ON THE PROMOTION OF INSTRUMENTALS IN MAYAN LANGUAGES

Colette G. Craig
University of Oregon

O. In Fillmore's Case Grammar, the deep structure instrumental case is defined as "the case of the inanimate force or object causally involved in the action or state identified by the verb." In the surface structure of languages the instrumental NP commonly functions as an oblique NP. For example, in English the instrumental NP is the object of the preposition 'with':

(1) I opened the door with this key
(2) I cut the meat with this knife

However, it is not uncommon to find languages in which the oblique instrumental NP undergoes a promotion and functions either as the surface subject or as the surface object of a sentence. For example, in English such a process of promotion underlies the production of sentences (3) and (4):

(3) this key opened the door
(4) this knife cut the meat

In English, therefore, an oblique instrumental NP may be promoted to surface structure subject under certain conditions, specifically in the absence of expressed agent.

This paper describes the two types of instrumental promotion found in the Mayan family of languages. One type is the promotion of the instrumental NP to surface structure subject function, and is found in Kanjobalan languages. This instrumental promotion is exemplified with data from Jacaltec. The other type is the promotion of the instrumental NP to surface structure object function, and is found in Quichean languages. This promotion of instrumentals is illustrated with data from Tzutujil.

1. PROMOTION TO SUBJECT: THE JACALTEC CASE

1.1. Instrumentals in Jacaltec appear either as oblique NPs with the relational noun -u (5a) or as promoted subjects (5b):
(5) a. speb'a naj te' pulta yu te' xila
closed he the door with the chair

'he closed the door with the chair'

b. te' xila xpeb'an te' pulta yu naj
the chair closed the door by him

'he closed the door with the chair'

In simple declarative sentences the construction (5b) which exhibits the promotion of the instrumental is considered more natural than the sentence (5a) with the oblique instrumental NP.

1.2. The instrumental NP is obligatorily promoted if it undergoes any operation, such as question (6) or relativization (7):

(6) a. tzet xpeb'an te' pulta yu naj
what closed the door by him

'what did he close the door with?'

b.* tzet yu speb'a naj te' pulta
what with closed he the door

'what did he close the door with?'

(7) a. xpohtoj te' xila speb'a naj te' pulta
broke the chair closed he the door

'the chair with which he closed the door broke'

b.* xpohtoj te' xila speb'a naj te' pulta yu
broke the chair closed he the door with

'the chair with which he closed the door broke'

1.3. The formal characteristics of the promotion of instrumentals in Jacaltec are -- the position of the instrumental NP
-- the special marking on the verb
-- the demotion of the agent

1.3.1. The promoted instrumental appears in sentence initial position. Jacaltec is a verb initial language in which the sentence initial position is used for clefting. One characteristic of the instrumental NP in clefted position is that it does not carry with it a strong clefted meaning, and that it was generally translated by informants in Spanish
with no particular emphasis. Compare the clefted meaning of the agent in example (7a) and the less emphatic meaning of the instrumental in example (7b):

(7) a. naj Xuan xpeb'an te' pulta yu te' Xila
    cl John closed the door with the chair
    'it is John who closed the door with the chair'

b. te' Xila xpeb'an te' pulta yu naj Xuan
    the chair xclosed the door by cl John
    'John closed the door with the chair'

1.3.2. When the instrumental NP is in clefted position the verb is marked as if to signal that the clefted NP is the subject of the sentence. The transitive verb carries no ergative case marker and takes the suffix -n(i). Note the same verb form xpeb'an in examples (7a) and (7b) above. The underlying form of xpeb'an is:

(8) x-Ø-     -peb'a-n
    asp-A3-N0 ERG.-verb-suff

This verb form is known as the antipassive one.

The transitive verb with no special marking is speb'a as in (4a) above. Its underlying form is:

(9) x-Ø-s-peb'a
    asp-A3-E3-verb

The fact that the transitive verb is in the antipassive construction when the instrumental is promoted is taken as an indication that the instrumental functions as the surface structure subject of the sentence.

1.3.3. The third characteristic of the construction is the very clear demotion of the old subject/agent to an oblique function. Note the agentive phrase yu naj 'by him' in example (5b) above. The demotion of the agent by the instrumental is similar to the demotion of the agent by the object in the passive voice. In both instances the subject/agent is demoted to the same oblique agentive phrase. Compare the agentive phrase yu naj 'by him' of (5b) with the agentive phrase of the passive sentence (10b):

(10) a. smak' naj ix
    hit he her
    'he hit her'
b. xmak' lax ix yu naj
    was hit she by him

'she was hit by him'

Within the framework of Relational Grammar the agentive phrase is referred to as the 'chômeur'.

The presence of the demoted agent in the Jacaltec sentence contrasts with the obligatory absence of the demoted agent in the corresponding English construction in which promotion of instrumental has occurred. Compare the Jacaltec sentence (7b) and the English equivalent *(11b):

(11) a. this key opened the door
    b. *this key opened the door by John

A language like Malagasy is typologically closer to Jacaltec with respect to instrumental promotion. When the instrumental is promoted to a subject function in Malagasy, the old subject/agent is also demoted to a 'chômeur' function and present in the sentence in an agentive phrase.

1.4. Jacaltec instrumentals may undergo promotion to subject function although the promoted instrumental functions only as a 'subject by default'. Unlike a subject, it never appears in subject position behind the verb:

(12) * speb'a te' Xila te' pulta yu naj
    closed the chair the door by him

'he closed the door with the chair'

The promoted instrumental only appears in subject clefted position. It also violates the selectional restrictions of transitive verbs since such verbs never take inanimate subjects in basic sentences. However, in view of the clear demotion of the old subject, and in view of the antipassive form of the verb, the instrumental is the only candidate for the subject function of such sentences.

2. PROMOTION TO OBJECT: THE TZUTUJIL CASE

2.1. Instrumentals in Tzutujil appear either as oblique NPs with the preposition tza?n (13a) or in the instrumental voice (13b):
(13) a. xintz'ap chi7 jaay tza7n chie7
    I closed mouth-house with stick
    'I closed the door with a propped stick'

b. chie7 xintz'apb'iej chi7 jaay
    stick I closed-with mouth-house
    'I closed the door with a propped stick'

Other examples of the instrumental voice are:

(14) klo7 xinchapb'iej
    rope I grabbed-with
    'I grabbed it with a rope'

(15) kchi7ii1 xinpusb'iej ti7iij
    knife I cut-with meat
    'I cut the meat with a knife'

(16) jun wuu j kintejb'iej wii7
    a book I taught-with myself
    'I taught myself with a book'

2.2. The promotion of the instrumental is obligatory whenever an operation applies to the instrumental.

(17) a. * a chu tza7n xtz'ap chi7 jaay
    what with he closed mouth-house
    'what did he close the door with?'

b. naq xtz'apb'iej chi7 jaay
    what closed-with mouth-house
    'what did he close the door with?'

(18) a. * xpa7x chie7 j kintz'apii j chie7 jaay
    broke stick that I closed mouth-house
    'the stick with which I closed the door broke'

b. xpa7x chie7 j kintz'apb'iej chi7 jaay
    broke stick that I closed-with mouth-house
    'the stick with which I closed the door broke'
The ungrammaticality of sentences *(17a) and *(18a) show that an oblique instrumental NP cannot be questioned or relativized.

2.3. The characteristics of the Tzotzil instrumental voice are
--- the position of the instrumental NP
--- the suffixation of the verb
--- the lack of demotion of either the subject or the object

2.3.1. The promoted instrumental appears in a preverbal position. The unmarked word order of a declarative sentence in Tzotzil is SVO as in:

(19) a. truj xuch'ey ya tuun tz'an jun ab'a
    man Peter hit woman Antonia with a rock
    S V O

'Peter hit Antonia with a rock'

In the instrumental voice the subject either remains in sentence initial position as in example (20a), or it is postposed to the object as in example (20b): 7

(20) a. a truj ab'a xch'eyb'iej ya tuun
    man Peter rock hit-with woman Antonia

    'Peter hit Antonia with a rock'

b. ab'a xch'eyb'iej ya tuun a truj
    rock hit-with woman Antonia man Peter

    'Peter hit Antonia with a rock'

The promoted instrumental is therefore either in sentence second position (20a) or in sentence initial position (20b).

2.3.2. The transitive verb in the instrumental voice takes the suffix -b'iej. This suffix is cognate with the instrumentative derivational morpheme -b' of Jacaltec. It is found in Jacaltec words such as mak'-b'-al 'a chicken hitting instrument', which is derived from the verb mak'a 'to hit somebody'; or txah-b'-al 'incense burner' which is derived from txah 'prayer'. 8 The Tzotzil instrumental voice suffix is also cognate with the Tzotzil benefactive voice suffix -b'e shown in example (21b): 9

(21) a. ta-Ø-h-man kantela
    asp-A3-E1-buy candle

    'I buy a candle'
(b) \text{c-a-h-man-be} \quad \text{kantela}
\text{asp-A2-E1-buy-for} \quad \text{candle}

'I buy a candle for you'

In Quiche the same instrumental voice suffix is used also with locative NPs:10

(22) \text{sukexeb'ex} \quad \text{la} \quad \text{ri: xun masa:t}
\text{he rode-with/on} \quad \text{here} \quad \text{the one deer}

'he rode here on the deer'

The Tzutujil instrumental voice suffix is therefore a reflex of a very productive Mayan morpheme.

2.3.3. The Tzutujil instrumental voice is characterized by the lack of demotion of either the subject or the object. Both subject and object inflect on the verb as shown in example (23):

(23) \text{atet jun ab'aj x-in-a-ch'ey-b'iej}
\text{you a rock asp-A1-E2-hit-with}

'you hit me with a rock'

The subject is cross-referenced in the verb with the ergative case marker (-\text{a}:E2) and the object with an absolutive one (-\text{in-}:A1).

On one hand it is clear that the instrumental NP has been promoted since it does not appear as an oblique NP at the end of the sentence anymore. On the other hand it is clear too that neither the subject nor the object has been demoted.11

The only possible promotion that the instrumental NP could have undergone is a promotion to object function, which would mean that the transitive verb of the instrumental construction has two objects. It is not possible to test whether or not the promoted object inflects on the verb, creating a three place transitive verb with two absolutive markers. This is due to the fact that instrumental NPs are, by nature, inanimate third person nouns, for which the absolutive case marker would always be an inaudible zero marker in Mayan languages.

The situation is the reverse in the benefactive voice of Tzotzil: there it is the absolutive marker of the benefactive object which inflects on the verb, as seen in example (21b). The question becomes then whether or not the basic object inflects too. Unlike the situation in Tzutujil, it is possible to test whether an audible first or second person basic
object inflects on the verb. With the meaning of giving somebody away in marriage, the following test sentence can be constructed:

\[(24) \, ^* \, \text{č-a-∅-y-ak'-b'e} \, \text{li sune} \, \text{asp-A2-A3-E3-give-to the John} \]

'he gives you to John'

As the ungrammaticality of *(24) shows, there is no slot available in the verb form for an audible absolutive marker corresponding to the basic object. The absolutive slot is occupied by the absolutive of the benefactive NP, even when it is a third person inaudible morpheme. The benefactive construction is possible in Tzotzil only with a third person object. One assumes that the inaudible absolutive marker of the object is 'floating'—presumably still attached to the object itself—and is not inflected on the verb form.\(^{12}\)

However, another construction which involves the presence of two absolutive markers points to the fact that the two languages have different ways of dealing with the conflict of two absolutive markers for one absolutive slot in the verb. Of the two languages, Tzotzil is the most restricted in both constructions. The second construction alluded to is the antipassive. While Tzotzil does not allow antipassive constructions with a non-third person object, Tzutujil does.

Compare the ungrammaticality of the Tzotzil sentence *(25) to the grammaticality of the Tzotujil sentence (26):

\[(25) \, ^* \, \text{muc'u} \, 1-a-∅-mah-on \, \text{asp-A2-A3-hit-suff} \]

'who hit you?'

\[(26) \, \text{naq } '\text{winaq} \, x-at-∅-ch'yowa' \, \text{which man asp-A2-A3-hit-suff} \]

'who hit you?'

The restriction in Tzotzil is that the presence of a voice suffix—benefactive or antipassive voice suffix—designates the absolutive slot in the verb for the case marker of the NP emphasized or promoted by that voice. The constructions are possible only when the dislodged absolutive marker is the inaudible third person which is then allowed to 'float' in the sentence. No such constraint exists in Tzutujil. The absolutive slot in the verb is not 'reserved' for a specific absolute and may be filled by either one of the absolutive case markers. The only restriction is that one of the two be an inaudible third person which is also allowed to 'float', the audible one filling the
verbal absolutive slot. Notice how the absolutive marker in the Tzutujil antipassive verb form refers to the agent in example (27) but to the object in example (28):

(27) x-at-ch'y-owa a tru7
asp-A2-hit-hit-suff man Peter

'it is you who hit Peter'

(28) jaa' x-at-ch'y-owa
he asp-A2-hit-suff

'it is he who hit you'

In example (27) the third person absolutive marker corresponding to the object is 'floating', while in example (28) it is the absolutive marker of the agent which is floating.

Although both languages deal differently with the presence of two absolutive markers in a sentence, both languages use the same strategy of allowing an inaudible absolutive case marker to be present in the sentence without inflecting on the verb.

2.4. In Tzutujil, the promoted instrumental NP is a 'floating' object. It is a special type of derived object since it is never found in post-verbal object position and since its absolutive case marker is always the inaudible third person one which is allowed to 'float' in the sentence in the presence of the absolutive marker of the basic object.

3. ON THE MAYAN PROMOTION OF INSTRUMENTALS

3.1. Two completely different promotional strategies apply to the instrumentals of Jicalteec and Tzutujil. However, in both types of promotion the promoted instrumentals are characterized by their failure to acquire all the features of basic subject or object. In Jicalteec, the instrumental is only a subject by default, which uses the antipassive strategy, the same strategy instrumentals use in Ixil. In Tzutujil, the instrumental is only a floating object which takes advantage of the inaudibility of the third person absolutive case marker in a double object construction. More data from other Mayan languages are needed now to determine the characteristics of the languages which promote instrumental NPs through the use of the antipassive construction and those which do it by creating the double object constructions, and to define language specific and Mayan family specific conditions on these promotions.
3.2. The promotion of instrumental NPs to subject function shows the close relationship which holds between the instruments and the agents which operate the instruments. This closeness surfaces in many languages around the world in the operation of promotion to subject function (as in Jacaltec, English, or Malagasy). Another expression of such closeness can be seen in the use of the same case for both the instrumental and the passive agentive NP (as in Russian or Jacaltec). Promotion to subject is the most drastic type of promotion and is always accompanied by the demotion of the old subject, whether the promotion is that of a passive sentence or that of an instrumental one. In both Jacaltec and Malagasy the demoted subject becomes a 'chômeur' in either case and appears in the sentence as an oblique NP. In English the instrumental promotion occurs only in the absence of an expressed agent.

3.3. Promotion to object is not as drastic an operation in that it is often not accompanied by a clear demotion of the old object. This is the case with the instrumental promotion in Tzutujil as well as with the Dative Movement in English. In both instances, the promotion creates a double object construction.

Rather than a double object construction, one must view the Mayan type of promotion as creating a double absolutive construction. Just as nominative/accusative type of languages are divided between languages which have double object constructions (English) and those which do not (French), the ergative Mayan languages are divided between languages which allow double absolutive constructions with an inaudible 'floating' absolutive (Tzutujil), and languages which do not allow such 'floating' absolutes.

Quiché is such a language which does not allow for an inaudible floating absolutive in a double absolutive construction. In all Mayan languages, however, double absolutive constructions with two audible absolutive markers are avoided by demoting the basic object NP to the function of an oblique NP different from the 'chômeur' function of a demoted agent.
Notes

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2. The terminology "oblique NP", as well as "promotion" and "chômeur" reflects the theoretical orientation of this paper which is written within the general framework of relational grammar. (See Perlmutter and Postal, forthcoming.)

3. The Jacaltec data were gathered during field trips to Jacaltenango between 1971 and 1974 and rechecked during the fall of 1976. The orthography is that in use in Jacaltenango and the one used in Craig (1977). The Structure of Jacaltec: the glottalization of b' and k' is specified in the examples of this paper.

4. The Tzutujil data were gathered in Santiago Atitlán in the fall of 1976. The orthography used is that promoted by the Proyecto Lingüístico Francisco Marroquín of Guatemala. See Kaufman (1976) Proyecto de alfabetos y ortografías para escribir las lenguas de Guatemala.

5. Malagasy is a Malayo-Polynesian language spoken in Madagascar. It has a circumstantial voice in which oblique NPs, including instrumentals, are promoted to surface subject function:

(a) manasa lamba amin’ity savony ity Rasoa
    is washing clothes with soap this Rasoa

    'Rasoa is washing clothes with this soap'

(b) anasan-d-Rasoa lamba ity savony ity
    is washed-by-Rasoa clothes this soap this

    lit: this soap is being washed clothes with by Rasoa

    'Rasoa is washing clothes with this soap'

The circumstantial voice is obliquely used when an operation applies to an instrumental NP— or any of the oblique NPs which can be promoted in this voice.

The data are from Keenan (1976) "Remarkable Subjects in Malagasy," p. 255-256.

6. See Craig (1976) "Properties of Basic and Derived Subjects in Jacaltec" for more details about promoted instrumental NPs and about another instance of subject by default, the indirect causative agent.
7. Tzutujil has an SVO word order although subjects are inverted and appear in sentence final position in yes/no questions:

(a) a tru7 xk'axaaj jun cholik
    man Peter heard a news

    'Peter heard the news'

(b) l xk'axaaj jun cholik a tru7
    Q heard a news man Peter

    'Did Peter hear the news?'

The subject can also be postposed to the verb when it is the antecedent of a relative clause, giving sentences (c) or (d):

(c) j acha k'o rpaq xkama
    the man exists his money died

    'the man who had money died'

(d) xkam acha j k'o rpaq
    died man that exists his money

    'the man who had money died'


9. The Tzotzil examples are from Craig and Robertson (1971) "Mayan Pronouns".

10. Day (1976), p. 46, also notes that the instrumentative derivational morpheme -b'-. of Jacaltec derives locatives, as with cape-b'-al 'coffee orchard' which is derived from cape 'coffee'.

The Quiché data are from Norman (1976), p. 54.

11. The discussion that follows applies only to Tzutujil and not to Quiche. In Quiché, the object undergoes clear demotion and is found in an oblique NP function:

(a) la: ma k'o: xun ič'i:č' kaqaworb'ex reč' ri:
    Q not exists a metal we perforate-with to the

    uči: taq iwač'aq
    mouth pl your bottoms

    'don't you have a metal we can use to perforate your anuses?'
12. A grammatical sentence for the meaning of sentence (24) would be:

(a) č-a-y-ak' eb'el ta sna li ſune
    asp-A2-E3-give dir. to his house the John

'he gives you to (the house of) John'

13. If neither one of the absolutes is third person then the object is demoted and appears as an oblique NP:

(a) *atet x-in-ch'y-owa'

'you are the one who hit me'

(b) atet x-at-ch'y-owa' w-xiin
    you asp-A2-hit-suff E1-to

'you are the one who hit me'

REFERENCES


