. The affix tag reflects the argument role. Another type of non-inherent state is an effect upon an entity that does not involve a total change. This section will look at wholly-affected states and partially-affected states. Result states are freely used as stative modifiers.

#### 2.2.4.4.1 Result-state affixation

Kankanaey result-state predicates are formed with stative roots and the affix *ma-* (*na-* perfective). Examples 71) and 72) demonstrate this alternation. In isolation some result-state predicates with perfective marking are ambiguous as to telicity and punctuality, as in 73) where it could be an achievement predicate. Example 74) shows the result-state predicate used as a stative modifier (bracketed).

- 71) *Mo inomem (inomen = mo) sa, ma-beteng = ka.*  
 if drink = 2sII DEM2I UNDS-drunk = 2sI

‘If you drink that, you’ll be/get drunk.’

- 72) *Na-beteng si Sefin.*  
 ST.P-drunk PRM Sefin

‘Sefin is/was drunk.’

- 73) *Na-p?es din goma = na.*  
 UNDS.P-deflate RMd innertube = 3sII

‘Its innertube went/was flat.’

- 74) *Inila = k din [na-p?es ay] goma = na.*  
 saw = 1s RMd UNDSP-deflate LK innertube = 3sII

‘I saw its flat tire.’

Result states may just happen, or be caused deliberately. With *ma-/na-* the predicate does not imply any causer, as in 75). The denotation is only the resultant state. To specify deliberate cause, a causative state predicate is used, as detailed in §2.2.10.

- 75) *Na-kilot din sakdoan.*  
 UNDS.P-dirty RMd water-fetching-place

‘The place to get water is dirty.’

Some roots denote an effect that is partial, temporary, or external. The affix used to form these state predicates is analyzed in this study as a circumfix (*ma-...-an*). The PATIENT is basically unchanged by the effect, being presented as the locus of the state. The tag UNDLs (for locus state) will indicate the circumfix and the left-chevron < will indicate that the final *-an* is part of the affix. Example 76) indicates a partial effect, 77) illustrates a surface effect, and 78) exemplifies a temporary effect.

- 76) *Mo man?emes = ka sin kaagawan, ma-kolang-an dada = m.*  
 if bathe = 2sI ORMd daytime UNDLs-insufficient < blood = 2sII  
 ‘If you bathe in the daytime, your blood will be reduced/lessened.’
- 77) *En = ka mansidom tan sana ay ma-koning-an = ka.*  
 go = 2sI take.shelter because DEM2V LK UNDLs -sunburn < = 2sI  
 ‘Go take shelter because there you are getting sunburned.’
- 78) *Ma-loya-an = ak sin inoto = da ay bagoong.*  
 UNDLs -dirty < = 1sI ORMd cooked = 3pII LK anchovy.paste  
 ‘I am repulsed/lose appetite by the anchovy paste they cooked.’

When a predicate indicates that something or someone is the locus of an effect, it is often in an adversative sense with an unwelcome effect. Examples 79) to 81) illustrate adversative states with a variety of roots.

- 79) *Na-abos-an = kami = s gasol ed na-sdem.*  
 UNDLs.P-used.up < 1pI = ORMi gas LOC UNDLs.P-afternoon  
 ‘We ran out of bottled-gas yesterday.’
- 80) *Wat = ak na-aga~agag-an ay nan-(t)agta~tagtag ed agsapa.*  
 only = 1sI UNDLs.P-CVCCV-rush < LK ACT.P-CVCCV-run LOC morning  
 ‘I was just terribly rushed racing about this morning.’
- 81) *Na-labi-an = kami sin danan.*  
 UNDLs.P-night < = 1pI ORMd path  
 ‘We were be-nighted (i.e. overtaken by nightfall) on the trail.’

#### 2.2.4.4.2 Reduplication with result-state predicates

Initial CV reduplication of the root specifies durative aspect with result-state predicates. Durative aspect precludes interpretation of the predicate as the achievement of the state, as seen in 82) and 83). Morphophonemic vowel deletion in the root triggers the application of reduplication to the predicate-initial CV, as in 84).

- 82) *Mo na-be~beteng Ø yan yamyama(n) = m Ø...*  
 If UNDLs.P-CV-drunk 3sI and scold = 2sII 3sIII  
 ‘If he is (\*gets) drunk and you scold him....’

83) *Na-lo~lokaw-an*                      *din*    *tobo*.

UNDls.P-CV-hole <        RMd   pipe

‘The pipe is (\*became) hollowed out.’

84) *Nanapno(na~na-pono)*   *din*    *beey=da*    *si*    *mangili*.

UNDs.P-CV-full                RMd   house = 3pII   ORM   outsiders

‘Their house was full of visitors.’

Reduplication of the initial CVC(C)V of the root indicates intensive aspect, as in 85).

85) *Na-gala~galabgab-an*                      *din*    *takkay=ko*    *sin*    *sibit*.

UNDls.P-CVCCV-scratched <        RMd   hand = 1sII    ORMd   thorn

‘My hands were all scratched up from the thorns.’

#### 2.2.4.4.3 Negation of result-state predicates

The negator *baken* is used to negate result-state predicates. This overlap with attribute negation indicates that the negated state is descriptive rather than indicating an achievement that did not or will not happen. Admittedly, the fine line between a purely descriptive state and a resultant state is hard to document in many cases. In example 86) and 87) an achievement reading is not possible.

86) *Baken na-beteng*                      *si*    *Sefin*.

NEG    UNDs.P-drunk    PRM   Sefin

‘Sefin isn’t/\*didn’t get drunk.’

87) *Baken na-pno*    *din*    *tangki*.

NEG    UNDs.P    RMd   tank

‘The tank is not/\*didn’t get full’.

### 2.2.5 Process predicates

#### 2.2.5.1 Affixation for process predicates

A process predicate in Kankanaey has the logical structure:        PROC **root'** (x) .

Processes are changes of state that begin, but do not have an inherent telicity or endpoint. This predicate indicates atelic progression in a particular direction. Process predicates are most often formed with property roots. The entity is asserted to exhibit more of that property, but the predicate does not specify how far in that direction the process will progress. Example 88) illustrates a process predicate. The infix <om> indicates change of state, and it is the denotation of the property root that specifies whether the change is necessarily complete.

88) *Ng<om>etit din lokto mo ibilag = mo Ø.*  
 CHANGE-black RMd yam if put.in.sun = 2sII 4III

‘The yams will darken (but not necessarily turn black) if you put them out in the sun.’

### 2.2.5.2 Reduplication with process predicates

Reduplication of the initial CVC of the root of a process predicate indicates progressive aspect, an ongoing state of affairs. Example 89) includes a process predicate with progressive aspect.

89) *Mantaoli = kami yan medyo p<om>od~podot yan natenaw Ø.*  
 return = 1pl and somewhat CHANGE-CVC-hot and melted 4I

‘We returned and it was getting a little warmer and it (the snowman) had melted.’

### 2.2.5.3 Negation and time phrases with process predicates

Process predicates are negated with *adi*, as in 90). Time phrases are interpreted in context, but always as duration of the process, as in 91).

90) *Adi <inm>ad?ado din pilak = ko.*  
 NEG CHANGE.P-much RMd money = 1sII

‘My money didn’t increase.’

91) *Man-payegpeg Ø, pag <om>atong din awak = na si dowa = y olas.*  
 ACT-shiver 3sI then CHANGE-warm RMd body-3sII ORMi two = LK hours

‘She shivers, then her body gets hotter (i.e. fever rises) for two hours.’

### 2.2.6 Achievement and accomplishment predicates

Achievement predicates assert an instantaneous change of state while accomplishment predicates involve a process leading to the achievement of a state. The operators in the logical structures of these predicates reflect this difference. Achievements have an INGRessive operator (instantaneous change) while accomplishments have a BECOME (process + ingressive) operator.

The logical structure for achievements is INGR **root'** (x)

The logical structure for accomplishments is BECOME **root'** (x).

Kankanaey achievements and accomplishments are based on result-stative roots, property roots, physical roots and experience-stative roots that have a single participant. Kankanaey uses two methods of creating achievement and accomplishment predicates— perfective affixation with result-state predicates, and <om>-affixation with other roots. Negation, the interpretation

of reduplicative affixes, and time phrases are discussed following the discussion of these two types of affixation.

### 2.2.6.1 Achievement and accomplishment by perfective affixation

As mentioned earlier, result-state predicates often take on an accomplishment or achievement interpretation when marked as completed, as in 92), repeated from 73), which is ambiguous. With the inflected prefix *na-*, the predicate may indicate an event, the completion of the change of state as in 93). Ambiguity as to achievement or state predication can be dispelled with a time frame in context as in 94). Negation also disambiguates, as a state reading is negated by *baken* (§2.2.4.4.3 above) while an achievement reading is negated by *adi* as in 95).

92) *Na-pʔes*                      *din*      *goma = na*.

UNDS.P-deflate    RMD    innertube = 3sII

‘Its innertube went/was flat.’

93) *Na-tdok*                      *di*      *danom*      *sin*              *bagan*.

UNDS.P-dry.up    RMI    water              ORMd    spring

‘The water in the spring (has) dried up.’

94) *Na-tey*                      *si*      *ama = na*      *ed*              *tawen*.

UNDS.P-die    PRM    father = 3sII    past.time    year

‘His father \*was dead/ died last year.’

95) *Adi na- pʔes*                      *din*      *goma = na*.              *Baken na- pʔes*                      *din*      *goma = na*.

NEG UNDS-deflate RMD innertube = 3sII    NEG UNDS-deflate RMD innertube = 3sII

‘Its innertube didn’t go flat (i.e. it didn’t happen).’    ‘Its innertube isn’t flat (i.e. it’s fine).’

Some result-stative roots indicate a position or relative location. As an achievement or accomplishment, a predicate based on such roots indicates a change of location or position. While there may be an element of intention in some movements, the denotation of the roots is that of a direction or goal or particular position, as in 96) and the perfective affix indicates an achievement reading of the stative. In the flow of a narrative, perfective marking regularly indicates an achievement as an event, as in 97).

96) *Na-gʔas*                      *din*      *nowang*              *Biti*.

UNDS.P-fallRMD    water.buffalo Biti

‘Biti’s water buffalo fell (over a drop-off).’

- 97) *Pag et na-tokang Ø yan inila=k ay ma-anod Ø.*  
 Then PART UNDs.P-tip.over 3sI and saw = 1sII LK UNDs-wash.downstream 3sI  
 ‘Then he suddenly fell over (\*was in horizontal position) and I saw that he would be swept away by the water.’

## 2.2.6.2 Achievement and accomplishment predicates with <om>

Many changes of state in Kankanaey are indicated by the infix <om> (<in-om> when perfective). The instantaneous or gradual time factor is part of the semantic content of each stative root, so this use of <om> (there are several) may be seen to indicate the change of state, while the root specifies the appropriate value for duration and telicity. The affix is thus tagged CHANGE for all state-change predicates that are formed with <om>.

### 2.2.6.2.1 with result-state, property and experience-stative roots

Achievement and accomplishment predicates with result-stative roots and experience-stative roots are exemplified in 98) and 99). In example 98) there is an unambiguous achievement predicate with the result-state root *betak* as compared to 92). Example 99) has perfective marking to set the event in the real past, but the change to the depressed state *sadot* probably was not instantaneous. Thus it may be categorized as an accomplishment predicate.

- 98) *B<in-om>tak din goma=na.*  
 CHANGE.P-burst RMD innertube = 3sII  
 ‘Its innertube popped.’
- 99) *S<inm>adot sin nateyan ama=na.*  
 CHANGE.P-sad ORMd death father = 3sII  
 ‘He became sad/unmotivated at his father’s death.’

### 2.2.6.2.2 with action roots

Onset of activity is often indicated in Kankanaey by a predicate like ‘begin’, but some roots may express onset with <om>. One example, from a story of a talking bird, is in 100) with a root that is usually prefixed with *man-* to express the activity of birds in the sky. The root used in example 101) is also usually affixed with *man-* to express the sun’s light emission, but with <om> the predicate specifically indicates the onset, such as when coming out from behind a cloud or after a storm.

100) *"Witdokit," kanana(kanaen = na) yan pag t <om> ayaw.*  
 witdokit say = 3sII and PART CHANGE-fly  
 ‘“Witdokit,” it said, and then flew away.’

101) *Awni = t s <om> git.*  
 later = PART CHANGE-sunshine  
 ‘In a little bit the sun will come out.’

Physical roots may create an inchoative predicate with the change-operator indicated by *<om>*, as in the second clause of 102). The affix indicates the onset of the change of the direction of movement but does not indicate that any end-point is reached, unlike the first predicate in this example, an active accomplishment with the root ‘climb uphill’.

102) *Tinikid = mi din dontog asi = kami pay b <om> alalong.*  
 climb.uphill = 1pII RMD mountain then = 1pI furthermore CHANGE-descend  
 ‘We scaled the mountain, then we began going downhill.’

#### 2.2.6.2.3 with physical roots

‘Physical’ roots in this study are those that denote movement generally in or through space, and those that denote physical positions of animate entities. When a predicate indicates that a person or animal changes position, it may be an achievement predicate with the affix *<om>*, as in 103) to 104).

103) *Basta t <om> okdo = ka sin doy kad?an di bato.*  
 simply CHANGE-sit = 2sI ORMd DEM3V place BRMi rock  
 ‘Just sit down there by the rock.’

104) *? <om> alagey = ka.*  
 CHANGE-stand = 2sI  
 ‘Stand up!’

The time phrases included in 105) and 106) are interpreted as time elapsed before the change of position. Many changes of positional or physical movement are intentional or directed—these are covered in §2.2.7.

105) *Kaanen = da din inbalod = da et doy ninina yan t <om> okdo.*  
 remove = 3pII RMD binding = 3pII and DEM3V little.while and CHANGE-sit  
 ‘They removed what they had bound her with and there in a little bit she sat up.’



106) *Maga di na-bayag, b <inm>aba din talipyano.*  
 NEGEXIS RMi UNDS.P-long.time CHANGE-descend RMd airplane  
 ‘It wasn’t very long, the airplane came down lower.’

### 2.2.6.3 Reduplication with achievement and accomplishment predicates

CVC reduplication (Test 1) is interpreted as plural or repetitive with achievements, but as progressive with accomplishments that have internal time duration.

Reduplication of the initial CVC of the root (or word, with morphophonemic changes) can occur with *<om>*-affixed achievement and accomplishment predicates. Predicates formed from roots that specify punctuality are achievements and take an iterative reading with CVC reduplication, as in 107), or repeated instances of the change of state with plural subjects, as in 108).

107) *B <in>om~b <om>tak din bomba ed Camp John Hay.*  
 P. CHANGE-PROG-burst RMd bomb LOC Camp John Hay  
 ‘The bombs were exploding at Camp John Hay.’

108) *B <om>al~bala din Japon ed Baguio City.*  
 CHANGE-PROG-emerge RMd Japanese LOC Baguio City  
 ‘The Japanese were coming out into Baguio City.’

With physical roots, the change of position is in progress, as in 109) and 110).

109) *? <om>al~alagey si Mayor Ismit.*  
 CHANGE-PROG-stand PRM Mayor Ismit  
 ‘Mayor Ismit is getting to his feet.’

110) *B <om>ab~baba sin baliwang di iskowilaan din esa.*  
 CHANGE-PROG-descend ORMd yard BRMi school RMd one  
 ‘The one (airplane) was coming in low over the school yard.’

With experience-stative roots that are not telic, CVC reduplication with the CHANGE operator indicates ongoing time and increase in the experience, as in 111). The presence of both PROCESS and INGRESSIVE operators in accomplishment predicates gives room for both telic interpretations and progressive modifications.

111) *S <om>ad~sadot si Meli.*  
 CHANGE-PROG-sad PRM Meli  
 ‘Meli is getting steadily more depressed.’

As noted in §2.2.6.1, some achievement predicates are formed by perfective affixation on result-states. When the approach of such an event is presented as perceptible and taking place over time, usually a relatively short time, CVC reduplication indicates progress toward the change of state creating accomplishment predicates, as in the second clause of 112) and in 113).

112) *Ilagalagaan=yo Ø yan dooy ay anggay mat~ma-tey=et Ø!*  
do.laga.ritual=2pII 3sIII and DEM3III LK already PROG-UNDS-die=PART 3sI  
‘You keep doing the ritual for him and there he’s already dying!!’

113) *Mag~mag?as(ma-?egas) di pantalon=(n)a.*  
PROG-UNDS-fall RMI pants=3sII  
‘His pants are falling down (e.g. as he runs).’

#### 2.2.6.4 Time/pace phrases with achievements and accomplishments

Oblique time phrases do not indicate duration with achievement but rather the time span before the change, as in 114). Examples 105) and 106) above showed general time-duration phrases, indicating elapsed time before the change. Time and pace indicators with accomplishment predicates modify the PROCESS element, as in 115).

114) *Awni ta asi=tako b<om>ala sin maika-dwa ay bowan.*  
later so.that next=1pI ACTm-emerge ORMd ordinal-two LK month  
‘Wait and then we’ll go out in the second month.’

115) *...insigon sin ka-dalas di sanglay ay k<om>ompitay.*  
depending ORMd NOM-quick BRMI roots LK CHANGE-soft  
‘...depending on the quickness of the roots to soften.’

#### 2.2.6.5 Negation with achievement and accomplishment predicates

The negator *adi* is used with achievement and accomplishment predicates. Example 116) shows negation with an <om> accomplishment. 117) comes from instructions on how to prepare rice wine.

116) *Kaman=ak adi ?<om>osto sin tokdoan.*  
like=1sI NEG CHANGE-correct ORMd seat  
‘It was as if I would not fit in the seat.’

117) *Siyat ma-kotob Ø ay pasya ta adi l<om>eg~legsew Ø.*  
must UNDS-cover 4I LK well so.that NEG CHANGE-CVC-stink 4I  
‘It must be tightly covered so that it is not getting stinky.’

*Adi* is the negator with *ma-/na-*affixed result-state roots that have formed achievement predicates, disambiguating the “fine line” between those result-states and achievements. Negation with a perfective-marked result-state predicate indicates an unambiguous achievement reading, as in 118), while 119) indicates a problem such that the achievement of a ‘full’ state will not happen to the sack. As a descriptive state, the negator is *baken*. Example 120) compares the negated achievement predicate and the negated state predicate.

118) *Adi na-nged si Poltag.*

NEG UNDs.P-drown PRM Poltag.

‘Poltag didn’t drown.’ \*Poltag wasn’t dead from drowning.

119) *Adi ma-pno din sako. Baken na-pno din sako.*

NEG UNDs-full RMd sack NEG UNDs-full RMd sack

‘The sack won’t get full.’

‘The sack is not full.’

120) *Sapay.koma.ta adi=kayo ma-oma en sak?en. Laton, baken=ak na-oma.*

hopefully NEG=2pI UNDs-bored OPRM 1sIII OK NEG=1sI UNDs-bored

‘I hope you won’t get/\*aren’t tired of me.’

‘It’s OK, I’m not bored.’

A very common use of the negated achievement predicate is in a purpose clause with *ta* ‘so that,’ as in 121). In 122) CVC reduplication indicates an accomplishment with internal time duration even though the experience did not happen. Again, the negator in this mid-river misadventure is *adi*.

121) *Paalonsod-e(n)=m din agdan ta adi ma-tokang Ø.*

set.at.slant-UND=2sII RMd ladder so.that NEG UNDs-tip.over 4I

‘Set the ladder at a slant so that it won’t/can’t tip over.’

122) *Adi na-lit~litaw di nemnem=ko et nan-pakod=ak si bato.*

NEG UNDs.P-CVC-lost RMi thought=1sII and ACT-clutch=1sI ORMi stone

‘My thoughts were not getting lost (i.e. I kept my wits) and I grabbed onto a large rock.’

### 2.2.7 Activity predicates

Activity predicates indicate dynamic events, “happenings” with no inherent temporal end-point. Activities have Actor arguments that do the activity. In the logical structure, the constant **do'** with an Actor argument (x) is the indicator of an activity predicate, thus **do'**(x, [**root'** (x/x,y)]). The root specifies whether the (x) argument is an inanimate EFFECTOR, such as a MOVER, or EMITTER, or an animate, potentially deliberate Actor such as a PERFORMER, CONSUMER, USER, PERCEIVER, etc. Three different types of roots form activity predicates in

Kankanaey: physical actions, actions that affect another entity, and perceptions. §2.2.7.1 to §2.2.7.3 will cover the various roots and affixes that form activity predicates. §2.2.7.4 to §2.2.7.6 examine reduplication, time phrases and negation with activities.

### 2.2.7.1 Physical actions

Some activity predicates denote physical motion, emission or positioning that only affects a single participant. In Kankanaey, these activity predicates are formed with the prefix *man-* (in a few arbitrary cases, *maN-*). The logical structure for these predicates is **do'**(x, [**root'** (x)]). Examples 123) and 124) illustrate motion and emission activities. Although as noted in §2.2.6.2.2 a physical position may be interpreted as an accomplishment, it is more common to assume that there is a degree of intentionality to an entity being in a physical position, and thus the participant is viewed as an Actor, as in 125). Note that in 126) the speaker is not crying uncontrolledly like an infant.

123) *Man-dan si Romy ya managtag (maN- + tagtag) si Lydia.*  
 ACT-walk PRM Romy and ACT-run PRM Lydia  
 ‘Romy walks and Lydia runs.’

124) *Palalo ay man-ngisangis di segit.*  
 too.much LK ACT-shine.brightly RMi sunlight  
 ‘The sunshine is too bright.’

125) *Man-salikaot Ø sin ed baeg.*  
 ACT-crouch 3sI ORMd LOC rafter-rack  
 ‘She was crouching up in the drying rack.’

126) *Pag=ak man-?oga tan mansakit nemnem=ko.*  
 then=1sI ACT-cry because hurt thought=1sII  
 ‘Then I cried, because I felt sad.’ (idiom: ‘thoughts were sick/painful’)

When the MOVER performs the movement without any specification of being deliberate, intentional, controlled or animate, a non-agentive predicate can be formed with the multi-tasking infix *<om>*. The intentionality of the argument of **do'** in activities formed with this infix is blocked. 127) and 128) exemplify activities effected by natural forces while the human EFFECTOR of the predicate in 129) is presented as mindlessly playing.

127) *?<om>aloyas din dada=na.*  
 ACT-flow RMd blood=3sII  
 ‘His blood flows down.’

128) *S<om>aliktoto din innapoy.*  
 ACT-boil RMd cooked.rice  
 ‘The rice boils.’

129) *G<om>oy~goyang si Baby.*  
 ACT-PROG-play.aimlessly PRM Baby  
 ‘Baby is playing (not with objects).’

A nuance of intentionality may be seen in the comparison of two predicates built with *onod* ‘follow.’ 130) shows overt intention while in 131), the path taken only happens to be the same as the brother. There is no intent to overtake or deliberately trace his steps. In fact, the ‘following’ is temporal as well as spatial. Example 132) is a commonly-heard response to an invitation to go somewhere.

130) *Man-lisi = ak koma ta asi = ak on~onod-en sisya.*  
 ACT-move.to.side = 1sI PART so.that then = 1sI CVC-follow-UND 3sIII  
 ‘I was going to pull over (and let his vehicle overtake mine) so that I would then be following him.’

131) *?<om>onod = ak en agi = k.*  
 ACTm-follow = 1sI OPRM brother = 1sII  
 ‘I will follow along after my brother.’

132) *Asi = ak <om>onod!*  
 then = 1sI ACTm-follow  
 ‘I’ll come along later (you go ahead)!’

### 2.2.7.2 Actions affecting a second participant

Some activity predicates are based on roots that denote actions by an animate entity which affect other participants. As noted in VVLP (1997:122-3), the second argument of many activity predicates differs from other arguments in logical structures, in that they are often non-referential and tend to be inherent in the meaning of the predicate, characterizing the nature or locus of the action. This may be because the atelic nature of activity predicates precludes a full effect upon a second participant from being specified. (This study has simplified the classifications of Kankanaey roots: it may be shown as Latrouite (2011) did for Tagalog, that some roots favor the formation of activity predicates because the denotation of the root primarily carries information about the ACTOR’s role. Other roots may disfavor the formation of

activity predicates because the root denotes salient information about the affected second participant.) The logical structure of these activity predicates is represented as:

**do'**(x, [**root'** (x,y)])

The affix used to form most activities in Kankanaey is *man-*. Roots of consumption, and creation can form the basis of an activity predicate, so long as the second argument is not specific, as in 133) and 134). In 135) there is no referential entity that is pinched by the scissors.

133) *Man-sibo din anak si digo.*

ACT-sip RMd child ORM broth

‘The child sips (some) broth.’

134) *Man-solat=ak koma ay dagos.*

ACT-write=1sIPART LK immediately

‘I should have written (a letter?) right back.’

135) *Man-ipit di kaltib mo i-pokis Ø.*

ACT-pinch RMi scissors if UNDt-cut.hair 4III

‘A scissors pinches if (one) uses them for haircutting.’

When the effect of an activity upon a specific second participant is explicitly partial, the infix *<om<sub>2</sub>>* (not the CHANGE operator) expresses this situation. For example, in 136) the activity is atelic in that it is not known how many of the eggs will be taken, but it is certain that some will be left behind.

136) *K<om<sub>2</sub>>awet=ka sin itlog sin kobongan.*

ACT-reach.in&get=2sI ORMd egg ORMd nest

‘Reach in and get some of the eggs in the nest.’

Some activity predicates do affect a definite second participant, but with no change of state or lasting effect on it that could delimit the activity. Definite second participants may be the locus of the activity, as in predicates of physical interaction such as ‘hold’. With a definite activity locus, Kankanaey uses one of the Undergoer voices.

137) *I-g?en=mo Ø sin siki=na.*

UNDt-hold=2sII 3sIII ORMd leg=3sII

‘Hold it by its legs.’

138) *Kawe-e(n)=m si Lola.*  
 hug-UND = 2sII PRM grannie  
 ‘Hug Grannie!’

### 2.2.7.3 Activities of experience

The third group of activity predicates is formed with state roots of inner experience, including emotion and perception. When the EXPERIENCER of a situation is presented as exhibiting or expressing the experience with intention or cognitive involvement, a **do'** component is included in the LS, represented as:

feelings: **do'** (x, [**feel'** (x, [**pred'**])])  
 perceptions: **do'** (x, [**perceive'** (x,(y))])

Activity predicates with one participant are formed using the affix *man-*. Example 139) illustrates this affixation with the feeling root *bongot* ‘anger’—a predicate that indicates the anger is outwardly expressed, as is the ‘happiness’ of example 140). In 141) the root *sakit* ‘pain/illness’ with *man-* affixation can only mean ‘sick’ in this context, while in 142) the sufferer is cognizant of the pain exhibited by the affected body part.

139) *Man-bongot si Akod.*  
 ACT-angry PRM Akod  
 ‘Akod is angry.’

140) *Man-layad din poso=k si dakdake.*  
 ACT-happy RMd heart = 1pII ORM big  
 ‘My heart is very happy (lit. hugely happy).’

141) *Man-sakit din manok Pabling.*  
 ACT-sick/hurt RMd chicken Pabling  
 ‘Pabling’s chickens are sick/\*hurting.’

142) *Man-sakit din tengnged=ko.*  
 ACT-sick/hurt RMd neck.back = 1sII  
 ‘The back of my neck is hurting/\*sick.’

With the prefix *man-*, perception predicates allow for intentionality of the Actor, who directs his perception toward a nonreferential STIMULUS, as in 143).

143) *Man-ila=ka=s asawa=m.*  
 ACT-see = 2sI = OPRM spouse = 2sII  
 ‘Keep an eye out/Look for a wife (for yourself)!’

When the STIMULUS of a perception root is referential, the Kankanaey activity predicate is formed with the suffix *-en* (tagged UND). These perception predicates are most often interpreted as cognizant, but not volitional, experience. In 144) conscious directed perception of the definite STIMULUS is indicated. In 145), the CONTENT of the mental perception is stated, but conscious awareness, not volition, is indicated in perception activities. Example 146) shows this distinction as well, with the activity an expected event, but not a planned event.

144) *Deng~dengek(denge-en=ko) din bogaw di mangan?anap en sak?en.*

CVC-hear-UND = 1sII RMd shout BRMi searching OPRM 1sIII

‘I was listening to the shouts of those searching for me (he was hiding).’

145) *Pag =dan ammo-en ay wada baw di mantabtabon ay guerrilla.*

then = 3pII know-UND LK EXIS PART RMi hiding LK guerrilla

‘Then they knew that aha, there were guerrillas who were hiding.’

146) *Ila-e(n)=k si Mrs. Mantad si bigat.*

see-UND 1sII PRM Mrs. Mantad ORM next-day

‘I’ll see/\*look for Mrs. Mantad tomorrow.’

Imperative perception predicates necessarily imply directed perception as in 147). In 148) the omitted STIMULUS is the referential situation in general, yielding a cautionary imperative.

147) *Adi=kayo deng~dengngen(denge-en) din lawlaw ay ibagbaga =n di odom.*

NEG = 2pI CVC-hear-UND RMd bad LK saying = BRMi other

‘Don’t listen to/pay attention to the bad things that others are saying!’

148) *Ila-em(-en=mo) tan maitok?o = ka.*

see-UND = 2sII because hit.head = 2sI

‘Watch out lest you hit your head.’

#### 2.2.7.4 Reduplication with activity predicates

Reduplicative CVC affixation on activity predicates indicates progressive aspect. In 144) above, the reduplication indicated progressive aspect, thus “I was listening...” Imperatives, as in 147) above, use the progressive as a softening device, thus more literally, “Don’t be listening to...” In 149), from the background section of a narrative, the speaker’s ongoing activity is interrupted as the story unfolds. In 150) the progressive has a pragmatic overtone of present reality, which enhances the expression of the inner emotion.



149) *Ed agsapa = s sa ay man-ot~oto = ak yan aket ...*  
 past.time morning = DEM2IV LK ACT-CVC-cook = 1sI and PART

‘This morning there I was cooking, and to my surprise....’

150) *Laylaydek(lay~layad-en = ko) di music.*  
 CVC-happy-UND = 1sII RMI music

‘I really enjoy music.’ (so please send me a CD)

When appropriate, activity predicates can express intensive or repetitive aspect by CVC(C)V reduplication. Example 151) is typical.

151) *?<om>oga~oga din moyang.*  
 ACT-INTENS-cry RMd baby

‘The baby is bawling and bawling.’

Reduplicative CV affixation with *man-* is not possible with most activity predicates, but with physical position roots or perception state roots, CV with *man-* indicates duration of the effect of the activity (similar to CV with achievement predicates noted in §2.2.6.3 above), or duration of the exhibited situation that was expressed as an activity. This may be seen in 152), where the position is taken and maintained by a volitional actor. In 153) the use of CV correlates with the time phrase to indicate the ongoing experience expressed by the activity ‘live’. Example 154) shows CV reduplication that indicates duration of the experience as a temporary or stage-level state. It is notable that each example observed of this particular word (*manlalayad* ‘happy’) is followed by a causing event, limiting the experience state to that context rather than a general life attitude. Example 155) is also a context-limited expressed-experience activity.

152) *Nan-sa~sadag = ak sin esa = y kaiw et boy~boya-e(n) = k din bapor.*  
 ACT.P-CV-lean.on = 1sIORMd one = LK tree and CVC-watch-UND = 1sII RMd boat

‘I was leaning against a tree and watching the boats.’

153) *Mabayag ay man-bi~biyag da nay ay ili,*  
 long.time LK ACT-CV-live pl DEM1V LK town

*asi pay man-taoli san siged ay kabibiyag = da.*  
 then PART ACT-return DRM2 good LK lifestyle = 3pII

‘It will be a long time these towns must live before that pleasant lifestyle of theirs returns (after earthquake).’

154) *Man-la~layad=kamitan laton ay dinmateng baw.*  
 ACT-CV-joy = 1pI because OK LK arrived EVID  
 ‘We are happy because we found out she arrived OK.’

155) *Man-a~agag=ak ay <om>ey.*  
 ACT-CV-hurry = 1sI LK ACTm-go  
 ‘I am in a hurry to go.’

#### 2.2.7.5 Time phrases with activity predicates

With an activity predicate, an oblique time phrase will indicate the length of time spent in the activity. In 153) above the ‘long time’ indicates the duration of the activity. In 156) the Actors were walking for five hours but had not necessarily reached their destination.

156) *Nandad?an(nan-CVC-dan)=kami si lima ay oras.*  
 ACT.P-CVC-walk = 1pI ORMi five LK hours  
 ‘We were walking for five hours.’

#### 2.2.7.6 Negation of Actitivity predicates

The negator *adi* is used with activity predicates, as seen with the activities in 157) to 159).

157) *Adi=kami man-apoy si kanen=mi.*  
 NEG = 1pI ACT-fire ORMi food = 1pII  
 ‘We didn’t (burn a fire to) cook our food.’

158) *Adi=ak man-i-solo ed niman.*  
 NEG = 1sI ACT.Th-teach LOC now  
 ‘I am not teaching at this time.’

159) *Adi man-sakit din eges=ko.*  
 NEG ACT-sick/hurt RMd stomach = 1sII  
 ‘My stomach doesn’t hurt.’

#### 2.2.8 Semelfactive predicates

*Aktionsart* semelfactives are punctual activities that do not affect any second participant in the action. The punctuality is denoted by the action root, differentiating them from the activity predicates described above in §2.2.7. The logical structure is represented as:

SEML **do'** (x,[**action'** (x,(y))])

Semelfactives in Kankanaey are expressed like activities with the affixes *man-* or suffixes *-en* or *-an*, as in 160) and 161). A few roots take *<om>*, such as a group denoting light-emission, which is perhaps a type of punctual physical action. Example 162) is representative.

160) *Man-ak~akbis si Tonia.*

ACT-CVC-sneeze PRM Tonia

‘Tonia is sneezing (more than once).’

161) *Teg~tegteg-en = da din pappait.*

CVC-pound.on-UND = 3pII RMd wild.sunflower

‘They repeatedly pound on the sunflowers.’

162) *B<om>on~boniing din komkomti.*

CHANGE-CVC-glow RMd firefly.

‘The firefly/ies are blinking.’

Many punctual action roots are onomatopoeic and imply repetition as semelfactive predicates. A few example roots are listed in 163). In 164) the pragmatic intent is probably more than one blow on the door.

163) *pagpag*

‘strike or tap’

*palakpak*

‘clap, applaud’

*pikpik*

‘pat gently’

*tegteg*

‘pound with a blunt object’

164) *Togtog-em(-en = mo) din tangeb.*

strike-UND = 2sII RMd door

‘Knock (on) the door.’

CVC reduplication on a semelfactive must be interpreted as iterative or plural rather than indicating time duration of one event. Examples 160) to 162) above show the iterative interpretation of CVC. Negation of semelfactives is with *adi*, as in 165).

165) *Adi = ak p<in>ikpik Ø yan nay na-ek met.laeng.*

NEG = 1sI UND.P-pat 3sIII and here UNDS-sleep PART

‘I didn’t pat her and here she fell asleep anyway.’

### 2.2.9 *Active accomplishment predicates*

Active accomplishment predicates are formed with action roots that indicate movement, consumption and creation, where the specified action entails a resulting change of state or location for the Actor or for another entity. As pointed out by VanValin (2005:44-45), these might be “more accurately characterized as ‘active achievements’.”

### 2.2.9.1 Active accomplishments with self-affecting motions

Linear spatial movements with specific locative end-points have the logical structure:

**do'** (x,[**motion'** (x)]) & INGR **be-at'** (y, x)

The locative state structure included in this logical structure cannot occur as an independent state predicate structure, but its presence influences and licences state-related phenomena. Very few self-affecting motion roots in Kankanaey can form active accomplishments. In the data gathered, only five roots are used to form predicates that can be followed by an end-point. The root *saa* 'go home' lexicalizes the end-point. Locative phrases occurring with the general roots *ey* 'go', *ali* 'come' and *dateng* 'arrive' always indicate the endpoint. Not surprisingly, given the rugged terrain occupied by the Kankanaey people, the roots *tikid* 'go uphill' and *balalong* 'go downhill' can also imply reaching the inherent end-point (hilltop or valley). Example 166) shows two active accomplishment predicates. In 167) the destination of a means of public transportation is mentioned. Time phrases, as in 168), indicate time before reaching the destination, not time spent in traveling, since the root denotes the punctual arrival at home.

166) *Ay ?<om>ali=ka sina ono s<om>aa=ka?*  
 Q CHANGE-come=2sI DEM1IV or CHANGE-go.home=2sI  
 'Will you come here or go home?'

167) *Emey(?<om>ey) din dyipni ay nay ed UBC.*  
 CHANGE-go RMD jeepney LK DEM1V LOC UBC  
 'This jeepney will go to U.B.C.'

168) *Nay enggay piga ay agew yan asi=da s<om>aa.*  
 DEM1V already how.many LK day and then=3pI CHANGE-go.home  
 'Here it is still how many days before (lit. and then) they come home.'

In 169) and 170), it may be seen that the verb specifying the mode of 'going' cannot specify the destination by itself alone. In 169) the active accomplishment predicate *emey* (with morphophonemic changes) with a place name indicates arrival, while in 170) the place name with only the 'walk' predicate can not indicate end-point.

169) *Kabigatana, nankoyog=kamiay nan-dad?an(CVC-dan) ay <om>ey ed Ambagan.*  
 Next.day accompany=1pILK ACT-PROG-walk LK ACT-go LOC Ambagan  
 'The next day, we went together walking to Ambagan.'

170) *Man-dan di bas ed Balakbak.*

ACT-walk RMi bus LOC Balakbak

‘The bus goes through/\*to Balakbak.’

With the suffix *-en*, the root *dateng* ‘arrive’ can form an active accomplishment with the meaning of ‘come to’ or ‘find’. It cannot denote control over the situation, as seen in 171) and 172). In 173) the ‘sudden’ particle and the lack of the definiteness operator on the Reference-phrase marker attest to the markedness of this construction. With other motion verbs, the predicate created by *-en* is not an active accomplishment, as in 174).

171) *Datng-ek(-en=ko) din ketang asi=ak pag songen.*

arrive-UND = 1sII RMd brook then = 1sI next go.upstream

‘I came to the brook, then I followed it upstream.’

172) *Atikawkawe(n) =na Ø, datng-e(n)=na din eten Dania.*

sort.through = 3sII 4III arrive-UND = 3sII RMd skirt Dania

‘Sorting through it, he found Dania’s skirt.’

173) *Idi inmaddawi=ak, d<in>teng=ko=et di ginawang.*

when go.far = 1sI UND.P-arrive = 1sII = PART RMi river.

‘When I had gone a fair way, I suddenly arrived at a river.’

174) *Adi=ka dan-en din danom ay sana.*

NEG = 2sI walk-UND RMd water LK DEM2V

‘Don’t walk in that water!’

The suffix *-an* with *dateng* also creates an active accomplishment predicate that specifies a person as locus (l), ‘come upon,’ as in 175).

175) *Idi=et d<om>ateng=ak ed Badiw, d<in>teng-ak(-an=ko) si manong.*

when = sudden ACT-arrive = 1sI LOC Badiw UNDI.P-arrive < = 1sII PRM brother

‘Well, when I got to Badiw, I came across (my) older-brother.’

### 2.2.9.2 Active accomplishments with other-affecting actions

Active accomplishment predicates can denote a specified action by one participant that results in some change of state for a second participant. (These predicates must be distinguished from causative achievements in which an unspecified action precedes an effect.) Action roots can specify manner, direction and other semantic particulars. The logical structure as suggested by Van Valin (2005:45) is as follows:

**do'** (x, [**pred**<sub>1</sub>' (x, y)]) & INGR **pred**<sub>2</sub>' (y)

Predicates of consumption and creation, formed with the suffix *-en*, should be understood as active accomplishments because the entity consumed or created is specific and fully affected. In example 176), the plan is to consume the entire quantity of beer, and in 177) the buildings were built from scratch, not fixed or enlarged.

176) *Inom-en = tako      din      nay      Stateside.*  
 drink-UND = 1 + 2P   RMd   DEM1V   stateside

‘Let’s drink this imported beer!’

177) *?<in>amag di      gobilno      di      Pidinsiya      ya      iskowilaan      sina.*  
 UND.P-make   BRMi   government   RMi   gov’t-center and   school   DEM1IV

‘The government built a municipal center and school here.’

### 2.2.9.3 Reduplication and time phrases with active accomplishments

Time phrases with active accomplishments have not been observed in Kankanaey, neither for duration nor for end-point. CVC reduplication is most often used when an active accomplishment predicate is nominalized or relativized. In such cases it can indicate plurality or repetition of habitual actions, as in 178) or progressive aspect as in 179).

178) *Ammo-a(n) = na      din      siged ay      <in>am~amag      di      ipogaw ed      nabaon.*  
 know-UNDI = 3sII   RMd   good   LK   UND.P-CVC-do   RMi   people   LOC   long.ago

‘He’ll learn the good (things) that people did long ago.’

179) *Ay      ad?ado di      am~amag-en = yo?*  
 Q      much   RMi   CVC-do-UND = 2pII

‘Do you have a lot to do? (lit. Is what you are doing much?)’

### 2.2.10 Causative predicates

Kankanaey has a prefix *pa-* which derives overt causative predicates from a wide variety of roots, see §2.3.7. Many causative predicates, however, may be constructed from stative roots by the use of transitive *-en*, which requires an Actor argument. In Kankanaey, the action is unspecified (**do'** (x, Ø)) and causes a change of state of the affected participant, as seen in the logical structure of these predicates.

#### 2.2.10.1 Causative change-of-state predicates

With result-stative roots, the suffix *-en* creates causative achievement predicates with this logical structure:

[do'(x,Ø)] CAUSE [INGR **stative'**(y)]

The activity part of the predicate is unspecified, as such predicates do not indicate what action causes the resultant change of state. They only assert that such a change is caused by some effector. For example, in 180), ‘break’ does not indicate the action by which the person would cause the jar to be broken.

- 180) *Mo gopak-e(n)=m san bogsit, bayad-a(n)=m Ø.*  
 if break-UND=2sII RM jar pay-UND1=2sII 4III  
 ‘If you break that jar, you’ll pay for it.’

In 181) and 182) a fuzzy semantic line may have been crossed—the action involved in ‘drop/let fall’ is very nearly unspecified. The semantic particulars relate to the effect on the second participant, which is total but due to natural causes. With this root, the prefix *i-* (*in-* perfective) connotes more intention than with the suffix *-en*; either may be used to form the predicate.

- 181) *In-tekdag=da din armas sin talipyano.*  
 UND<sub>t</sub>.P-fall.distance=3pII RM<sub>d</sub> weapons ORM<sub>d</sub> airplane  
 ‘They dropped the weapons from the airplane.’
- 182) *Adi=ka eg~?egas-en Ø tan ma-gopak Ø.*  
 NEG=2sI CVC-fall.short.distance-UND 4III because UNDS-break 4I  
 ‘Don’t let it fall it because it will break.’

### 2.2.10.2 Three-argument predicates

Three-argument predicates such as ‘put’, ‘sell’, ‘give’, and ‘tell’ are causative achievement predicates in Kankanaey. They all involve a locative state predicate (e.g. **be-at'**), which as noted in §2.2.9.1, can only be part of complex predicates in Kankanaey. (It will be noted in §2.5 that simple location is expressed not with a locative predicate but with the existential.) Again, the activity causes the achievement of a change-of-location state, but is not otherwise specified. One possible logical structure follows, where (y) is a location and (z) is a theme argument.

[do' (x, Ø)] CAUSE [INGR **be-at'** (y, z)]

The affixes *i-*, *-an* and *i-...-an* are used to form causative achievements. Example 183) has two causative achievement predicates indicated by *i-*, while 184) shows an *i-...-an*-marked predicate. Chapter 6 explains the variable assignment of affixes to predicates.

183) *Mabalin ay i-paw?it=ko Ø en Jery ono i-gto=k Ø pay laengisna.*  
 possible LK UNDT-send = 1sII4III OPRM Jery or UNDT-store = 1sII 4IIIPART DEM1IV  
 ‘It’s possible for me to send it to Jery or to still store it here.’

184) *Asi=na i-dawt-an dakami si pala kanen.*  
 then = 3sII UNDD-give < 1pIII ORMi for food  
 ‘Then he gave us (something, i.e. money) for (getting) food.’

The resulting location may be inherent, as in 185), where a recipient is implied. In 186), a storage location is implied by the root, and the time expression indicates the duration of the resultant state. Note that in 187), when CVC reduplication is applied to the causative achievement predicate, the punctual nature of the change of state gives an iterative rather than progressive-aspect interpretation.

185) *Asi=ak i-dawat Ø mo <om>ey=ak issa.*  
 and.then = 1sI UNDT-give 4III if/when ACT-go = 1sI DEM2IV  
 ‘I’ll give it to (to you) when I go to your place (lit. there).’

186) *I-dolin=da Ø si manga tolo=y agew.*  
 UNDT-put.store = 3pII 4III ORMi about three=LK day  
 ‘They put it in storage (i.e. set it aside) for about three days (e.g. to ferment).’

187) *Mo wada di ma-bay?ansi i-lako=yo, i-dol~dolin=yo Ø koma.*  
 if/whenEXIS Rmi UNDS-left ORMi UNDT-buy = 2pII UNDT-CVC-put.store = 2pII4IIIPART  
 ‘Whenever there is (money) left over from what you have for buying, you should put it in storage (save it).’

## 2.3 Derived predicates

Some predicates are derived from non-canonical roots, such as causatives from attribute roots, and activities from property roots. Other predicates are derived by increasing or decreasing the participants from the default norm specified by the root, or by expanding the possible roles a participant could fill. The affixes used for these predicates may add semantic content or license a participant to hold a specific role. Types of derived predicates that are covered in this section are: potential predicates, derived attributives, predicates with temporal immediacy, passive statives, complex predicates with extra licensed participants and derived causatives.



### 2.3.1 Potential predicates

A predicate expressing the potentiality of a state of affairs lacks agentivity and has a potentiality operator as part of the predicate. With EFFECTORS and EXPERIENCERS, especially humans, it indicates ability. With ATTRIBUTANTS it indicates propensity. The symbol  $\diamond$  indicates potentiality.

#### 2.3.1.1 Potential activities with *maka-*

Potential activities may be derived with experience and action roots using the prefix *maka-*, tagged ABIL(itative), which blocks the agency implicature of *do'* with these roots. This derivation yields predicates that express the ability of the EFFECTOR in relation to the root. The semantic representation (SR) for the derivation of *maka-anges* ‘able to breathe’ is shown in (188) and exemplified in (189). An example with EXPERIENCERS is (190).

188) *man-anges si Mims* SR: *do'* (Mims, [*breathe'* (Mims)])

‘Mims breathes/takes a breath.’

*maka-anges si Mims* SR:  $\diamond$  *do'* (Mims, [*breathe'* (Mims)])

‘Mims can breathe.’

189) *Mang-i-pa-kayabkab tet?ewa Ø mo adi=ka maka-anges.*

ACT-Th-CAUS-heart.pound true 4I if/when NEG=2sI ABIL-breathe

‘It really is frightening (makes the heart pound) when you can’t breathe.’

190) *Olay sin mabolinget, maka-ila=ka pay dedan.*

even ORMd darkness ABIL-see=2sI PART PART

‘Even in the dark, you are nevertheless able to see.’

With perfective marking, the lack of agency implicature yields a ‘fortuitous’ reading, as in (191). This derived form is often used with the negative to deflect responsibility for one’s lack of success, as in (192). The negator for the potential activities is *adi*, as in (192).

191) *Enggay naka-a=ak si esa ay reference=ko en da Danlo.*

already ABIL-get=1sI ORMi one LK reference=1sII OPRM pl Danlo

‘I was already able to get one reference from Danlo (and someone with him.)’

192) *Adi=ak naka-solat ay dagos tan na- sangaw=ak sin pitsa.*

NEG=1sI ABIL.P-write LK immediately because UNDs.P-distract=1sI ORMd date

‘I wasn’t able to write (you) immediately because I got confused about the date.’

Both CV and CVC reduplication can occur with potential activity predicates. CV reduplication may modify the potentiality operator, indicating the continuing potentiality or

lack thereof over time, as in 193). CVC reduplication, on the other hand, expresses an at-the-moment situation as in 194).

193) *Adi maka-i~inat si Poltag.*

NEG ABIL-CV-pull.away PRM Poltag

‘Poltag wasn’t able to pull away (implied: he was stuck, he tried repeatedly)’

194) *Maka-ot~ota =ak.*

ABIL-CVC-vomit = 1sI

‘I feel like I can/am going to vomit.’

### 2.3.1.2 Potential attributives with *maka-*

With certain roots, potentiality tends to be interpreted as propensity, as in 195), and these predicates fall into the attributive class, describing their ATTRIBUTANT as an individual-level stative, and taking *baken* as the negator, as in 196).

195) *Ma-lastog ono maka-etek =da.*

ATT-lie or ABIL-deceive = 3pI

‘They are liars, deceivers.’

196) *Baken maka-apal si ka-dwa =k.*

NEG ABIL-envy PRM companion-two = 1sII

‘My husband is not (an) envious (person).’

### 2.3.1.3 Potential attributives with *kaCV-*

When the ability to trigger emotions or mental states can be attributed to something or someone, an abilitative-attributive predicate is formed with *ka-* followed by CV reduplication of the state root. Like other attribute predicates, it does not inflect for aspect, and thus cannot assert that a participant actually caused the state, although pragmatically this is generally the assumption. The symbol  $\diamond$  indicates potentiality. The EXPERIENCER is unspecified in the Stative LS (compare to VVLP:402).

[be' (...x...)  $\diamond$  CAUSE [feel' ( $\emptyset$ ,pred')]

Thus, in 197) the ‘words’ had the potential to offend, while in 198) the ‘path’ is characterized by its potential for causing ‘fear’. Like other attributive predicates, this derived attribute is negated with *baken*, as in 199).

197) *Kasi-sinit tomet din kali =m.*

ATT.ABIL-offended PART RMd word = 2sII

‘Your words were certainly offensive.’

198) *Kae-egyat ay danan Ø tan deppas Ø.*

ATT.ABIL-fear LK path 4I because precipice 4I

‘It’s a scary/dangerous path because it’s precipitous.’

199) *Baken koma kae-egyat di pese.*

NEG should ATT.ABIL-fear RMi death

‘Death should not be frightening (to anyone).’

### 2.3.2 *Attributive predicates with CVC +ma-*

Many different roots may be affixed with *ma-* and then reduplication applied after affixation to the first CVC of the resulting word; this process yields a derived attributive predicate indicating current or customary stage-level attributes. Examples 200) and 201) are formed from property and internal-experience roots, respectively.

200) *Mal~ma-liteng san kapi; ipaatong=yo Ø.*

PROG-ATT-cold DRM2 coffee heat =2pII 4III

‘That coffee is cold; heat it up.’

201) *Mab~ma-bain si Emy.*

PROG-ATT-embarrassed PRM Emy

‘Emy’s feeling shy.’

These derived attribute predicates are formed with a variety of roots—actions in examples 202) and 203), and a class root used metaphorically in 204).

202) *mag~ma-geyek.*

CVC-ATT-tickle

ticklish’

203) *mat~ma-tao*

CVC-ATT-bark

‘characterized by loud and continuous barking’

204) *mak~ma-keweng*

CVC-ATT-ear

‘attentive’

### 2.3.3 *Predicates with temporal immediacy*

The prefix *ka-* can indicate temporal immediacy—a suddenly beginning event, or a just-completed event.

### 2.3.3.1 Inchoative predicates with *ka-*

Actions that are not inherently precipitous may be prefixed by *ka-*, tagged IMM(ediate), to indicate that the event is suddenly beginning. This affix forms an achievement predicate with this logical structure:

INGR **do'** (x, [**root'**(x,(y))])

205) *ngem ka-posipos = ak et adi ...*

but IMM-twist/turn = 1sI PART PART

‘but I just quickly twisted really...’(and escaped!)

206) *Et doy etay ka-sigbo Ø, en = (n)a pay kano = n ila-(e)n Ø.*

and DEM3V PART IMM-dive 3sI go = 3sII PART HSY = DISP see-UND 3sIII

‘And there wow! he dove right in, he went to see him.’ (upon realizing his friend was stuck underwater)

### 2.3.3.2 Recently completed predicates with *ka-CVC*

The combination of CVC reduplication with the prefix *ka-* indicates recently completed activities or changes of state. Examples 207) and 208) show this predicate.

207) *Sa = y address = na tan doy kakal~kali = k.*

DEM2I = RMI address = 3sII because DEM3IV RECENT-speak = 1sII

‘That’s his address (I know) because I just now spoke (with him).’

208) *Kadat~dateng = mi = d labi en da Pedring.*

RECENT-arrive = 1pII = LOC night OPRM pl Pedring

‘We just arrived last night--Pedring and others and I.’

### 2.3.4 Passive states with *ma-*

Previous examples have shown that the prefix *ma-* can form several different kinds of predicate, and passive states are yet another use of this prefix. Any two-argument predicate with a state **pred'** in its logical structure may be passivized by a process (see §1.2.5.3 of Chapter 6) in which *ma-* replaces *-en* or co-occurs with *i-*, *-an*, or *i...an*. (Perfective aspect is marked on *ma-* yielding *na-*.)

Passive states have only one direct argument, the affected entity. Examples of passive states are shown in 209) to 211).

209) *Na-galabgab-an            din    takkay Malisay.*

UNDls.P-scratch <    RMd   hand   Malisay

‘Malisay’s hand was scratched.’

210) *Na-sawad = ak            sin    tolo   ay    pewek.*

UNDs.P-block = 1sI   ORMd   three   LK   typhoon

‘I was blocked (from my plans) by the three typhoons.’

211) *Nakdeng   ay    nai-galot = kami    amin...*

done            LK    UNDts.P-tie = 1pII   all

‘(When) all of us were fastened (by seatbelts)...

Imperfective marking on passive predicates (*ma-* as opposed to perfective *na-*) creates an open-ended proposition that may easily imply potentiality rather than assurance of its fulfillment. A passive derivation from a directed-perception activity is shown in 212) by the semantic representations built on *ila + 2s* ‘see you’.

212) *Ila-en = mi sik?a.*    SR: **do'** (we [**see'** (we, you)])    ‘We are looking at/see you.’

*Ma-ila = ka.*            SR:  $\diamond$  (**see'** ( $\emptyset$ , you))    ‘You are able to be seen/visible.’

213) *Ma-lako-an            amin.*

UNDls -buy <            all

‘Everything can be bought (it’s all for sale).’

#### 2.3.4.1 Passives as stative modifiers

Passive predicates can be used as stative modifiers. For example, in 214) the reference phrase *din itlog* ‘the eggs’ has a linked modifier, the passive predicate *na-i-do~dolin* ‘were stored’. This passive was derived from the causative achievement predicate *i-dolin*. CV reduplication was added to indicate that the resulting state had duration in time.

214) *Na-boyok   din   itlog   ay   nai-do~dolin.*

UNDs-rot   RMd   egg   LK   UNDts.P-CV-store

‘The stored eggs/eggs that were stored are rotten.’

Test 5 above predicts that semelfactive, activity and process predicates cannot serve as stative modifiers. This is borne out by examples 215) to 217), which attempt to passivize semelfactive, activity, and process predicates by adding a co-occurring *ma-*, all of which are ungrammatical.

215) \**Na-ek*      *din*      *anak*   *ay*      *na-pikpik(-en)*.

UNDS-sleep RMd      child LK      UNDS-pat

\*‘The patted child/child who was patted slept.’

216) \**Na-ek*      *din*      *anak*   *ay*      *na-man-dan*.

UNDS-sleep RMd      child LK      UNDS-ACT-walk

\*‘The walked child/child who walked slept.’

217) \**Ay*   *in-dolin = mo*      *din*   *lokto*   *ay*      *na-ng <om> etit?*

Q      UNDt.P-store = 2sII RMd yams      LK      UNDS-CHANGE-black

\*‘Did you store the darkened yams/yams that darkened?’

#### 2.3.4.2 Reduplication with *ma-* passives

CV reduplication indicates the continuing duration of a passive state, as was noted in 214). This reduplication is also seen in the second clause of 218) and in 219).

218) *Nan-ta~tangad*      *Ø*   *et*      *anggay*   *ma-i~ila = n*      *ngalab = na*.

ACT.P-CV-face.up 3sI   and   already   UNDS-CV-see = RMd   privates = 3sII

‘She was facing upwards and her private parts were completely visible.’ (woman turned to stone)

219) *Nay*      *etay*      *mai-li~ligat-an = ak*.

DEM1V PART   UNDDs-CV-hardship < = 1sI

‘Oh my, here I am being given/having a very hard time.’

CVC reduplication with *ma-* passives indicates an on-going current situation, as in the bracketed word in 220).

220) *Dalon*   *b <inm> ab~baba*      *din*      *eroplano*   *et*      [*ma-il~ila*]      *din*      *Americano*.

much   ACTm.P-CVC-descend RMd   airplane   and   UNDS-CVC-see RMd   American

‘The airplane was coming down low and the American (soldier) was being seen.’

#### 2.3.4.3 Negation of *ma-* passives

As noted above regarding result-state predicates, passivized predicates may also show ambiguity as to whether they represent a situation as an event or a descriptive state. The negation of passivized states depends on this interpretation. Thus in 221) the negator *baken* and the durative *CV-* gives the predicate a descriptive reading, while in 222) *adi* is used for an event that did not happen. There is some dialect shift toward greater use of *adi*, making this a

somewhat fuzzy area between the clear use of *baken* with identificational and attributive states and the clear use of *adi* with activity predicates.

221) <In> ammo-an=(n)a am?in dana, tan baken met nai-ta~tabon Ø.

UNDI.P-know< = 3sII all pl.DEM1I because NEG PART UNDTs.P-CV-hide 4I

‘He learned all these things, because they certainly weren’t hidden.’

222) Ka-parti abe ay dagos din akin-aso et adi na-observar-an Ø.

IMM-butcher PART LK immediately RMD owner-dog and NEG UNDTs.P-observe< 4I

‘The owner of the dog killed (it) immediately and it (dog) was not observed (for rabies).’

If potentiality is implied, the negation of that potentiality is with *adi*. Examples 223) and 224) show that when *ma-* is negated, the prefix *ka-* often substitutes for it to specifically indicate and perhaps intensify the impossibility.

223) Adi ka-bilang di badang=yo.

NEG UNDTs.INTENS-count RMI help=2pII

‘Your help can not be calculated (i.e. you were so very helpful).’

224) Adi ka-silaw-an di danan tan masde di liboo.

NEG UNDTs.INTENS-light< RMI way because thick RMI cloud

‘The way couldn’t be lit up because the cloud/fog was so thick.’

### 2.3.5 Derived predicates with *i-* and *i...an*

Many predicates formed from any root class may express a situation not entailed by the root denotation, such as a entity being used or moved in the course of the main event. Such predicates take the affix *i-* as an applicative to license the participant introduced by such a state of affairs, such as an INSTRUMENT, CONCOMITANT, or other THEMES that are moved or used. The Actor of these activity predicates is generally interpreted as agentive, even causative, depending on the root. In 225), which exemplifies a causative semelfactive predicate, the item that ‘knocks’ is brandished by an agent. In 226), the prefix *i-* with ‘take to sleep’ has licensed the ‘doll’ as a concomitant THEME and with ‘pillow’ it has licensed the ‘towel’ as an instrument THEME.

225) I-togtog=na din payong sin tangeb.

UNDT-knock RMD umbrella ORMd door

‘She knocked (with) the umbrella on the door.’

226) *I-ek = na                      din      daldali = na;      i-pongan = (n)a      din      towalya.*

UNDT-sleep = 3sII RMd doll = 3sII      UNDT-pillow = 3sII RMd towel

‘She takes her doll to sleep with her; she uses the towel as a pillow.’

Many actions and movements may be specified in terms of direction vis-à-vis some entity, whether literally ‘toward’ or ‘away from’ the entity, or more metaphorically, as in the case of a BENEFICIARY or other RECIPIENT. The *i...an* circumfix, tagged UNDD(irectional), is used as an applicative to form the predicate and to license such entities when they are specified as relevant to the activity. Example 227) compares three predicates based on *tagtag* ‘run.’ 228) to 231) exemplify various interpretations of directional specification.

227) *managtag                      i-tagtag                      i-tagtag-an*

*maN-tagtag    i...an-tagtag*

‘to run’                      ‘to run off with something’      ‘to run from something or someone’

228) *I-tneng-a(n) = m      kod      mo      sino      san      i-bog~bogaw = da.*

UNDD-hear < = 2sII      please      if      what      DRM2 UNDT-PROG-shout = 3pII

‘Please listen (attentively) to (hear) whatever it is they are shouting about.’

229) *I-tep?a-a(n) = m      pay      din      manok      si      kane(n) = na.*

UNDD-toss < = 2sII PART RMd chicken ORMi food = 3sII

‘Toss the chicken some food.’

230) *Iandoanas                      tatang = na.*

*i-ando-a(n) = na = s(i)*

UNDD-tall < = 3sII = PRM father = 3sII

‘He passes his father in height.’

231) *I-lako-a(n) = m      kod      sak?en      si      arina.*

UNDD-buy < = 2sII please 1sIII ORMi flour

‘Please buy me some flour.’

### 2.3.6 *Derived activity predicates with maki-*

The prefix *maki-* (ASSOC for ‘associate’) indicates that a participant joins others in an activity. The time phrase indicates duration of the activity with no inherent telic point. A more detailed look at this predicate is found in Chapter 6.

232) *Siyat = ta = n                      maki-line      si      piga      ay      oras.*

must = 1 + 2I = DISP ASSOC-line ORMi how.many LK hour

‘We have to stand in line for how many hours.’ (e.g. at the post office)



### 2.3.7 *Derived causative predicates with pa-*

The prefix *pa-* (CAUS) on the root adds an agentive CAUSER participant to the logical structure of a predicate, often in addition to other affixation that specifies the presence of affected participants. The causing activity is unspecified, and  $\beta$  represents another LS:

[DO (x, [**do'**,  $\emptyset$ ]) CAUSE [ $\beta$ ]

#### 2.3.7.1 With the prefix *man-*

*Man- + pa-* forms causative predicates such as the causative activities in 233) and 234) and the causative perception-state in 235). Often these predicates take a reflexive function, as may be seen in Examples 234) through 237). With place-names, as in 238) , *man-pa-* creates a causative locative state, indicating ‘to head toward’ that place.

233) *Man-beey kano di kabonyan sidi ay manpa-kan si ma-dagaang-an.*  
 ACT-house HSY RMi god DEM3IV LK ACT-CAUS-eat ORMi UNDIls -hunger <  
 ‘Gods live there, they say, who feed hungry (people).’

234) *Asi=ak man-pa-amag si baro ay beey=ko.*  
 then = 1sI ACT-CAUS-makeORMi new LK house = 1sII  
 ‘Then I’ll have a new house built for me.’

235) *Na-bayang-an Ø et man-pa-ligat Ø tan man-ga~gate Ø.*  
 UNDIls.P -wound < 3sI and ACT-CAUS-suffer 3sI because ACT-CV-itchy 4I  
 ‘He got a wound and he’s having a hard time (causing himself to suffer) because it is always itchy.’

236) *Man-pa-pokis=ak kod.*  
 ACT-CAUS-cut.hair = 1sI please  
 ‘I’d like to get a haircut please.’

237) *Man-pa-ila=ak si doktor.*  
 ACT-CAUS-see = 1sI ORMi doctor  
 ‘I’m going to see a doctor (lit. cause myself to be seen by a doctor).’

238) *Nan-logan=kami en Mrs. Mayos ay man-pa-Bagyo.*  
 ACT.P-vehicle = 1pI OPRM Mrs. Mayos LK ACT-CAUS-Bagyo  
 ‘Mrs. Mayos and I got on a vehicle to go to Baguio.’

#### 2.3.7.2 With *i-*, *-en* and *-an*

With *i-*, *pa-* forms causative active accomplishments, causative perception-states or causative activities, as in 239) to 241) respectively.

- 239) *I-pa-kan=mo*                      *din sakati sin baka.*  
 CAUS.ACT-eat=2sII RMd grass ORMd cow  
 ‘Feed the grass to the cow.’
- 240) *Asi=na i-pa-dnge*                      *Ø sin soldados=na.*  
 then=3sII UNDt-CAUS-hear 4I ORMd soldiers=3sII  
 ‘Then he told it to his soldiers. (lit. caused to hear it)’
- 241) *Olay i-pa-chekup=yo*                      *agan?o Ø ta.say ma-pnek di bayer=yo.*  
 OK UNDt-CAUS-check=2pII before 4III so.that UNDs-satisfy RMi buyer=2pII  
 ‘It’s OK to have it checked out first so your buyer will be satisfied.’

With *-en*, *pa-* also forms causative activities and causative states, with action roots in 242) to 244), stative roots as exemplified in 245) and 246) and even a class root in 247). Time expressions, as in 243), indicate duration of the action.

- 242) *Pa-kan-en=da*                      *si Doligen.*  
 CAUS-eat-UND=3pII PRM Doligen  
 ‘They fed Doligen.’
- 243) *P<in>a-kan di man-ili di soldados si dowa ay agew.*  
 CAUS-UND.P-eat BRMi ACT-town RMi soldiers ORMi two LK day  
 ‘The townspeople fed soldiers for two days.’
- 244) *En=ak pa-lobwat-en dakayo ed Bagyo.*  
 go=1sI CAUS-depart-UND 2pIII LOC Bagyo  
 ‘I am going to see you off (lit. cause to depart) in Baguio.’
- 245) *Masapol ay pa-pigsa-e(n)=m din nemnem=mo ya t<om>oled=ka.*  
 necessary LK CAUS-strong-UND=2sII RMd mind=2sII and CHANGE-brave=2sI  
 ‘It’s necessary that you strengthen your mind and become brave.’
- 246) *Pa-sadot-e(n)=na=s Ana gapo sin ka-iwed di anak=na.*  
 CAUS-sad-UND=3sII=PRM Ana due.to ORMd NOM-NEGEXIS RMi child=3sII  
 ‘He made Ana sad because of her not having children.’
- 247) *Si sak?en koma di mang-onod sin papilis ngem pa-bigat-e(n)=k Ø.*  
 PRM 1sIII1 IRR RMi ACT-follow ORMd papers but CAUS-morrow-UND=1sII 4III  
 ‘I should be the one to follow-up on the paperwork but I put it off.’

There are very few instances of *pa...an* in Kankanaey. One of these is with the general movement root *ey* ‘to go’. The *pa-* prefix triggers morphophonemic assimilation with this root

248) *Pay?am*  $\emptyset$  *si* *danom asi=ka* *ipe?ey*  $\emptyset$  *sin* *ref*  
*pa-?ey-an=mo* *i-pa-?ey*  
 CAUS.ACT-go < =2sII 4III ORMi water then=2sII CAUS.ACT-go 4III ORMd ref  
 'Put water in/on it and then put it in the refrigerator.'

Causative *pa-* can co-occur with *ka-* as in 249), where the second (oblique) participant must be acknowledged by the *i-* ‘Theme’ prefix.

#### 2.3.7.4 with no other affixation

250) *Pa-alodos* = *mo*       $\emptyset$     *sin*      *dingding*.  
CAUS-in.line = 2sII    4III ORMd    wall  
‘Place it along the base of the wall.’

### 2.3.8 *Predicates with the possession root oka*

252) *Oka* = *n di anak* = *ko din sapatos ay doy*.  
 belong.to BRMi child = 1sII Rmd shoes LK DEM3V  
 ‘Those shoes belong to my child.’

253) *Oka-en Pidlo din bingay=na ay daga.*

belong-UND Pidlo RMd share=3sII LK land

‘Pidlo will take possession of his share of land.’

254) *Oka-an=da din pedis di nangon?ona ay napalti.*

belong-UNDI=3pII RMd bile BRMi preceded LK butchered

‘They will offer up (in ritual) the bile of the preceding (animal) that was butchered.’

### 2.3.9 Class roots with predicating affixes—argument incorporation

Predicate affixes are typically used with action or stative roots. When a class root takes predicating affixes, the resulting predicate denotes a typical activity or state involving entities of the denoted class. A special case in point is the affixation possible on number words. §2.4 details this intriguing set of affixes.

#### 2.3.9.1 Natural phenomena

One analysis of predicates of natural phenomena is that they incorporate their only argument. Dynamic natural events are activity predicates with *man-*, while states that come about by natural means are affixed with *ma-*. Thus in 255) rain is expressed as an activity predicate while nightfall is a state predicate. In 256) both earthquakes and typhoons are expressed as activities with *man-*. (The modifier ‘strong’ is an adverbial adjunct.)

255) *Man-?odan downan ma-labi.*

ACT-rain while UNDs-night

‘It was raining as night came on.’

256) *Nan-yegyeg si na-pigsa~pigsa, ya nan-pewek si na-pi~pigsa*

ACT-earthquake LK ATT-CVCCV-strong and ACT-typhoon LK ATT-CV-strong

*et linibo di nat~na-tey.*

and thousands RMi CVC-UNDS-die

‘It earthquaked extremely strongly, and it typhooned strongly over time and those who died were (numbered in the) thousands.’

#### 2.3.9.2 Class roots as nonreferential participants

With other class roots, an activity predicate indicates that the root is a nonreferential undergoer. Examples of such activities would include many predicates about gathering things, as in 257). When a state predicate is formed with *ma-* or *ma...an*, as in 258) and 259), the root denotes a state affecting the participant.

257) *Mang-owang = tako!*

maN-kowang

ACT-worm = 1 + 2pI

‘Let’s dig worms!’

258) *Na-kowang = da.*

UNDS.P-worm = 3pI

‘They are infested with worms.’

259) *Na-dalangki-an      din      moyang ay      nay.*

UNDls-cradle.cap <    RMd    baby      LK      DEM1V

‘This baby has cradle-cap (a scalp condition).’

## 2.4 Predicates built with numbers

Predicates built with numbers show more variety than those built with other types of roots. Reduplication and common affixes build predicates with numbers but there is other affixation unique to numerical predicates.

### 2.4.1 Reduplicative affixation

Examples 260) and 261) show reduplicative affixation. CV reduplication with numbers is common when the number is the nuclear element in the clause core. CVC reduplication is an idiomatic way of estimating, used most commonly with the numbers three, five, and seven.

260) *To~tolo    din    bisita = mi.*

CV-three RMd visitor = 1pII

‘We have three visitors.’

261) *Tol~tolo    di    anak = mi.*

CVC-three Rmi child = 1pII

‘We have just a few kids.’

### 2.4.2 Predicating affixation

Numbers can be affixed with almost any predicating affix to indicate activities or states having to do with that number. The following examples 262) to 268) show numbers with the most common affixes.

262) *Man-tolo    din    balat    mo    pit?ing-e(n) = m      Ø.*

ACT-three RMd banana if break.in.hands-UND = 2sII 4III

‘The banana will split into three parts if you break it in your hands.’

- 263) *Opat-e(n)=m      din    lokto.*  
 four-UND = 2sII    RMd yams  
 ‘(Divide/cut) the yam into four.’
- 264) *Opat-e(n)=m      di      lako-a(n)=m.*  
 four-UND = 2sII    RMi    buy-UNDI = 2sII  
 ‘Buy four.’
- 265) *Ma-opat    din    mangga    =s di.*  
 ST-four    RMd mango    =DEM3IV  
 ‘Mangoes cost four pesos there.’
- 266) *Pan-tolo-en=da              din    tawid=na.*  
 UND.CAUS-three = 3pII    RMd inheritance = 3sII  
 ‘They will divide his estate into three.’
- 267) *Man-taoli    Ø      sin      ka-tlo=na.*  
 ACT-return 3sI    ORMd ordinal-three = 4II  
 ‘He will return day after tomorrow (in 3 days).’
- 268) *Sino      san      ka-dwa=m?*  
 who      DRM2 NOM-two = 2sII  
 ‘Who is your companion?’

### 2.4.3 Unique affixation

Several unique affixes have developed in Kankanaey to express fine points regarding mathematical concepts. Examples 269) to 276) have affixes observed only with numbers, and include some metaphorical extensions. Vowel deletion and other morphophonemic processes are clarified in the following examples.

- 269) *Mamin-dowa=ka ay    manakdo (maN-sakdo).*  
 times-two = 2sI    LK    ANTI-fetch.water  
 ‘Fetch water twice.’
- 270) *<Inm>ey=ak sidi      si      namin-tolo.*  
 ACTm-go = 1sI    DEM3IV    ORMi times-three  
 ‘I went there three times.’

- 271) *Ay sa=y maika-pito ay anak=yo?*  
 Q DEM2I=RMi sequence-seven LK child=2pII  
 ‘Is that your seventh child?’
- 272) *Sag-o~opat di ala-en=y.*  
 each-CV-four RMi take-UND=2pII  
 ‘Take four apiece.’
- 273) *Sag-do~dowa-e(n)=m di i-watwat=mo sin anan?ak.*  
 each-CV-two-UND=2sII RMi UNDt-distribute=2sII ORMd children  
 ‘What you distribute to the children, make it two apiece.’
- 274) *Kap?atam (ka-?opat-an=m) kod sa.*  
 ?-four <=2sII please DEM2I  
 ‘Please bring that up to four (as when vendor offers 3 for a certain price).’
- 275) *I-pi-dwa=m kod Ø.*  
 UNDt-?-two=2sII please 4III  
 ‘Please say/do it again (repeat).’
- 276) *Ipingsan ... mamingsan .....pingsan*  
 ?-esa ...ma-?-esa .....?-sa  
 UNDt-once ...UNDs-once first.cousin  
 ‘do once.....next/sometime....first cousin’

#### 2.4.4 Glottal infix with numbers

A glottal stop [ʔ] infixed before the second vowel of the root indicates a limitation, ‘only’. This combines with reduplicative affixation and predicating affixation in unique ways with number roots, as seen in 277) to 280).

- 277) *Tol~tol<ʔ>o din anak=mi.*  
 CVC-ʔ-three RMd child=1pII  
 ‘Our kids are only three (i.e. we have just three kids).’
- 278) *Tol~tol<ʔ>o din book=na.*  
 CVC-ʔ-three RMd hair=3sII  
 ‘He is balding.’

279) *Pit~pit <?>o-e(n)=m di lako-a(n)=m.*  
 CVC-?-seven-UND = 2sII RMi buy-UNDI = 2sII  
 ‘Just buy seven.’

280) *Mat?olo (ma <?>tolo) di na-bay?an.*  
 UNDS-?-three RMi UNDS.P-left.over  
 ‘There are only a few left.’

## 2.5 Existential predicates

Existentials are the final type of predicate that will be introduced in this chapter. Existentials occur in their base form to express simple existence or physical presence. With a locative phrase, they express location. With a possessive phrase, they express possession. Kankanaey has three existentials—one positive, *wada*, and two interchangeable negatives, *maga* and *iwed*, which vary by geographical dialect. *Wada* may be shortened to *wa* when the following reference-marker is shortened and cliticized. Table 2.5 shows the existential forms.

**Table 2.5. Kankanaey Existential Forms**

Positive	<i>wada/wa</i>
Negative	<i>maga</i>
	<i>iwed</i>

With an indefinite argument, the existential indicates simple existence, as in 281). With a definite argument, the existential indicates physical presence, as in 282).

281) *Iwed di danan.*  
 NEGEXIS RMi path  
 ‘There wasn’t any path/road.’

282) *Ay wada=s Mrs. Mayamno? Iwed Ø.*  
 Q EXIS = PRM Mrs. Mayamno NEG-EXIS 3sI  
 ‘Is Mrs. Mayamno here?’ ‘No/she’s not.’

Location is shown by locative phrases following the existential, as in 283) and 284). When an indefinite argument has a possessor, as in 285), the existential indicates that possession.

283) *Wa=y balat sin apis gowab=da.*  
 EXIS = RMi banana ORM area below = 3pII  
 ‘There are banana trees just below their place.’



284) *Wada = da = s di.*

EXIS = 3pI = > DEM3IV

‘They are there.’

285) *Maga = y sapatos = na.*

NEGEXIS-RMi shoes = 3sII

‘He doesn’t have any shoes.’

Existential predicates can take some of the predicating affixation introduced in previous sections, as in 286) and 287). A euphemistic expression using *ma...-an* is seen in 288).

286) *Emey = et di piga ay minoto, ka-wada = et di logan.*

go = PART RMi how.many LK minute IMM-EXIS RMi vehicle

‘A few minutes went by, (and) suddenly there was a vehicle.’

287) *Aket ma-iwed din anak = ko mo?*

why UNDS-NEGEXIS RMd child = 1sII why

‘Why has my child disappeared?’

288) *Mo ma-wadʔ-an = ka, man-tee = ka sin beey.*

if UNDI-EXIS < = 2sI ACT-stay = 2sI ORM house

‘If you get pregnant (lit. become locus of existence), stay at home.’

Existentials may be used in many constructions—in clauses, in reference phrases, and with predicating and nominalizing affixes. Chapter 4 will show the existential as it functions in various constructions. Chapter 7 will include the role of existentials in its study of information flow in Kankanaey discourse.

## Conclusion

This chapter has introduced the Kankanaey lexicon, with its roots and affixes. A complex variety of basic predicates are formed by the combination of affixes with different types of roots. Other derived predicates are built with more affixes and combinations of affixes. Numbers and existentials form yet other types of predicates. Chapter 3 will turn to reference phrases in Kankanaey, and then Chapter 4 will put predicates and their reference-phrase arguments together in the clause structures of Kankanaey.