

Causal-noncausal verb pairs in Ilocano*

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Abstract: Ilocano is an Austronesian language of the Philippines. This paper examines typological characteristics in the coding of causal-noncausal verb alternations in Ilocano. Specifically, this study provides Ilocano data to Haspelmath’s (1993) list of 31 causal-noncausal verb meaning pairs. The results reveal that Ilocano uses both directed and non-directed coding with equal frequency. It is also shown that Ilocano has productive morphological devices to form causal and noncausal verbs, and the same root is shared by both causal and noncausal members of a pair. In addition to these descriptive facts, I argue that the Ilocano data does not fully fit into the crosslinguistic tendency claimed by Haspelmath (2016) and different semantic characteristics of roots should be considered in order to account for the distribution of coding types.

Keywords: Ilocano, Austronesian, causal-noncausal verb pairs, verbal morphology

1 Introduction

A pair of verbs denoting a causal-noncausal contrast shows different formal relationships from language to language. In some languages the causal member of a pair is derived from the noncausal counterpart, in some, it is the reverse, and in some, neither the causal nor the noncausal member is derived from the other (Haspelmath 1993, Nichols et al. 2004). Examples of these three alternation types are given in (1)–(3), adopted from Haspelmath (1993: 89–91). Note that the third alternation type includes three subtypes (see Section 2.1 below).

(1) Causal verb derived from noncausal verb: Khalkha Mongolian

xajl-ax ‘melt’ (noncausal)

xajl-uul-ax ‘melt’ (causal)

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(2) Noncausal verb derived from causal verb: Russian

rasplavit’-sja ‘melt’ (noncausal)

rasplavit’ ‘melt’ (causal)

(3) Non-directed: Japanese

atum-aru ‘gather’ (noncausal)

atum-eru ‘gather’ (causal)

Using the list of 31 verb meaning pairs from Haspelmath (1993), the current study will investigate the coding of causal-noncausal verb pairs in Ilocano, an Austronesian language of the Philippines. It will be shown that Ilocano has productive morphological devices for forming causal and noncausal verbs, and the same root is used to express both the causal and noncausal meaning of a pair. I will also discuss what factors play an important role in determining the direction of formal derivation. Previous research has suggested that noncausal verbs tend to be expressed in a morphologically unmarked form if the event expressed is more likely to take place spontaneously, while causal verbs take a simpler form when the event is commonly brought about by an external force (Croft 1990, Haspelmath 1993, 2016). I will argue that the likelihood of spontaneous occurrence does not fully explain the distribution of formal types of alternations in Ilocano and different semantic characteristics of roots play a role in accounting for the Ilocano situation.

2 Previous studies

2.1 A typology of causal-noncausal verb pairs

A causal-noncausal verb pair is defined purely on a semantic ground (Haspelmath 1993, Nichols et al. 2004). It is a pair of verbs that denote the same situation such as an accomplishment or an activity and differ only in that the causal verb meaning involves an event causing that shared situation, while the event expressed by the noncausal verb can be construed to take place spontaneously without an external force. A typical example is given in (4), where the shared situation by the verbs is a toy breaking.¹

¹ This point will become clear when the semantic decomposition of the examples is considered (Rappaport Hovav & Levin 1998, Van Valin 2005: 31–49). The decomposition of each sentence shows that the causal meaning (4b) entails the noncausal meaning (4a):

a. break (noncausal): BECOME **break**’ (toy)

b. break (causal): [**do**’ (girl, Ø)] CAUSE [BECOME **break**’ (toy)]

- (4) a. *The toy broke.*
b. *The girl broke the toy.*

The causal-noncausal distinction does not necessarily correlate with a transitive-intransitive opposition. For instance, in English, *learn*, which is noncausal, and *teach*, which is causal, are both transitive. Causal-noncausal verb alternations, thus, are distinct from valency-changing operation (Dixon and Aikhenvald 2000).

Haspelmath (1993) distinguishes five coding types with regard to the formal relations between causal-noncausal verb pairs: Causative, anticausative, suppletive, labile, and equipollent. The latter three types are covered by the term “non-directed” since neither member is formally more marked than the other. In causative coding, the noncausal member is basic and the causal member consists of the noncausal verb plus another morpheme, as shown in (1). In anticausative coding, the causal member is basic and the noncausal member consists of the causal verb plus another morpheme, as in (2). In labile coding, the same verb form encodes the causal and noncausal meaning, like *break*, *burn*, and *open* in English. A pair in which distinct verb roots occur is called suppletive coding, as in *die/kill* in English. Finally, a pair in which both verbs are derived from the same stem is called equipollent coding, as in (3). Note that this classification is independent of the distinction between inflection and derivation but rather focuses on the markedness relations between verb pairs. This classification also assumes that the markedness of a verb pair reflects the directionality of the derivation: the derived form is morphologically more marked than the basic form it is considered to be derived from.

Haspelmath (1993) and subsequent work reveal that different languages have different coding strategies which they primarily rely on to express causal and noncausal verb meanings. For example, Russian and Romanian show a preference for anticausative coding, while Dravidian languages such as Malayalam, Kannada, and Tamil predominantly rely on causative coding (see Haspelmath 1993 for Russian and Romanian; Rajendran 2014a and 2014b for Malayalam and Tamil; Uppoor and Venkategowda 2014 for Kannada).

The Ilocano data of Haspelmath’s list of 31 causal-noncausal verb meaning pairs has already been provided by Yamamoto (2014). The present paper aims at examining the typological characteristics in the coding of causal-noncausal verb meaning pairs, based on a detailed description of the coding strategies in Ilocano.

like ‘dance’, ‘talk’, or ‘walk’. Although the term ‘unergative’ was originally defined on syntactic grounds, it is used in a semantic sense here. Unergative verbs are often contrasted with unaccusative verbs and they frequently show formal differences in many languages (Levin and Rappaport Hovav 1995). Unaccusative verb meanings are divided into two types here, AUTOMATIC and COSTLY verb meanings. Briefly, an automatic event is a change-of-state event that is easily construed as occurring without any external instigator, e.g., ‘melt (intr.)’, ‘sink’, ‘dry’. A costly event is a change-of-state event that typically involves an external force, e.g., ‘open (intr.)’, ‘break (intr.)’, ‘change (intr.)’. The distinction between these verb meanings is not clear-cut and the two types are “introduced primarily for expository purposes and for cross-linguistic comparison” (Haspelmath 2016: 56). Finally, AGENTFUL verb meanings are verb meanings where the event is hardly interpreted to occur spontaneously, e.g., ‘be cut’, ‘be eaten’.

On the basis of this scale, Haspelmath makes two basic predictions: the higher the noncausal verb meaning of a pair is on the spontaneity scale, the shorter the noncausal verb form will be, and the lower the noncausal verb meaning of a pair is on the scale, the longer the noncausal verb form will be. For instance, the verb meaning ‘cut’, which belongs to the transitive type on the scale, is more likely to be shorter than its causal counterpart ‘make someone cut something’, while the verb meaning ‘be cut’ is more likely to be longer than its causal counterpart ‘cut (tr.)’.

As is argued in Haspelmath (2016: 55–58), these two predictions (and the spontaneity scale itself) are motivated by the form-frequency explanation: when two grammatical values (such as singular/plural and nominative/accusative) make an opposition in a certain grammatical category (such as number and case), the less frequent member tends to be overtly coded or coded with more morphemes, while the more frequent member tends to be zero-coded or coded with fewer morphemes since the latter member is more expected and predictable.²

I will show that causal-noncausal verb pairs in Ilocano support the spontaneity scale only to a limited extent. Before turning to the Ilocano data, I will provide background information on the language and an overview of its verbal morphology relevant to this study.

² A reviewer pointed out that the scale proposed by Haspelmath (1993) is explained in terms of iconicity. Although Haspelmath (1993) tries to do so, such an explanation for the scale is not plausible, as he admits much later (Haspelmath 2022). Syntagmatic isomorphism, the subtype of the iconicity principle relevant here, predicts that the causal member is always coded by a more complex form than the noncausal member, because the causal member is semantically more complex, as shown in footnote 1.

3 Ilocano preliminaries

Ilocano is a Malayo-Polynesian language of the Austronesian family (Blust 1999). The language is spoken by nine million people in the northwest of the Luzon Island of the Philippines (Rubino 1997, 2005). It also functions as the lingua franca of the region. Ilocano is classified as a member of the Cordilleran language family of Northern Philippine languages and is considered to constitute its own branch of that group (Reid 1989: 57–58).

Ilocano distinguishes between four vowels /i, e, a, u/ and fifteen consonants /p, b, t, d, k, g, ʔ, s, m, n, ŋ, l, r, w, j/. /u/ is usually lowered to [o] word-finally. In this study, the data is given in phonetic transcription using IPA without square brackets. Like other Philippine languages, Ilocano is a predicate-initial (i.e., VS/VAP) agglutinative language. The primary case distinction is made between the core and the oblique case. In core arguments, the ergative and absolutive cases are distinguished for pronouns only. *ti=* and *djaj=* mark common nouns as core arguments, and *ni=* marks personal nouns as core arguments, regardless of whether or not they are A (the most agent-like argument) or P (the most patient-like argument).

Table 1 Ilocano case articles

	Number	Core	Oblique
Common	Neutral	<i>ti=</i> (neutral) <i>djaj=</i> (definite)	<i>iti=</i> (neutral) <i>kendjaj=</i> (definite)
	Plural	<i>dagiti=</i>	<i>kadagiti=</i>
Personal	Neutral	<i>ni=</i>	<i>kenni=</i>
	Plural	<i>da=</i>	<i>kada=</i>

3.1 Verbal morphology

Verbs in Ilocano are derived by affixes indicating a category called ‘focus’, following Rubino (1997: Ch. 8) and Schachter and Otnes (1972). In this system, four focus categories are basically distinguished morpho-syntactically: actor focus (AF), patient focus (PF), locative focus (LF), and conveyance focus (CF). The latter three focuses are classified as non-actor focuses. Actor focus verbs are either atransitive (taking no core arguments) or intransitive (taking one core argument functioning as the actor). The actor focus is marked by one of three affixes, *ag-*, *<um>*, and *man-*. Although each of these affixes can be assumed to be associated with certain semantic characteristics, which affix a verb root takes is primarily determined lexically. Non-actor focus verbs are transitive and take two core arguments, an actor (A) and undergoer (P). The patient

focus is marked by the suffix *-en*, the locative focus is marked by the suffix *-an*, and the conveyance focus is marked by the prefix *i-*. Verbs in the patient focus take an argument that is the patient of the action expressed by the verb. LF verbs are those that take arguments that are either a source, a goal, a location, or a partially affected patient. CF verbs take arguments expressing an entity that is conveyed physically or psychologically. Examples are given in (6).³

- (6) a. *t<imm>araj=ak.*
 <PFV.AF>run=1MINI.ABS
 ‘I am running.’
- b. *s<in>u.rot-ø=dak.*
 <PFV>chase-PF=3AUG.ERG>1MINI.ABS
 ‘They chased me.’
- c. *p<in>altu.g-an djaj=pulis taj=tao.*
 <PFV>shoot-LF C=police C=person
 ‘The police shot a citizen.’
- d. *?in-ja.wid=nak.*
 PFV.CF-take.home=3MINI.ERG>1MINI.ABS
 ‘He took me home.’

Ilocano verbs obligatorily inflect for viewpoint aspect and three formal categories are identified: zero-marked, perfective, and imperfective (Yamamoto 2019). The perfective and imperfective forms express the perfective aspect and imperfective aspect, respectively. A zero-marked verb is a verb that lacks an overt morphological marking. It denotes the perfective aspect and is typically construed as having future or present time reference. The zero-marked form is a finite form that contrasts with the perfective and imperfective aspect forms in the language.

Ilocano verbs show another class of alternations called ‘potentive’ (Rubino 1997: Ch. 8). Potentive forms express involuntary actions in general, covering various semantic domains such as nonvolitional activities, ability, coincidental activities, and resultative states. The potentive formative *maka-* is consistent with the actor focus (e.g. *maka-lanjoj* (POT.AF-swim) ‘to be able to swim’, *maka-kita* (POT.AF-see) ‘to see’), whereas *ma-* is consistent with the other (i.e. non-actor)

³ Ilocano personal pronouns express person and minimal-augmented number values (Thomas 1955). ‘Minimal’ means the minimum amount of individuals necessary to satisfy each person value. For the speaker-addressee person, the minimum amount is two, while for the other persons it is one. On the other hand, the term ‘augmented’ means any amount of individuals more than the minimum amount.

3.2 Data

The data of causal-noncausal verb alternations in Ilocano provided in this paper comes primarily from my own fieldwork in Laoag City in the Philippines. I also searched for Ilocano verbs with certain aspect forms on Google and collected example sentences. To confirm this primary data, I refer to secondary data obtained from the Ilokano-English dictionary (Rubino 2000). The wordlist used for collecting data is from Haspemath (1993) with 31 verb meaning pairs (see Table 3 in Section 4.1). In elicitation sessions, verb meanings were given with their argument(s) (e.g., *The butter melts, the wind closes the door*), in order to avoid ambiguity.

4 Ilocano causal-noncausal verb pairs

4.1 The distribution of the formal types of verb pairs

Table 3 shows the formal types of each causal-noncausal verb pair in Ilocano.

Table 3 Causal-noncausal verb pairs

Verb meaning	Noncausal	Causal	Type
1 boil	<i>?ag-burek</i>	<i>?i-pa-burek</i>	Causative
2 freeze	<i>?ag-je:lo</i>	<i>pag-balin-en ?a je:lo</i>	Causative
3 dry	<i>ma-maga-?an</i>	<i>pa-maga-?an</i>	Equipollent
4 wake up	<i>?ag-ri:??</i>	<i>ri?:?-en</i>	Equipollent
5 go out/put out	<i>r<um>uwar</i>	<i>?i-ruwar</i>	Equipollent
6 sink	<i>l<um>ned</i>	<i>pa-lned-en</i>	Causative
7 learn/teach	<i>?ag-sur~su:ro</i>	<i>?i-su:ro</i>	Anticausative
8 melt	<i>ma-ru.naw-ø</i>	<i>runa:w-en</i>	Anticausative
9 stop	<i>?ag-sarden?</i>	<i>?i-sarden?</i>	Equipollent
10 turn	<i>?ag-puli:gos</i>	<i>puligu:s-en</i>	Equipollent
11 dissolve	<i>ma-ru.naw-ø</i>	<i>runa:w-en</i>	Anticausative
12 burn	<i>ma-pu?u:r-an</i>	<i>pu?u:r-an</i>	Anticausative
13 destroy	<i>ma-perdi-ø</i>	<i>perdj-en</i>	Anticausative
14 fill	<i>ma-pno-ø</i>	<i>punnu-?en</i>	Anticausative
15 finish	<i>ma-lpas-ø</i>	<i>ma-lpas-ø</i>	Labile
		<i>pa-lpas-en</i>	Equipollent

Verb meaning	Noncausal	Causal	Type
16 begin	<i>?ag-rugi</i>	<i>?ag-rugi</i> <i>?i-rugi</i>	Labile Equipollent
17 spread	<i>?ag-saknap</i> <i>ma-i-saknap</i>	<i>?i-saknap</i>	Equipollent Anticausative
18 roll	<i>?ag-tula:tid</i>	<i>?i-tula:tid</i>	Equipollent
19 develop	<i>r<um>aŋ?aj</i>	<i>pa-raŋ?aj-en</i>	Causative
20 get lost/lose	<i>?ag-pu:kaw</i>	<i>puka:w-en</i>	Equipollent
21 rise/raise	<i>?ag-pa-ŋa:to</i> <i>ŋ<um>ato</i>	<i>?i-pa-ŋa:to</i> <i>?i-ŋato</i>	Equipollent Equipollent
22 improve	<i>?<um>imbag</i>	<i>pa-?imbag-en</i>	Causative
23 rock	<i>?ag-lja:li</i>	<i>?i-lja:li</i>	Equipollent
24 connect	<i>d<um>ket</i>	<i>?i-dket</i>	Equipollent
25 change	<i>?ag-ba:liw</i>	<i>bali:w-an</i>	Equipollent
26 gather	<i>?ag-ti:pon</i>	<i>tipu:n-en</i>	Equipollent
27 open	<i>ma-j-lukat</i>	<i>?i-lukat</i>	Anticausative
28 break	<i>ma-perdi-ø</i>	<i>perdj-en</i>	Anticausative
29 close	<i>ma-j-rikep</i>	<i>?i-rikep</i>	Anticausative
30 split	<i>ma-bu:sak-ø</i>	<i>busa:k-en</i>	Anticausative
31 die/kill	<i>ma-taj-ø</i>	<i>pa-taj-en</i>	Equipollent

As can be seen in Table 3, four of the five coding types are found in Ilocano: causative, anticausative, equipollent, and labile. I will now look more closely at the formation of each derivation type found in Ilocano. The table also reveals that the same root is used for each causal-noncausal verb pair.

4.2 Formation of each derivation type

4.2.1 Causative coding

As mentioned in Section 3.1, Ilocano verbs are obligatorily marked by focus affixes. In other words, plain verbs consist of at least a verb root plus one focus affix. In causative pairs, verbs expressing noncausal meaning are formed as is and verbs expressing causal meaning are derived by additional morphemes. Examples are given in (7)–(10). Each noncausal verb in (7)–(10) consists only of a verb root and an actor focus affix, while the causal verbs involve the prefix *pa-*,

which denotes causation. The affixes related to the coding of causal and noncausal meaning are marked with boldface.

- (7) a. *ʔag-burek* *ti=danum.*
 ZERO.AF-bubble C=water
 ‘The water boils.’
- b. *ʔi-pa-burek=na* *ti=danum.*
 ZERO.CF-CAUS-bubble=3MINI.ERG C=water
 ‘S/he boils the water.’
- (8) a. *l<um>ned* *ti=barko.*
 <ZERO.AF>sink C=warship
 ‘The warship sinks.’
- b. *pa-lned-en=da* *ti=barko.*
 CAUS-sink-ZERO.PF=3AUG.ERG C=warship
 ‘They sink the warship.’
- (9) a. *r<um>aŋʔaj* *ti=panagbjag=mi.*
 <ZERO.AF>develop C=life=1AUG.GEN
 ‘Our lives progress.’
- b. *pa-raŋʔaj-e=k* *ti=panagbjag=mi.*
 CAUS-develop-PF=1MINI.ERG C=life=1AUG.GEN
 ‘I progress our lives.’
- (10) a. *ʔ<um>imbag* *ti=sakit=ko.*
 <ZERO.AF>get.well C=illness=1MINI.GEN
 ‘My illness gets better.’
- b. *pa-imbag-en=na* *ti=sakit=ko.*
 CAUS-get.well-PF=3MINI.ERG C=illness=1MINI.GEN
 ‘S/he cures me of my illness.’

The causal member of the ‘freeze’ pair is the only expression which is coded in an analytic way. As shown in (11b), the general causative verb *pagbalinen* ‘make’ is used in combination with the complement *je:lo* ‘ice’ introduced by a ligature, an abstract element used to build complex constructions.

- (11) a. *ʔag-je:lo ti=danum.*
 ZERO.AF-ice C=water
 ‘The water freezes.’
- b. *pag-balin-en=na=ʔa je:lo ti=danum.*
 PF-make-PF=3MINI.ERG=LIG ice C=water
 ‘S/he freezes the water.’

4.2.2 Anticausative coding

In an anticausative pair, the causal verb is basic while the noncausal verb is derived. Ilocano forms anticausative verbs almost exclusively by using the potentive affix *ma-* (*na-* in the perfective aspect) but not *maka-*, because its base form is always a non-actor focus, which is not consistent with *maka-*. Representative examples are given in (12)–(15).⁷

- (12) a. *na-j-lukat ti=ridaw.*
 PFV.POT-CF-open C=door
 ‘The door opened.’
- b. *ʔi-lukat=na ti=ridaw.*
 ZERO.CF-open=3MINI.ERG C=door
 ‘S/he opens the door.’
- (13) a. *ma-perdi-ø ti=aldaw=ko.*
 ZERO.POT-break-PF C=day=1MINI.GEN
 ‘My day is ruined.’
- b. *perdj-en=na ti=aldaw=ko.*
 break-ZERO.PF=3MINI.ERG C=day=1MINI.GEN
 ‘S/he ruins my day.’
- (14) a. *ma-j-rikep ti=rwa:ŋan.*
 ZERO.POT-CF-close C=door
 ‘The door closes.’
- b. *ʔi-rikep=na ti=rwa:ŋan.*
 ZERO.CF-close=3MINI.ERG C=door
 ‘S/he closes the door.’

⁷ As can be seen in (12a), (13b), and (14a), /i/ is realized as the glide [j] when it is resyllabified as an onset or coda.

- (15) a. *ma-puɔu:r-an* *ti=balaj*.
 ZERO.POT-burn-LF C=house
 ‘The house burns.’
- b. *puɔu:r-an=na* *ti=balaj*.
 burn-ZERO.LF=3MINI.ERG C=house
 ‘S/he burns the house.’

The learn/teach pair is the only pair in which the anticausative verb is formed by a focus affix in combination with reduplication⁸ of the root, as shown in (16).

- (16) a. *ɔag-sur~su:ro=ɔak* *ɔiti=saba:li=ɔa* *lengwa:he*.
 ZERO.AF-RDP~learn=1MINI.ABS OBL=other=LIG language
 ‘I learn another language.’
- b. *ɔi-su:ro=k* *ti=kurso* *ti=lengwa:he*.
 ZERO.CF-teach=1MINI.ABS C=course C=language
 ‘I teach a language course.’

4.2.3 Equipollent coding

As shown in Table 3, equipollent coding is frequently used in causal-noncausal verb formation in Ilocano. The simplest way of equipollent coding found in the language is illustrated in (17)–(20), where both causal and noncausal verbs involve a focus affix only.

- (17) a. *ɔag-ri:ɔiŋ* *ti=ɔubiŋ*.
 ZERO.AF-wake C= child
 ‘The child wakes up.’
- b. *ri:ɔiŋ-en=nak* *ti=ɔubiŋ*.
 wake-ZERO.PF=3MINI.ERG.1MINI.ABS C=child
 ‘The child wakes me up.’
- (18) a. *r<um>uwar* *ti=lala:ki* *ɔidjaj=kwarto=na*.
 <ZERO.AF>go.out C=man LOC=room=3MINI.GEN
 ‘The man goes out of the room.’

⁸ It is unclear what is the function of the reduplication in (16a). In general, CVC reduplication expresses plurality or the imperfective aspect in Ilocano.

- b. *ʔi-ruwar* *ti=lala:ki* *ti=li:bro* *ʔidjaj=bag=na.*
 ZERO.CF-move.out C=man C=book LOC=bag=3MINI.GEN
 ‘The man takes out the book from his bag.’
- (19) a. *ʔag-sarden* *ti=lu:gan* *ʔiti=sa:ŋo* *ti=simba:ʔan.*
 ZERO.AF-stop C=car OBL=front C=church
 ‘The car stops in front of the church.’
- b. *ʔi-sarden=ko* *ti=ʔag-sigari:ljo.*
 ZERO.CF-stop=1MINI.ERG C=ZERO.AF-smoke
 ‘I stop smoking.’
- (20) a. *ʔag-pu:kaw* *ti=namna:ma=na.*
 ZERO.AF-loss C=hope=3MINI.GEN
 ‘Her/his hope disappears.’
- b. *puka:w-en=na* *ti=namna:ma=na.*
 loss-ZERO.PF=3MINI.ERG C=hope=3MINI.GEN
 ‘S/he loses her/his hope.’

Equipollent verb pairs with an additional morpheme are also found. In such cases, the noncausal verb is marked by the potensive prefix *ma-*, which denotes involitionality, while the causal verb is marked by the casative prefix *pa-*, as in (21) and (22).

- (21) a. *ma-maga-ʔan* *ti=buʔok=ko.*
 ZERO.POT-dry-LF C=hair=1MINI.GEN
 ‘My hair will become dry.’
- b. *pa-maga-ʔa=k* *ti=buʔok=ko.*
 CAUS-dry-LF=1MINI.ERG C=hair=1MINI.GEN
 ‘I will dry my hair.’
- (22) a. *ma-lpas-ø* *ti=padaja.*
 ZERO.POT-finish-PF C=party
 ‘The party ends.’
- b. *pa-lpas-e=k* *ti=ʔamin=ŋa* *ʔubra.*
 CAUS-finish-PF=1MINI.ERG C=all=LIG work
 ‘I finish all tasks.’

4.2.4 Labile coding

The data reveals that Ilocano allows labile coding only for verbs that express an aspectual meaning (i.e., ‘finish’ and ‘begin’). In (23) and (24), the verb *ʔagrugi* ‘start’ and *malpas* ‘finish’ denote either a noncausal or causal meaning.

- (23) a. *ʔag-rugi ti=ba:ro=ŋa traba:ho ditoj.*⁹
 ZERO.AF-start C=new=LIG work here
 ‘A new project will start here.’
- b. *ʔag-rugi=da=ŋa ʔag-kampanja=n.*¹⁰
 ZERO.AF-start=3AUG.ABS=LIG ZERO.AF-campaign=already
 ‘They are already starting the campaign.’
- (24) a. *kaano=ŋata ma-lpas-ø dajtoj=ʔa covid-19?*¹¹
 when=Q ZERO.POT-finish-PF this=LIG covid-19
 ‘When will the COVID-19 end?’
- b. *na-lpas-ø=isu:na=ŋa ʔag-ba:sa ʔiti=dja:rjo.*
 PFV.POT-finish-PF=3MINI.ABS=LIG ZERO.AF-read OBL=newspaper
 ‘S/he finished reading the newspaper.’

5 Discussions

5.1 Characteristics in Ilocano causal-noncausal verb formation

Table 4 gives the numbers of verb meaning pairs belonging to each of the formal types. Furthermore, the table also provides the ratio of the number of anticausative and causative expressions in addition to the percentage of non-directed expressions (i.e., equipollent, labile, suppletive coding). When a verb meaning pair corresponds to two types, each of them was counted as 0.5. There was no pair that shows more than three coding types.

⁹ <https://twitter.com/accenturejobsph/status/946629392935063552?lang=da>, accessed on September 30, 2022.

¹⁰ <https://twitter.com/iameilsen/status/198776843694911488>, accessed on September 30, 2022.

¹¹ <https://www.facebook.com/112397560408728/posts/kailokanwankaano-ngata-malpas-daytoy-a-covid19makain-inumak-iti-arakenshare-yu-m/119320826383068/>, accessed on September 30, 2022.

Table 4 Frequency of each expression type

type	total	A	C	E	L	S	A/C	% non-dir.
frequency	31	10.5	5	14.5	1	0	2.1	50

Abbreviations: A = anticausative coding, C = causative coding, E = equipollent coding, L = labile coding, S = suppletive coding, A/C = ratio of anticausative to causative pairs, % non-dir. = percentage of non-directed pairs

Table 4 reveals that Ilocano uses both directed and non-directed coding to express the 31 causal-noncausal verb pairs. Between the two types of directed coding, anticausative coding is preferred to causative coding, as shown by the ratio of anticausative to causative pairs in the table. The ratio of non-directed coding is relatively high in Ilocano when compared to the 21 languages examined in Haspelmath (1993).

Table 5 The percentages of non-directed pairs in the 21 languages of Haspelmath (1993)

Language	% non-dir.	Language	% non-dir.
Finnish	9	Swahili	29
Mongolian	10	Hindi-Urdu	31
Hebrew	10	Lezgian	35
Turkish	12	Hungarian	48
Rumanian	17	German	53
Arabic	18	Indonesian	55
Armenian	21	Greek	56
Lithuanian	24	Georgian	56
Udmurt	26	Japanese	71
Russian	26	English	94
French	27		

Another finding from Table 4 is that in Ilocano, equipollent coding accounts for around 94% of the three types of non-directed coding, and this coding type is used most frequently among all coding types. This high frequency of equipollent coding in Ilocano can be attributed to the productivity of the focus morphology. As can be seen in Table 3, alternations of focus categories

are often associated with causal-noncausal alternations (in the 11 equipollent pairs, the causal-noncausal distinction is expressed only by differences in the focus morphology of the verb).

One might wonder if there is any cross-linguistic correlation between the preference for certain types of derivations and other typological parameters. Based on the investigation of a set of 18 verb meaning pairs, Nichols et al. (2004) point out that significant correlations are found between argument alignment and the orientation of derivation chiefly in inanimate verbs. What is specifically relevant to this paper is that non-directed coding favors ergative alignment (Nichols et al. 2004: 168), although the motivation is not mentioned. However, Ilocano does not show this tendency clearly. In Ilocano, non-directed coding accounts for just 50% of the 31 verb meaning pairs, while the languages with ergative alignment in their database exhibit non-directed coding 72% or more for 9 inanimate verb pairs such as ‘boil’ and ‘dry’.

5.2 Verb root meanings and causal-noncausal coding types in Ilocano

By observing the coding patterns of causal-noncausal verb pairs in Ilocano, it has been shown that Ilocano uses four different coding types: causative, anticausative, equipollent, and labile. Such intralinguistic variation leads us to ask what determines the choice of a particular coding type. I argue in this section that this can be in part accounted for by verb root meaning.

Out of the 31 verb pairs, the pairs that can choose labile coding are only verbs expressing aspectual meanings. A similar pattern is also found in other Austronesian languages of the Philippines such as Tagalog, as in (25). Although further investigation is needed, this suggests that such a pattern is potentially an areal tendency for those languages.¹²

- (25) a. *nag-simula=na=sila* *sa=traba:ho.*
 PFV.AF-start=already=3PL.NOM LOC=work
 ‘They have started work already.’
- b. *nag-simula=na* *?aŋ=ba:go=ŋ* *semestre.*
 PFV.AF-start=already NOM=new=LIG semester
 ‘A new semester has already started.’

In addition, in Ilocano, there is a strong tendency for causal-noncausal motion verb pairs to prefer equipollent coding (Yamamoto to appear). As can be seen in Table 3, this is also true of

¹² A reviewer suggested that this parallelism can be attributed to the fact that Ilocano and Tagalog belong to the same language family. While I do not intend to exclude this possibility, it does not seem likely that *simula* in Tagalog and *rugi* in Ilocano are cognates of the same root.

the four motion verb pairs in the verb list: ‘go out/put out’, ‘rise/raise’, ‘spread’, and ‘roll’. In these verb pairs, the causal members are marked by the conveyance focus prefix *i-* while the noncausal members are marked by the actor focus infix *<um>*. In other words, the meanings of self- (noncausal) motion and caused motion seem to correspond to the affixes *<um>* and *i-*, respectively, resulting in the preference for equipollent coding.

Another finding from the data is that almost all verb roots that express physical objects or states show directed coding, namely, either causative or anticausative coding. The roots expressing such meanings are given in Table 6.

Table 6 Verb roots expressing physical objects or states

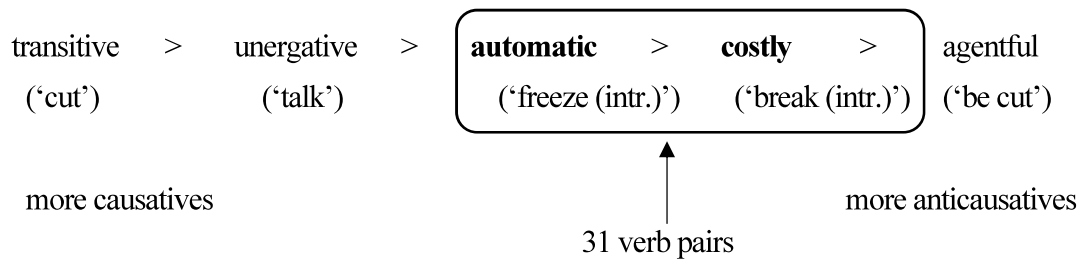
Root	Gloss	Directed coding	Noncausal	Causal
<i>burek</i>	bubble	yes	<i>ʔag-burek</i>	<i>ʔi-pa-burek</i>
<i>je:lo</i>	ice	yes	<i>ʔag-jelo</i>	<i>pag-balin-en ʔa je:lo</i>
<i>pu:ʔor</i>	fire	yes	<i>ma-puʔu.r-an</i>	<i>puʔu.r-an</i>
<i>perdi</i>	lost, wasted	yes	<i>ma-perdi-ø</i>	<i>perdj-en</i>
<i>dekket</i>	glue	no	<i>d<um>ket</i>	<i>ʔi-dket</i>
<i>pu:kaw</i>	loss	no	<i>ʔag-pu:kaw</i>	<i>puka:w-en</i>
<i>raŋʔaj</i>	propensity	yes	<i>r<um>aŋʔaj</i>	<i>pa-raŋʔaj-en</i>
<i>ʔimbag</i>	good	yes	<i>ʔ<um>imbag</i>	<i>pa-ʔimbag-en</i>
<i>lukat</i>	open	yes	<i>ma-j-lukat</i>	<i>ʔi-lukat</i>
<i>rikep</i>	shutter	yes	<i>ma-j-rikep</i>	<i>ʔi-rikep</i>

As I have argued above, the meanings of verb roots correlate to some extent with their coding patterns, although there are still verb pairs that remain unaccounted for. (26) lists the three predictions that can be made for Ilocano verbs based on the coding patterns discussed in this section.

- (26) a. A pair of verbs that express aspectual meanings prefers labile coding.
 b. A pair of verbs that express self-motion and caused motion shows equipollent coding.
 c. A pair of verbs consisting of roots that express physical objects or states shows either causative coding or anticausative coding.

5.3 Direction of derivation and the spontaneity scale

Haspelmath (2016) proposes the spontaneity scale of noncausal verb meanings and claims that the choice of causative and anticausative verb forms can be determined in terms of that scale. The 31 noncausal verb meanings that I examined in this study exclusively fall into either the automatic or costly verb type. The scale predicts that automatic verbs are more likely to exhibit causative coding than costly verbs while costly verbs are more likely to favor anticausative coding than automatic verbs.

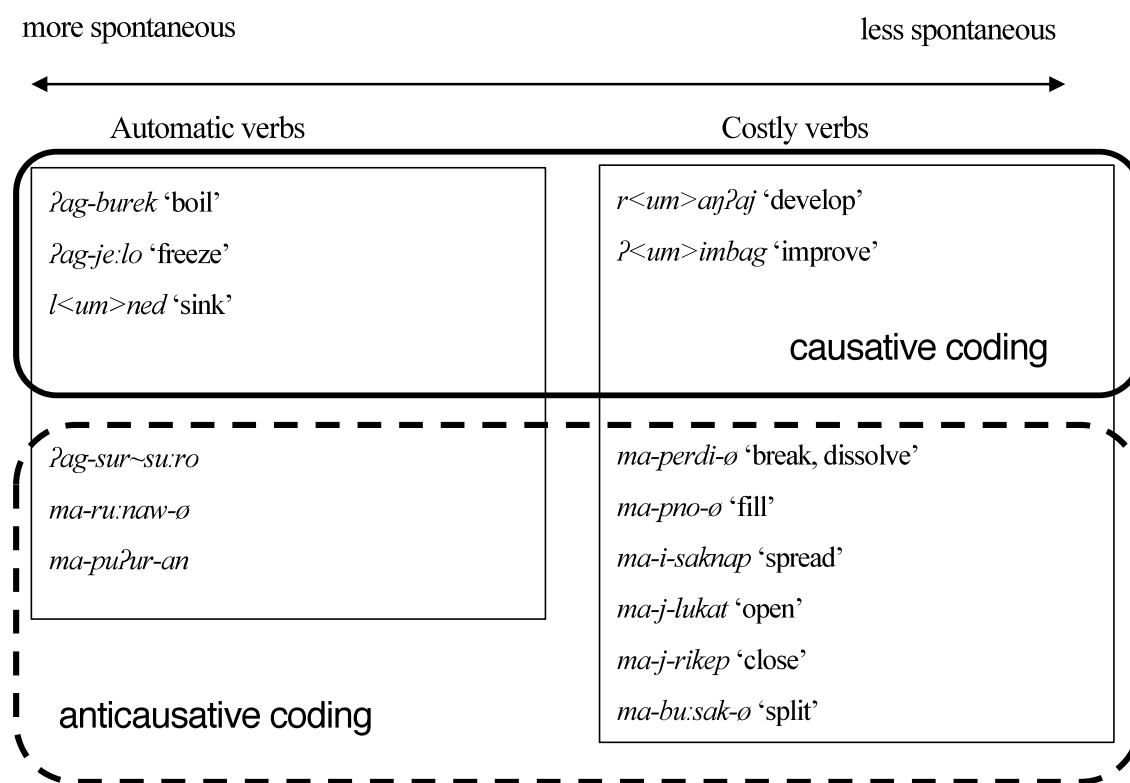


These predictions do hold in some languages. Tanigawa (2020) argues that this scale accounts very well for the coding pattern of causal-noncausal verb meanings in Norwegian. To ensure cross-linguistic comparability, I follow Tanigawa's (2020) classification of automatic and costly verb meanings, because the distinction between these verb meanings is made for cross-linguistic comparison (Haspelmath 2016: 56).

In Ilocano, while some automatic verbs such as 'boil' and 'freeze' show causative coding, as expected, other automatic verbs such as 'melt' and 'learn', which are also likely to occur spontaneously, are expressed by anticausative coding.¹³ In addition, some costly verbs such as 'develop' and 'improve' are expressed by causative coding, despite being expected to show anticausative coding. Thus, some noncausal verbs are in line with the spontaneity scale, but others are not, as shown in Figure 1.

¹³ A reviewer doubted that 'learn' belongs to automatic verbs. However, learning can occur without teaching. Therefore, I believe 'learn' should be classified as an automatic verb rather than as a costly verb.

Figure 1 The spontaneity scale and directed coding types in Ilocano



6 Conclusion

This paper examined typological characteristics in the coding of causal-noncausal verb pairs in Ilocano. This study provided the Ilocano data in accordance with Haspelmath’s (1993) list of the 31 causal-noncausal verb meaning pairs. The results revealed that Ilocano uses both directed and non-directed coding with equal frequency. Within directed coding, Ilocano prefers anticausative coding over causative coding. With regard to the use of non-directed coding, Ilocano predominantly relies on equipollent coding. It was shown that Ilocano never uses suppletive coding, perhaps because it has productive morphological devices to form causal and noncausal verbs and the same root is shared by both causal and noncausal members of each pair. I also argued that the Ilocano data cannot be fully accounted for by the spontaneity scale proposed by Haspelmath (2016), and different semantic characteristics of verb roots should be taken into account.

Symbols and abbreviations

ABS	absolutive	OBL	oblique case article
AF	actor focus	PF	patient focus
AUG	augmented	PFV	perfective form
C	core case article	PL	plural
CAUS	causative	POT	potentive
CF	conveyance focus	Q	interrogative marker
ERG	ergative	ZERO	zero-marked form
GEN	genitive	1	first person
LF	locative focus	2	second person
LIG	ligature	3	third person
LOC	locative	<>	infix boundaries
MINI	minimal	~	reduplication
NOM	nominative		

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イロカノ語の使役・非使役動詞ペア

山本恭裕

【キーワード】 イロカノ語、オーストロネシア語族、使役・非使役動詞、動詞形態論

要旨

使役・非使役動詞ペアが形式的にどのような関係を見せるかについては言語ごとに異なることがわかっている。本研究では、Haspelmath (1993) の動詞リストに基づき収集したデータを検討し、フィリピンのイロカノ語の類型論的特徴を明らかにする。その結果から、イロカノ語は有方向表現と無方向表現の両方を同じ頻度で用いることがわかった。また、使役・非使役動詞を作るための生産的な形態素を持ち、それらを用いて各ペアの使役動詞と非使役動詞が同一の語根から形成される。これらの結果に加えて、イロカノ語の使役・非使役動詞ペアの表現形式の分布は Haspelmath (2016) が提案する「自発性スケール」だけでは説明が難しいこと、他の意味特徴から部分的に説明できることを議論する。

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