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The Ilokano Causative in Universal Grammar*
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Introduction

There are three basic ways, relative to the noncausative situation, in which causation may be expressed in Ilokano,¹ namely analytic, morphological, and lexical, as illustrated in (1) to (3), respectively:

1. P-in-ilit-na ni Juan nga ag-aramid ti
 -OT,past-force-3sg. Det. J. linker(LI) AT,fut.-make Det.
 table
 'He/she forced Juan to make a table.'
2. Ag-pa-katawa-(na) ni Juan
 AT,fut.-caus-laugh-(3sg) Det. Juan
 'Juan will make him/her laugh.'
3. B-in-ennat-ko daytoy goma.
 -OT,past-stretch-1sg. this rubber band.
 'I stretched this rubber band.'

The purpose of this paper is to analyze and place in universal grammar perspective the type of causative construction illustrated in (2), where a non-causative verb has undergone a derivational process in order to express causativity, and there is no separate expressed predicate of causation (as there is, for example, in (1)).

1. The Ilokano sentence structure.

The simple sentence of Ilokano consists of a verb followed by a string of one or more noun phrases, one of which is marked as the topic.² Formally, the topic is either unmarked when it is nonpronominal, or marked by the use of a topic pronoun form. Semantically, the topic is always interpreted as definite. A case-marking affix on the verb indicates the case role of the topic NP. Thus, depending on the case marking affix, a verb may be actor-topic (AT), object-topic (OT), indirect-object-topic (IOT), beneficiary-topic (BT), or locative-topic (LT), and the topic NP that occurs with these verbal forms may be called the actor-topic, the object-topic, and so on.

4. Ag-luto ni Marya ti tarong.³
 AT-cook det. M. det. eggplant
 'Maria will cook eggplant.'
5. Lutu-en ni Marya daydiay tarong.
 cook-OT dem.
 'Maria will cook that eggplant.'
6. Laku-an na-kami ti lalaki ti aso.
 sell-IOT he-us man dog
 'The man will sell a dog to us.'

7. I-bulud-an ni Maria ni Juan ti kuarta.
 BT-borrow-BT money
 'Maria will borrow money for Juan.'
8. Manila ti pag-gian-an ni Rosa.⁴
 det.^{LT} -live-LT
 'Manila is where Rosa will live.'

The order of the constituents in citation sentences is VAX (where A=actor and X=other constituents in a fairly free linear arrangement). The position of the actor is fixed in non-actor-topic sentences but flexible in actor-topic constructions.⁵

Non-topic noun phrases that occur in the sentence are marked for case either by the use of a non-topic pronoun or by a prenominal marker in the case of indirect objects and other oblique constituents. Semantically, non-topic noun phrases may be definite or indefinite. Formally, non-topic definite NP's must be marked as non-topic by the use of prepositional markers such as ka-, ken-, and para, with the exception of non-topic actors, which are unmarked, and non-topic direct objects, which must be indefinite, i.e. the only determiner allowed to occur in this NP is ti, as illustrated in (9) and (10).

9. Nag-surat ni Maria { ti
 AT-write { *kadaydiay } daniw.
 'Maria wrote { a
 { *the } poem.'
10. *K-inn-ita ni Maria { ni
 see-AT-see { ken-ni } Juan.
 'Maria saw John.'

On the other hand, non-topic indirect object and benefactive NP's may be definite, as (11) and (12) illustrate.

11. I-ted ni Maria ti libro { ken-ni Pedro.
 { ka-daydiay ubing.
 OT-give det. Maria det. book { nonT-det. Pedro
 { nonT-that child
 'Maria will give the book { to Pedro.'
 { to that child.'
12. Lutu-en ni Maria ti tarong para ken-ni Pedro.
 cook-OT for nonT-
 'Maria will cook the eggplant for Pedro.'

2. The causative construction

In Ilokano, causation is expressed by the use of a productive causative verbal affix pa-.⁶ The causative sentence consists of a verb which includes this causative affix (henceforth the causative verb), which typically involves one more NP argument than the corresponding non-causative verb. Thus, a non-causative intransitive verb requires one NP, while the corresponding causative intransitive verb requires two NP's, as shown by (13) and (14).

direct objects so it appears to indicate that the causee is a syntactic direct object. In sentences with transitive causer-topic verbs, as in (17), there is no such restriction on the definiteness of the causee. Hence, the causee is marked as a non-topic indirect object, as a comparison with (11) shows.

2.2 Causee-topic constructions

The affixes which mark a direct object as the topic of a noncausative sentence are used in C2T constructions to indicate that the topic is the NP whose referent is the causee. In addition to pa-, the causative affix pag- may also be used to indicate causation in these sentences. In this section I shall argue that pa- is a more productive and older causative morpheme than pag-.

In non-causative sentences verbs may take one of three different affixes to mark the direct object as topic: '-en', 'i-', or '-an', as illustrated in (19) to (21).

19. Lutu-en-na ti karne asada.
 cook-OT-3sg
 'He'll cook roast beef.'
20. I-serra ni Maria daydiay tawa.
 OT-shut window
 'Maria'll shut that window.'
21. Sagad-an ni Juan ti kusina.
 sweep-OT kitchen
 'Juan will sweep the kitchen.'

Of these three sets of affixes, -en may cooccur with pa-/pag- in C2T constructions, -an may cooccur only with pa-, and i- does not occur at all as a causee-topic marker.

22. { *I-pa-luto
 Pa/pag-lutu-en } ni Maria ni Juan ti karne asada.
 OT-caus-cook
 caus-cook-OT
 'Maria will make Juan cook roast beef.'

Lexicalized causatives provide evidence that the causative morpheme pa- is an older form as compared to pag-. Thus it is the morpheme pa- the one that appears in the following lexicalized causative verbs: padara ('to have a hemorrhage'--dara, 'to bleed'); pakan ('to feed'--kaan 'to eat'); pasirut ('to tie'--sirut 'to fasten into a knot'); patay ('to kill'--matay 'to die'); pakita ('to show'--kita 'to see'); pataray ('to ride'(a horse)--taray 'to run'). It does not seem to be justified to analyze the sentences where these verbs occur as containing a syntactic causer and a causee, as illustrated in (23) and (24):

23. Nag-pataray ni Juan ti kabalyo idiyay taltalon.
 AT-ride horse loc. field
 'Juan rode a horse in the field.'

24. Im-pa-kita-na daydiay libro.
 OT-caus-show-3sg
 'He showed that book.'

There are some verbs which may be causativized only by means of pa-, as for example turog ('to sleep') and pagna ('to walk').

25. a. Pa-pagna-en-na } ti lalaki.
 b. *Pag-pagna-en-na }
 caus-walk-OT-3sg
 'He'll make the man walk.'
26. a. Pa-turog-en } ni Maria ti ubing.
 b. *Pag-turog-en }
 caus-sleep-OT
 'Maria will make the child sleep.'

The b sentences in (25-6) are interpreted as ungrammatical because Ilokano has the verbs pagpagna and pagturog with the respective meanings 'to walk on' and 'to put on something to sleep'. The segment pag- in pagpagna is a reduplication with the meaning of 'to do X continuously', and the pag- in pagturog seems to be the instrumental affix pag- ('what you put on in order to sleep').

Independently, the morpheme pag- functions as an instrument-topic affix, as illustrated in (27-8).

27. Pag-laba ni Maria ti sapun ti lupot.
 Inst.T-wash soap clothes
 'Maria will wash clothes with soap'
28. Pag-pinta-na ti sepillo ti balay.
 Inst.T-paint-3sg brush house
 'He'll paint a house with the brush'

We conclude, therefore, that: (i) the exclusive occurrence of pa- in lexicalized causative verbs, (ii) its occurrence in all topics in causative constructions, (iii) the restricted productivity of pag- as a causative affix, and (iv) its parallel function as an instrument topic marker, offer sufficient evidence in support of the claim that pa- is the older causative morpheme.⁸ In fact, it is likely that pag- has acquired its causative status more recently, probably as a result of the semantic similarity between causation and instrumentality, i.e. the causee may have been interpreted as the instrument used by the causer to bring about an event.

2.3 Object-Topic Causative Constructions (OTC)

Two of the affixes used to mark OT in noncausative sentences, i- and -an, are also used to indicate that the direct object is the topic in causative constructions. Noncausative verbs that take -en and i- in OT sentences, take only i- in the corresponding causative constructions, while -an verbs use the same affix -an in

the derived causative verbs. Representative examples below.⁹

29. a. Basa-en ti ubing daydiay libro.
read-OT
'A child will read that book'
b. I-pa-basa ni Maria daydiay libro iti ubing iti lalaki.
OT-caus-read
'Maria will make a child read that book to a man.'
30. a. G-in-atang ni Pedro ti kabalyo.
OT-buy
'Pedro bought the horse.'
b. Im-pa-gatang ni Maria ti kabalyo kenni Pedro.
OT-caus-buy
'Maria made Pedro buy the horse.'
31. a. I-lak-lako ni Pedro ti kabalyo.
OT-Red.,imp.-sell
'Pedro is selling the horse'
b. I-pa-lak-lako ni Maria kenni Pedro ti kabalyo.
OT-caus-Red.,imp.-sell
'Maria is making Pedro sell the horse'.
32. a. Sagad-an ni Juan ti kusina.
sweep-OT
'Juan will sweep the kitchen.'
b. Pa-sagad-an ni Maria kenni Juan ti kusina.
caus-sweep-OT
'Maria will make Juan sweep the kitchen.'

2.4 Indirect Object and Benefactive Topic Causative Constructions (IOTC, BTC)

Both in noncausative and causative sentences the suffix -an marks IOT, and the affixes i- -an BT. In causative sentences, however, IO and B topic verbs which have an incorporated prefix i- in their stem (e.g. ilot ('to rub'), igad ('to grate'), isuro ('to teach')) usually mark both IOT and BT with the affixes i- -an.

33. Pa-basa-an ti babae ti libro kenni Pedro ti lalaki.
caus-read-IOT
'A woman will make Pedro read a book to the man.'
34. I-pa-isuru-an¹⁰ ni Pablo kenni Lourdes ti Ilokano daguiti
IOT-caus-teach-IOT det. pl.
estudyante.
'Pablo will make Lourdes teach Ilokano to the students.'
35. Im-pa-lutu-an ni Juan kenni Maria ni Pedro ti tarong.
IOT-caus-cook-IOT
'Juan made Maria cook eggplant for Pedro.'

3. The Semantics of the Ilokano Causative Construction

It was stated at the beginning of this paper that we would be concerned here with a study of a mode of causation where at least two participants are overtly responsible for the occurrence

of an event: the causer and the causee. One semantic question that arises from this causative situation is the degree of participation of the causer in causing the resultant event. The different degrees of involvement of the causer in the effect caused are reflected in the semantic differences between various types of causative constructions. Observe, for instance, the following examples from Spanish.

36. Juan botó a María. 'Juan 'dropped' María' (made her fall)
37. Juan hizo caerse a María. 'Juan made María fall'
38. Juan causó la caída de María. 'Juan caused Mary to fall'
39. Juan hizo irse a María. 'Juan made María leave'
40. Juan la dejó irse a María. 'Juan let Mary go'

The lexical causative in (36) implies a direct physical connection between the subject's ('Juan') action and the result. Juan must have touched María in order to cause her to fall. The analytic causative (38) implies less direct causation, and (37) represents an intermediate stage of causer involvement.

(39-40) illustrate another aspect of the relation between causer and result: the difference between causation proper and permission. (39) means that somehow Juan caused María to leave, while (40) implies that Juan, the causer, had some control of the situation but that rather than causing it he did not prevent it from occurring; he allowed it to happen.

In Ilokano, the strong agentivity of the subject and its physical manipulation of the object (as illustrated by (36)) is also conveyed by lexical (or lexicalized) causatives. These verbs do not allow a meaning of incidentality nor of mediated causation, as the examples below show.

41. S-in-ukat-an ni Maria diay ubing, *gapu ta mabalinanna.
OT-dress-OT
'Maria dressed the child, *because he could do it'
42. In-tinnag ni Maria diay ubing, *gapu ta naglaawna.
OT-drop
'Maria dropped the child, *because she shouted'

On the other hand, the affixal causative in Ilokano does not necessarily imply a physical connection between subject and object. These morphological causatives may express, however, both causation proper and permission in all the different topics. Thus, in the preceding sections we have consistently glossed the Ilokano examples with the causative predicate 'make', but a more exact translation must allow both meanings. Corresponding to (41-2) we have the causatives (43-4).

43. P-in-ag-sukat-an ni Maria diay ubing, gapu ta mabalinanna.
OT-caus-dress-OT
'Maria caused/made/let the child dress, because he could do it'

The derivation of causative verbs would be stated in another level of the lexicon as part of the productive lexical rules of the language. This level has been suggested by Thompson as an improvement to Jackendoff's theory of the lexicon. Thompson states: "...it is not appropriate to consider the rules which account for a speaker's productive capacity as simply redundancy rules "used generatively", since this does not allow a distinction to be made between a productive process and a non-productive relationship." (1975:345).

Rule (48) represents the speaker's ability to create causative from noncausative verbs in a completely productive way.

$$48. \left[\begin{array}{l} /X/ \\ +Verb \end{array} \right] \longrightarrow \left[\begin{array}{l} /pa + X/ \\ +Verb \\ +Causative \end{array} \right]$$

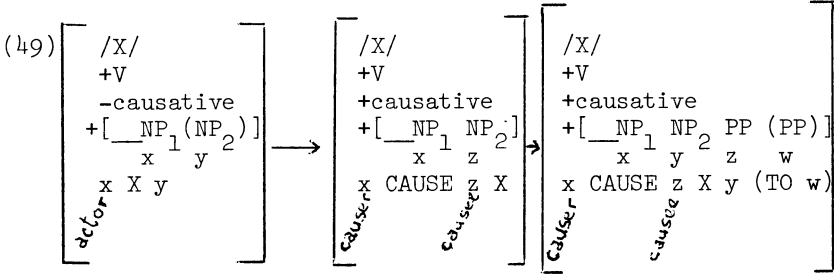
In the same manner, I would suggest that the syntactic relationships should be captured in the lexicon, given that they are a consequence of the differences in both the morphology and semantics of the base verb. So I would modify rule (48) to include this information.

$$48.' \left[\begin{array}{l} /X/ \\ +Verb \\ +[_NP_1] \\ \quad \quad \quad x \\ \quad \quad \quad X \\ \text{actor} \end{array} \right] \longrightarrow \left[\begin{array}{l} /pa + X/ \\ +Verb \\ +Causative \\ +[_NP_2 \quad _NP_1] \\ \quad \quad \quad y \quad \quad x \\ \text{CAUSE } Y \text{ CAUSE } x \text{ X} \\ \text{causer} \quad \quad \quad \text{causee} \end{array} \right]$$

(48') shows the regular and productive relationship that holds between the morphology, the syntax, and the semantics of a causative and a noncausative verb: the causative verb always involves one more NP argument (the causer) than the corresponding noncausative verb; the actor in the noncausative sentence corresponds to the causee in the causative one.

The difference between (48') and Jackendoff's lexical redundancy rules is that (48') reflects a productive process in the lexicon, and we believe (with Thompson) that this property should be differentiated from the nonproductive relationships captured by redundancy rules.

We would further suggest that the grammatical relations in which the causee appears with respect to the verb may also be represented in the lexicon as part of the productive processes related to a change in the valency of a derived causative verb. Rule (49) represents this generalization.



(49) shows the relationship that holds between the grammatical function of the causee and the number of arguments of the verb: in intransitive sentences the causee appears as direct object (NP₂), and in transitive sentences as indirect object (PP when non-topic), so when the verb has an IO there is syntactic doubling on this position.¹³

Neither Jackendoff nor Thompson consider these types of rules, but the analysis of Ilokano causatives suggests that the generalizations reflected by (49) should be expressed by the grammar of a language.

5. The Ilokano causative in universal grammar

This section places the Ilokano causative construction within the universal framework for these types of constructions set up by Comrie (1976).

It has been observed that when the subject of a noncausative verb is demoted to the status of causee in a causative sentence, the extra NP expressing the causer must be accommodated in some way by the syntax of the language. B. Comrie (1976) has pointed out that in some languages (e.g. Turkish, French) the surface exponency of the "embedded subject" (the causee) is determined by the syntactic arguments of the "embedded verb" (the causative verb) in such way that if the syntactic positions are ordered as follows:

subject - direct object - indirect object - other oblique
constituent

"we find that the embedded subject is shifted from left to right along this list to the leftmost position that is not already occupied" (1976: 263).

Keenan and Comrie (1977) propose to consider the ordering of the syntactic constituents as a "case hierarchy" on the basis of the evidence provided by the relative accessibility of NP positions to relativization. Comrie (1976) further proposes this hierarchy as also valid for causatives in view of the evidence provided by the analysis of this type of construction in a wide variety of languages. Our analysis of the Ilokano causative lends some support to Comrie's hypothesis about the validity of the case hierarchy as a principle of universal grammar, which may be used in different areas of the grammars of natural languages.

In Ilokano, the causee is shifted from left to right down to the indirect object position. In intransitive causative sentences

direct object, indirect object, is forbidden: i.e., a simplex sentence can have not more than one each of these constituents" (p. 265). As we have shown before in this paper, Ilokano doubles on the indirect object position. This is not surprising, however, because Comrie himself notes that the restriction on doubling has the greatest number of exceptions. In fact, restrictions on syntactic doubling follow the proposed case hierarchy: doubling on subjects is rare, if nonexistent; few languages allow doubling on direct objects; many more languages allow doubling on indirect objects; and there are no restrictions on doubling of other oblique constituents. The higher in the hierarchy the given constituent is, the greater the restriction on syntactic doubling.

3. Ilokano supports the generalization that it is always the "embedded subject" that is either omitted or demoted down the hierarchy when the restrictions on doubling require that some constituent be removed. In Ilokano, as pointed out before, the causee is the mobile constituent demoted down the hierarchy, and it is also preferably deleted in causative sentences where objects and oblique constituents are expressed.

4. Ilokano is an exception to the fourth and last feature of the paradigm case according to which "when the embedded subject is demoted down the hierarchy, it is demoted stepwise" (p. 265), always to the next-highest position that is still available. Observe that in Ilokano the causee is demoted to DO when the causative verb is intransitive (as in 50), and to IO when the causative verb is transitive, regardless of whether the DO position is filled or not (cf. (57) and (58)).

57. Mangpabasa ti libro ni Marya [kenni Pedro].

IO

'Maria will make Pedro read a book.'

58. Mangpabasa ni Maria [kenni Pedro].

IO

'Maria will make Pedro read.'

Comrie does suggest that this fourth feature of the paradigm case may have to be modified to account for instances of "preemption" as the one illustrated by Ilokano. Observe that in (58) the direct object NP that could be present as an argument of the causative verb "preempts" that position even though it is not overtly present, and forces the causee to the next position down: the indirect object position. It has also been noted that the same phenomenon occurs in Turkish, French, Italian, Tagalog and possibly some dialects of Spanish.

FOOTNOTES

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constructive criticism of my work. I alone, of course, am responsible for the facts and analysis presented here.

1. Ilokano is a Philippine language currently spoken by approximately three million people. It is one of the eight major Philippine languages, the other seven being: Tagalog, Cebuano, Hiligaynon, Bikol, Waray, Kapampangan, and Pangasinan. Philippine languages belong to the Austronesian or Malayo-Polynesian language family.
2. It must be noted that in Ilokano there are also verbless sentences (E.g. Napintas ti babae (beautiful, woman - 'Women are beautiful'), and topicalized sentences with nominalized clauses that do not contain any topic NP (cf. note 4) (E.g. Ni Rosa ti gumatang kadaydiay bado ('Rosa (is the one who) will buy the dress')).
3. Ag- is only one of several AT affixes. There is also more than one set of OT affixes, while the other topic NP's have only one affix paradigm associated with each.
4. Locative-topic verbs are restricted to occur in nominalized clauses with no surface topic. See Schwartz (1976) for a discussion of these clauses in Ilokano.
5. Ilokano appears to be a pragmatic word order language. We have observed that the linear arrangement of constituents becomes more or less flexible depending on various pragmatic factors, such as ambiguity, newness of information, etc.
6. Later we show that in addition to pa-, the causative affix pag- is used in causee topic sentences.
7. As discussed in section 2.2, in intransitive causatives the causee may be definite if it is the topic of the sentence and the verb is marked with a causee topic affix.
8. Distributional evidence also supports this conclusion. Pa- is a causative affix in a large number of Austronesian languages (cf. Starosta, 1974); it is also the causative affix in other Philippine languages, namely Tagalog, Kapampangan, and Hiligaynon.
9. Thus, the topic marking affixes on -an verbs are undifferentiated for C2T, OTC, and IOTC. In these cases, the determiners on the nouns will signal the topic from the non-topic NP's (causee: single underlining, topic: double underlining).

C2T	Pasagad-an ni Maria <u>ni Juan</u> ti kusina.
OTC	Pasagad-an ni Maria <u>kenni Juan ti kusina</u> .
	'Maria will make Juan sweep the kitchen'
IOTC	Pasagad-an ni Maria <u>kenni Juan ni Pedro</u> ti kusina.
	'Maria will make Juan sweep the kitchen "to" Pedro'
10. An optional rule may delete either the stem initial /i/ or the IOT /i/, but not both.
11. See Starosta (1971, 1974) for extensive arguments in support of a non-transformational analysis of morphological causatives in Philippine and Formosan languages.
12. Stockwell, Schachter, and Partee (1973) use the asterisk (*) to indicate that at least one realization of the feature thus marked must be chosen in the derivation.

13. The morphological, syntactic, and semantic relations that hold between the different causative topics also hold in noncausative constructions. I do not concern myself with them here.
14. Obviously, this discussion is only possible to the extent that we equate "embedded subject" (in Comrie's terms) to "causee" (in my terms). This is not an easy matter to settle in view of the contradictory proposals on the question of subject in Philippine languages (cf. Schachter (1976-7), Noonan (1977), and Schwartz (1976)). However, the discussion in this section would be valid even if we accepted Schachter's suggestion about the nonexistence of a category subject in these languages. Schachter's argument is that the characteristic properties of subject NP's listed by Keenan (1976) are shared by two NP's in Philippine sentences: the actor and the topic. From this it is possible to conclude that when the actor is also the topic, we may safely call this NP the subject of the sentence. On this assumption, the causee may be equated with the "embedded subject" given that in a noncausative AT sentence, the NP corresponding to the causee would be considered the subject.

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