The proleptic possessive construction in Kaqchikel Maya

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Abstract: Kaqchikel exhibits two possible alternations for encoding a third argument for ditransitive verbs. Similar to the English dative alternation, Kaqchikel encodes a third argument as an indirect argument of the verb marked as an oblique. Additionally, Kaqchikel employs the proleptic possessive construction to semantically encode a recipent argument as a pronominal dependent of the object. In this paper, I show that the proleptic possessive constructions exhibits an interesting pattern of usage that requires an actual transfer of possession rather than just the potential of change in possession, which contrasts with the English variation between the double-object construction and the dative alternation.

Keywords: lexical semantics, argument structure, ditransitives, Kaqchikel

1 Introduction

The proleptic possessive is a construction found in Kaqchikel, a Mayan language spoken in the central highlands of Guatemala that has been observed to semantically encode a third argument (the recipient) in ditransitive verbs. The construction is formed by attaching the possessive pronoun morpheme to the noun in the same manner as a regular possessed[1] NP as illustrated in (1) and (2).

(1) Juan x-ø-u-ya' [jun nu-wuj]
Juan PRFV-A3s-B3s-give one 1s-book
'Juan gave me a book' (lit. 'Juan gave my book.')

(2) Yin x-ø-in-sik'ij [jun nu-wuj]
1s PRFV-B3s-A1s-read one 1s-book
'I read my book.'

Though the bracketed constructions in both (1) and (2) are morphologically identical, I argue that the possessive construction in (1) actually functions as both the recipient argument (*nu-*) and the theme argument (*-wuj*) when combined with verbs encoding three-participants with a 'caused possession' event.

Previous approaches to event structures for ditransitive verbs (Beavers 2011, Dowty 1979, Foley & Van Valin 1984, Rappaport Hovav & Levin 1998, Rapport Hovav & Levin 2008, inter alia) assume that there is a difference among classes of ditransitive verbs with a common split for *give*-type, *send*-type, and *throw*-type verbs cross-linguistically. The common assumption in the literature is that only *give*-types necessarily encodes a 'change of possession' event, while *throw*-types and *send*-types do not necessarily encode a 'change of possession', but the 'change of possession' meaning can be added to these verbs via different argument realization strategies as with the English dative alternation. However, I assume that there is a difference between verb

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[1] It is common for Mayanists to use 'Set A' and 'Set B' to refer to agreement markers, where Set A correlates to both the ergative subject and the possessive marker on nouns and Set B correlates to the absolutive.

In Proceedings of the Workshop on Structure and Constituency in the Languages of the Americas 18 & 19, University of British Columbia Working Papers in Linguistics 39,
Natalie Weber and Sihwei Chen (eds.), 2015.

types that *only* entail the possibility of transfer of possession and verbs that entail actual possession for languages such as Kaqchikel (Beavers 2011, Gropen et al. 1989).

In this paper, I argue that not all of the corresponding verbs in Kaqchikel show this pattern, and *throw* cannot be augmented to encode 'change of possession' with the proleptic possessive construction as it can in the English dative alternation. I also aim to analyze the lexical and semantic properties of the proleptic possessive construction in Kaqchikel as compared to the lexical and semantic properties encoded in the dative alternation in English. In the section that follows, I outline some of the cross-linguistic strategies for encoding three participants for ditransitive verbs as they relate to the strategies found in both Kaqchikel and English. In Section 3, I discuss some of the approaches to analyzing three-participant events as proposed by Rappaport Hovav & Levin (2008) and Beavers (2011). In Section 4, I illustrate how the previous accounts of 'caused possession' and 'caused motion' events do not account for the alternation found in Kaqchikel with the proleptic possessive construction. I conclude in Section 5.

2 Three-participant events cross-linguistically

Malchukov et al. (2010) define a ditransitive construction as one that consist of a verb with an agent argument, a recipient-like argument and a theme argument. There are several strategies attested cross-linguistically for how languages encode the third participant in a ditransitive construction. Margetts & Austin (2007) provide an overview of the various strategies for encoding these types of three-participant events including syntactic, semantic, and pragmatic realizations for arguments. The strategies discussed in the paper are listed in (3).

(3) a. three-place predicate strategy
b. oblique/adjunct strategy
c. serial verb strategy
d. incorporation strategy
e. adnominal strategy
f. directional strategy
g. absorption strategy

English employs two of the above strategies: a three-place predicate strategy and the oblique/adjunct strategy. Kaqchikel also employs the oblique/adjunct strategy in addition to the adnominal strategy. Due to their relevance for the languages of discussion, these three strategies are discussed further below.

In addition to the various strategies for encoding a third participant, languages also tend to show either a T(heme)-type of alignment or an R(ecipient)-type of alignment (Margetts & Austin 2007). For R-type languages, the recipient tends to be the argument as the oblique. For T-type languages, the theme tends to be marked as the oblique. The most common pattern cross-linguistically is an R-type pattern, but some languages exhibit both patterns depending on the verb. Most verbs in English exhibit an R-type alignment.

(4) a. Mary sent the letter to John.
b. Mary sent the letter.
c. *Mary sent to John.

In (4a–c), the theme *the letter* is the unmarked argument in addition to being the obligatory argument amongst the theme and recipient. This provides some evidence that it is not the adjunct[2] argument here. The oblique marked argument *to John* is the recipient argument in addition to being an optional argument of the verb. However, some English verbs also show a T-type pattern where the recipient is obligatory.

(5) a. Mary fed the cereal to John.
b. Mary fed John cereal.
c. *Mary fed cereal.
d. Mary fed John.

In (5a), *to John* is still the oblique marked recipient object. However, the constructions where neither argument is overtly marked in (5b–d), *John* is now the obligatory argument as the one being fed.

Kaqchikel also exhibits the properties of an R-type language marking recipient is the oblique argument.

(6) Juan x-ø-u-ya' ri wuj [cherä ri ak'al.]
Juan PRFV-B3s-A3s-give DET book [RN.3s DET child]
'Juan gave the book to the child.'

As with the English construction, the recipient argument *cherä ri ak'al* is marked as adjunct or oblique argument of the verb *ya'* 'give'.

2.1 Three-place predicate strategies

There are three sub-types of three-place predicate strategies: the direct argument, causative, and applicative strategies. In each of these strategies, all three arguments are arguments of the verb. English double object constructions exemplify the direct argument strategy.

(7) Mary gave John the book.

In (7), *Mary, John,* and *the book* are all unmarked arguments of the verb *give* without any additional morphology added to the verb or to the arguments. The other two types of three-place predicates include additional morphology to increase the valence of a verb.

Both the causative and applicative strategies involve additional morphology to increase the valence of the verb. For the causative strategy, the verb itself is only encoded to have two arguments, so additional morphology is necessary to signal that the third argument is an argument of the verb increasing the valence from a two-place predicate argument structure to a three-place predicate argument structure. The causative strategy is illustrated in Saliba, a language of Papua, New Guinea.

[2] Due to the high variability in languages between adjuncts and obliques in terms of what qualifies as an adjunct, I leave the terms undifferentiated because the distinction does not have a great significance for the purposes of this paper.

(8) Tautau wa ya he-kita-go
picture GIVEN 1SG CAUS-see-2SG.O
'I showed you the picture.' (Margetts & Austin 2007: 14)

The verb *-kita* 'see' in (8) is only a two-place predicate verb in Saliba. However, the causative morpheme *he-* on the verb tells the verb to look for a third, or causer, argument. The applicative strategy also utilizes the valence increasing morphology to increase valency from two to three arguments, where a third benefactive or recipient type argument is added to the verb. This strategy is found in the Mayan language, Tzotzil.

(9) 7a li Xun-e ba y-ak'-be chitom li 7antz-e
TOP the Xun go A3-give-APPL pig the woman-CLF
'Xun went to give the pig to the woman.' (Aissen 1987: 105)

In (9), *Xun* and *chitom* 'the pig' are direct arguments of the verb, but the applicative morpheme *-be* signals that there is an additional benefactive argument *li 7antz-e* 'the woman' of the verb.

2.2 Oblique/adjunct strategy

With an oblique or adjunct strategy, the third participant for a three-participant event is marked as an oblique or adjunct of the verb. The other two participants are direct unmarked arguments of the verb. This strategy is found in English with the dative *to* construction.

(10) a. Mary gave the book to John.
b. Mary sent the book to John.
c. Mary threw the ball to John.

The argument *to John* in (10a–c) functions as the third argument of the verbs 'give', 'send', and 'throw', where the preposition *to* (commonly considered the English dative) marks *John* as an oblique argument.

Kaqchikel also employs this strategy. For the Kaqchikel oblique construction, the third argument is headed by a relational noun. Relational nouns, common in Mayan languages, function similarly to adpositions. They differ from other basic adpositions in that they show agreement with their dependents, but other purely prepositional words do not show the same agreement pattern.

(11) Juan x-ø-u-k'aq ri tzapuy chwä rin
Juan PRFV-B3s-A3s-throw DET ball RN.1s 1s
'Juan threw the ball to me.'

(12) Juan x-ø-u-k'aq ri tzapuy pa ri qanja.
Juan PRFV-B3s-A3s-throw DET ball PREP DET river
'Juan threw the ball in the river.'

The example in (11) contains an oblique argument headed by the relational noun *chwä,* and it is marked for agreement with the 1s object. However, the example in (12) contains a regular preposition *pa,* and there is no agreement with the object. For the purposes of this paper, only the construction in (11) is considered as a third participant for a three-participant event because it

contains a benefactive or recipient argument. The example in (12) contains a locative (adjunct) argument rather than an additional participant for the event.

2.3 Adnominal strategies

In an adnominal strategy, the third argument of the verb is marked as a dependent on one of the two direct arguments of the verb. There are two subtypes for the adnominal strategy: the possessive strategy and the proprietive strategy. The proleptic possessive construction in Kaqchikel is an example of the possessive strategy. In This construction, the R-type argument is a dependent of the T-type argument.

(13) Juan x-ø-u-ya' [jun nu-wuj]
Juan PRFV-B3s-A3s-give one A1s-book
'Juan gave me a book' (lit. 'Juan gave my book.')

As previously discussed, the 1s possessive marker *nu-* is the third semantic argument of the construction and is a dependent of the T-type argument *wuj* 'book'.

For languages that exhibit a T-type alignment, the proprietive strategy is found. In a proprietive strategy, the third argument, the theme, is marked as a dependent on the recipient argument. This is found in Dyirbal (Pama-Nyungan, North-Eastern Australia).

(14) Niya marndi-jarra [kanthathu-na wirrin-kuru]
3sg.NOM deprive-PST [father-PST.OBJ money-PROP]
'He took money off his father.' (Evans 1995: 420, cited in Margetts & Austin 2007)

In (14), *kanthathu-na wirrin-kuru* forms one NP argument, where the proprietive marked noun 'money' is a dependent of the NP 'father', which is marked as the object of the verb.

Of the different strategies of encoding three-participant events discussed in this section, only the three-place predicate strategy and the oblique/adjunct strategy have a strong representation in the literature. Previous studies primarily focus on the English double object construction (direct argument strategy) and the dative alternation (oblique/adjunct strategy). However, cross-linguistic data indicates that there are some similarities for the semantic encoding of a third participant for common ditransitive verbs, like 'give', 'send', and 'throw'. However, in terms of augmenting the meaning of verbs via different encoding strategies, languages such as Kaqchikel show more restrictions than the English alternation, which I discuss in the following section.

3 Event structure and types of 'caused possession'

It has been observed that the English dative alternation can be analyzed as having two different event structures: one for events of caused possession and one for events of caused motion. Rappaport Hovav & Levin (2008) provide the two following structures for the alternation in English:

(15) a. Caused possession: (*x* cause *y* to have *z*)
b. Caused motion: (*x* cause *y* to be at *z*)

In English, the verb 'give' necessarily encodes the 'caused possession' event indicated in (15a), but for verbs like 'send' and 'thow', the basic event structure is that provided in (15b). Rappaport

Hovav & Levin (2008) consider this to be a verb sensitive approach to analyzing the event structures of the English dative alternation. The idea behind the verb sensitive approach is that the event can be augmented to add meaning when a different alternation is used. For English, the event that is lexicalized onto the verb is the event template found for the dative *to* construction. However, the double object construction can be used to add the 'caused possession' event to verbs where it is not already lexicalized (adapted from Rappaport Hovav & Levin 2008).

(16)

	Dative *to*	Double object
give-type:	caused possession	caused possession
send-type:	caused possession/motion	caused possession
throw-type:	caused possession/motion	caused possession

What the table in (16) suggests is that for verbs like 'give' which lexicalize the meaning of 'caused possession', there is no difference between the dative construction and the double object construction because the 'caused possession' meaning is already there. However, 'send' and 'throw' lexicalize the 'caused motion' event (with the possibility of a transfer of possession, but it is not a lexicalized event of the verb) for the dative *to* construction, but the 'caused possession' event is added when the double object construction is used.

Beavers (2011) extends the analysis of Rappaport Hovav & Levin (2008) with the idea of prospective possession (originally in Gropen et al. 1989) vs. actual possession.
Prospective possession only entails the *possibility* of possession in the future rather than any sort of actual transfer of possession necessarily occurring in the event. This allows for cancellation of the result state of possession for verbs that only entail prospective possession:

(17) a. John threw the ball to Mary, and she received/caught it.
b. John threw the ball to Mary, but she didn't receive/catch it.
c. John threw Mary the ball, but she didn't catch it.

For each of the sentences in (17), 'caused possession' is not necessarily encoded via the different strategies, which then results in the cancellability of the 'change of possession' for both (b) and (c), where Mary might come into possession of the ball though not necessarily.

However, *give*-type verbs involve an actual transfer of possession. When there is actual transfer of possession entailed for the verb, the result state of possession cannot be cancelled:

(18) a. John gave Mary a book, and she received it.
b. #John gave Mary a book, but she didn't receive it.
c. #John gave a book to Mary, but she didn't receive it.

Interestingly, there appear to be parallels in Kaqchikel where a difference exists in the possible strategies that can be employed that depend on whether there is actual transfer of possession or only the possibility of a 'caused possession' event. However, the alternation for strategies between the oblique (dative) construction and the proleptic possessive construction in Kaqchikel seems more limited in the classes of verbs that can be augmented to add this meaning of 'caused possession'.

4 Kaqchikel: A closer look at events of possession

As discussed in Section 2, there are two strategies for realizing the third argument in a three-participant event in Kaqchikel: the oblique strategy and the adnominal (proleptic possessive) strategy. The oblique strategy can be used as a strategy for expressing the third participant for all classes of ditransitive verbs.

(19) a. Juan x-ø-u-ya' ri wuj cherä ri ak'al.
Juan PRFV-B3s-A3s-give DET book RN.3s DET child
'Juan gave the book to the child.'

b. Maria x-ø-u-taq pa chwä rin jun tzibanik.
Maria PRFV-B3s-A3s-send PREP RN.1s 1s one letter
'Maria sent a letter to me.'

c. Maria x-ø-u-k'aq chwä rin ri tzapuy.
Maria PRFV-B3s-A3s-throw RN.1s 1s DET ball
'Maria threw the ball to me.'

Similar to with English, the 'caused possession' event for (19c) can be cancelled but not for (19a), as shown in (20).

(20) a. # Juan x-ø-u-ya' ri wuj cherä ri ak'al,
Juan PRFV-B3s-A3s-give DET book RN.3s DET child
po ma x-ø-u-kon tä.
but NEG PRFV-B3s-A3s-receive IRR
'Juan gave the book to the child, but he didn't receive it.'

b. Maria x-ø-u-k'aq jun tzapuy cherä riya,
Maria PRFV-B3s-A3s-throw one ball RN.3s 3s
po riya ma x-ø-u-chap tä
but 3s NEG PRFV-B3s-A3s-catch IRR
'Maria threw her the ball, but she didn't catch it.'

Further, the oblique recipient argument is obligatory for the verb *ya* 'give', but not for the verbs *taq* 'send' or *k'aq* 'throw' for the oblique strategy:

(21) a. * Juan x-ø-u-ya' ri wuj
Juan PRFV-B3s-A3s-give DET book

b. Maria x-ø-u-taq pa jun tzibanik.
Maria PRFV-B3s-A3s-send PREP one letter
'Maria sent a letter.'

c. Maria x-ø-u-k'aq ri tzapuy.
Maria PRFV-B3s-A3s-throw DET ball
'Maria threw the ball.'

This indicates that the verb *give* requires a third recipient argument, which provides evidence that the proleptic possessive construction differs semantically from a regular possessed NP.

The proleptic possessive construction also shows an interesting pattern for the restrictions on verb classes that it can occur with. Recall that in the English dative alternation, the 'caused possession' event is encoded on *give*-type verbs and can be added to the other classes of verbs when the double object construction is used. If we expect other languages to pattern similarly to English, the prediction for the two different strategies in Kaqchikel would then be that the proleptic possessive construction could be used in a similar manner to augment the meaning of the *throw*-type and *send*-type verbs. However, consider the data in (22).

(22) a. Ri ak'al x-ø-u-ya' jun nu-tzabwij
DET child PRFV-B3s-A3s-give one A1s-ball
'The child gave me a ball.'

b. *Ri ak'al x-ø-u-k'aq jun nu-tzabwij
DET child PRFV-B3s-A3s-throw one A1s-ball

The proleptic possessive construction can only be used with the verbs that encode actual transfer of possession (*give*-types), but not for verbs where transfer of possession is not encoded in the meaning of the verb (*throw*-types). What is interesting with *taq* 'send' is that it can also occur with the proleptic possessive construction.

(23) x-ø-u-taq pa jun nu-tzibanik
PRFV-B3s-A3s-send PREP one A1s-letter
'She sent me a letter.'

What this seems to suggest is that the proleptic possessive construction is restricted to usage with verb classes that encode a stronger notion of 'caused possession' than with the English constructions. If this is true, the proleptic possession construction is predicted to being limited to contexts where the 'change of possession' is an actual transfer of possession. Verbs such as *sell* where a 'caused possession' event is encoded on the verb would then be expected to be possible with the proleptic possessive construction as shown in (24).

(24) Maria x-ø-u-k'y jun nu-chakat
Maria PRFV-B3s-A3s-sell one A1s-chair
'Maria sold me a chair.'

As with the *give*-types and *send*-types of verbs, *-k'y* 'sell' is also possible with the proleptic possessive. This suggests and supports the notion that beyond the differences between *give*-types and the *send/throw*-types, there is a fine-grained difference between the properties of *throw*-types and *send*-types in Kaqchikel though they pattern similarly in English. This lends to the idea that a mere possibility of transfer of possession is not strong enough to capture these differences for Kaqchikel.

5 Conclusions and future work

Based on the above patterns for the Kaqchikel alternations for realizing a third participant in three-participant event, it is clear that Kaqchikel behaves differently than the alternation in English when

considering the difference between prospective possession and actual or permanent transfer of possession. Crucially, the proleptic possessive construction can only be used with verbs that denote actual transfer of possession but not when there is only prospective or possible transfer of possession. Though this is only a preliminary study on a limited set of verbs in Kaqchikel, it leads to a larger question as to how different languages lexicalize certain events to some verb classes but not others. It also demonstrates how different languages employ different strategies to augmenting or adding events to certain verbs that do not lexicalize the 'caused possession' meaning. A much larger set of Kaqchikel verbs that have been observed to encode a third participant in other languages is necessary to gain a deeper understanding of the extent to which the proleptic possessive construction can encode a third participant as compared to being realized as only a possessed NP. This would allow for a clearer picture of the cross-linguistic possibilities for encoding a third argument in a ditransitive construction beyond those considered in the English dative alternation.

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