

SEMANTIC INTRANSITIVITY, CAUSATION, AND THE AFFIX *M*- IN KAGAYANEN

Carol Pebley

Summer Institute of Linguistics

0. INTRODUCTION

In Kagayanen, the exact distribution and function of the verbal affix *m*- have been difficult to predict.¹ In her study of Kagayanen, Harmon (1977:105–6) notes that *m*- is derived from the intransitive Proto Philippine affix **-um-*, and states that the affix occurs exclusively with [– ergative] verbs (specifically underived stems).² That is, *m*- occurs exclusively with semantically intransitive verbs, such as *panaw* ‘to go’ (Harmon’s example).

To a point, Harmon’s statement of the distribution of *m*- is correct; however, the facts are more complex than her description would lead us to believe. First, although *m*- occurs exclusively on semantically intransitive verbs, it does not occur on all semantically intransitive verbs. Second, while *m*- occurs on certain semantically intransitive verbs, two other affixes, *mag-* and *ma-*, may also occur on these verbs in the same clauses. These observations raise two questions. One is, what is the exact distribution of *m*- among semantically intransitive verbs? The other is, what is the function of *m*-? Is it an unmarked verbal affix, or does it perform some marked function, such as signaling volition or ability?

This study is an attempt to answer these questions. To account for distribution, I will show that *m*- occurs on verbs in three semantically intransitive verb classes: motion verbs, activity verbs, and bodily process verbs.³ To account for function, I will argue that *m*- is an unmarked affix for these verbs in intransitive clauses. As the unmarked affix, *m*- cross-references an absolutive argument that is a core semantic role in the underlying cognitive event schema of the verb. It is also semantically less restricted or semantically more neutral than any other affix that can

¹ Kagayanen is a member of the Northern Manobo subgroup of the Southern Philippine language family (Harmon 1977); however, it includes many loan words borrowed from Hiligaynon, a Visayan language. Thus, Kagayanen is similar to Manobo languages in structure, but more like Hiligaynon in vocabulary. The language is spoken by 15,000–20,000 people living on the islands of Cagayancillo, Palawan, Negros, and Panay.

This study is based on data gathered between 1994 and 1997, while the author was living in the Republic of the Philippines, under the auspices of the Summer Institute of Linguistics. The data include elicited sentences and paradigms. The author would like to thank Miss Mermor Cayabo for her assistance in checking Kagayanen data for this paper. The author would also like to thank Dr. Sherri Brainard for her comments on an earlier version of this paper.

² Harmon (1977:106) defines ‘ergative’ verbs as those that prefer [+OBJ] subjects. ‘Subject’ in Harmon’s (1977:38–9) terminology is the ‘absolutive NP’ in this paper, i.e. the required argument in a single-argument clause and the less agentive required argument in a transitive clause.

³ Following Brainard (1994b), I adopt the analysis that activity verbs, such as ‘dance’, ‘hunt’, and ‘harvest’, are semantically intransitive. Examples of semantically intransitive motion verbs (henceforth ‘motion verbs’) are ‘go’, ‘enter’, and ‘sit’. Examples of bodily process verbs are ‘breathe’, ‘sweat’, and ‘defecate’.

In a verbal clause, an affix on the verb cross-references the absolutive NP, and identifies its semantic role. Verb cross-referencing displays an ergative pattern in that the verb affix always cross-references the absolutive NP (S and P), never the ergative NP (A). In addition to identifying semantic roles, verb affixes indicate mood, the main contrast being realis-irrealis. One function of the realis-irrealis contrast in Kagayanen is to indicate whether an event or state is perceived as actually occurring or having occurred; 'irrealis' indicates that it is perceived as not occurring or as not having occurred.

2. PHONOLOGICAL ALTERNATIONS OF *M-* AND *MA-*

The affixes *m-* and *ma-* have certain phonological features that are important to note. When *m-* attaches to most roots, the initial consonant of the root is deleted, as in *maan* [m-+kaʔan] 'to eat'. This rule is blocked when the initial consonant of the root is [j] or [ʎ] as in *myapon* [m-+japən] 'to eat supper' and *mlala* [m-+ʎaʎa] 'to weave'. When the affix *ma-* attaches to roots beginning with [ʔ], [j], or [ʎ], /a/ of the affix is optionally deleted, as in *maita* [maʔitaʔ] or *mita* [mitaʔ] from [ma-+ʔitaʔ] 'to be soft', *mayagak* or *myagak* from [ma-+jagak] 'to cry', and *malettem* or *mlettem* from [ma-+ʎəttəm] 'to be hungry'. Notice that following vowel deletion in *ma-*, the surface forms of the underlying affixes *ma-* and *m-* are indistinguishable. Because these surface forms are potentially ambiguous, roots beginning with [ʔ], [j], and [ʎ] were not included in the analysis.

3. DISTRIBUTION OF *M-*

In order to identify the distribution of *m-*, a survey was made of 40 semantically transitive verbs and 77 semantically intransitive verbs. The verbs were grouped into classes based on verbal semantics. For each class, a count was made of the number of verbs that occur with *m-*. The results are given in tables 1 and 2.

Table 1. Semantically Transitive Verbs that Occur with the Affix *m-* in Kagayanen

Verb Class	Verbs Taking <i>m-</i>	Total Number of Verbs
Transitive Motion	0	15
Causative	0	13
Ditransitive	0	2
Perception	0	4
Cognition	0	3
Utterance	0	3
Total	0	40

Table 2. Semantically Intransitive Verbs that Occur with the Affix *m-* in Kagayanen

Verb Class	Verbs Taking <i>m-</i>	Total Number of Verbs
Intransitive Motion	13	15
Activity	18	21
Stative	0	15
Non-bodily Process	0	10
Bodily Process	5	8
Emotion	0	9
Total	36	78

Table 1 shows that *m-* did not occur on any semantically transitive verb encoded in either a transitive clause or an antipassive clause, as expected. Table 2 shows that *m-* occurred exclusively with verbs belonging to three semantically intransitive verb classes when those verbs are encoded in intransitive clauses (and only intransitive clauses). These verb classes are: motion verbs, activity verbs, and bodily process verbs (but notice not non-bodily process verbs).

Two points are worth noting here. The first is that a significant majority (31 of the 36, or 86%) of the semantically intransitive verbs occurring with *m-* are motion verbs or activity verbs. More than half of the bodily process verbs counted (5 out of 8) also occur with *m-*. We assume that these verbs take *m-* because they follow

the well-attested tendency for bodily process verbs to pattern like activity verbs in many languages.⁷

The second point is that although *m-* occurs with a large percentage of motion, activity, and bodily process verbs, it does not occur with all of them. This reflects the fact that verbs and verb affixes do not have a one-to-one correspondence.

4. LOCALIST CASE GRAMMAR

We have proposed that *m-* is an unmarked affix and that one of its functions is to cross-reference a core semantic role in the underlying cognitive event schema of a verb. In order to discuss this claim, we will adopt a restricted model of localist case grammar developed by DeLancey (1984, 1985, 1991), based on earlier models proposed by Anderson (1971), Diehl (1975), Gruber (1976), and Jackendoff (1983, 1990).

Within localist case grammar, semantic roles are assumed to be language universals, although their association to grammatical relations in clauses will be language specific. The model assumes that every clause expresses a locative relation between a Theme and a Loc. The relation can be literal or metaphorical. States and events in all languages are represented by the cognitive schemas shown in table 3.

Table 3. Cognitive State and Event Schemas

Theme AT Loc
Theme GOTO Loc
Agent CAUSE Theme GOTO Loc

From these schemas come three core semantic roles: Agent (AG), Theme (TH), and Loc (LOC). Their roles are defined in terms of their functions in the cognitive schemas: a Loc is a physical site or state; a Theme is an element that changes location or state; and an Agent is a primary cause of the change of location or state.

Localist case grammar assumes that all verbs have two core semantic roles: a Theme and a Loc. Some verbs are also lexically specified for an Agent. Other semantic roles, such as Instrument, Benefactive, and Source, are ‘nonnuclear’ semantic roles; that is, they are semantic roles of nonnuclear clauses that have been integrated into the nuclear clause. (In Philippine languages, the nonnuclear clause is normally not present in the surface structure.) Thus, Instruments and Associatives are Nonnuclear Themes; Benefactives are Nonnuclear Locs; and Sources are Nonnuclear Locs or Nonnuclear Agents, depending on the verb.⁸

Each NP will usually have only one semantic role; however, it can have two roles if one of them is an Agent. Semantic roles can be covert arguments; they can also be lexicalized into the verb. In either case, they will not occur in the clause as overt NPs.

⁷ The five bodily process verbs that occur with *m-* are: *tunuga* ‘to sleep’, *bugtaw* ‘to wake up’, *suka* ‘to vomit’, *indis* ‘to defecate’, and *nig-ab* ‘to burp’. The three that do not are: *baan* ‘to sneeze’, *gin-awa* ‘to breathe’, and *masakit* ‘to get sick’.

⁸ Recipients are assumed to be human Locs.

These examples show that when *m-* occurs on motion, activity, or bodily process verbs in intransitive clauses, it cross-references an absolutive NP that is a core semantic role in the underlying cognitive event schema of the verb, thereby satisfying the semantic role criterion for an unmarked affix.

Since the affixes *mag-* and *ma-* can replace *m-* in (3)–(5) without altering the structure of the clause, they too satisfy the semantic role criterion for an unmarked affix. Consequently, we must turn to the semantic restriction/ semantic neutrality criterion to determine which of these affixes is the unmarked affix. (6)–(8) all have the motion verb *selled* ‘to enter’. The affix *m-* occurs in (6); *mag-* in (7); and *ma-* in (8).

- (6) *Melled* *bai* *ya* *naan* *ta* *balay* *an*.
m- =*selled* *bai* *ya* *naan* *ta* *balay* *an*
 ACT/TH/IRR =enter woman DEF SPAT OBL house DEF

‘The woman will enter into the house.’

- (7) *Magselled* *bai* *ya* *naan* *ta* *balay* *an*.
mag- =*selled* *bai* *ya* *naan* *ta* *balay* *an*
 ACT/TH/IRR=enter woman DEF SPAT OBL house DEF

‘The woman will (intentionally) enter into the house.’
 or ‘The woman will enter into the house (in the remote future).’

- (8) *Maselled* *bai* *ya* *naan* *ta* *balay* *an*.
ma- =*selled* *bai* *ya* *naan* *ta* *balay* *an*
 ACT/TH/IRR =enter woman DEF SPAT OBL house DEF

‘The woman might enter into the house.’

In (7), *mag-* signals two different meanings, depending on the context: 1) the intention to perform an action, or 2) the placement of the action in the remote future. This contrasts with *m-* in (6) which is neutral with respect to either the intention of the woman to enter the house or the point in time when this will happen. In (8), *ma-* signals the possibility that the action will occur. Again, this contrasts with *m-* in (6) which is neutral with respect to the possibility that the woman will enter the house.

A similar contrast in semantics occurs with activity verbs and bodily process verbs. (9)–(11) are examples of the activity verb *kaan* ‘to eat’.

- (9) *Maan* *kay* *kani* *kilem* *ta* *tinapay*.
m- =*kaan* *kay* *kani* *kilem* *ta* *tinapay*
 ACT/AG/IRR =eat 1PL-EX/ABS later night OBL bread

‘We will eat some bread later tonight.’

- (10) *Magkaan* *kay* *kani* *kilem* *ta* *tinapay*.
mag- =*kaan* *kay* *kani* *kilem* *ta* *tinapay*
 ACT/AG/IRR =eat 1PL-EX/ABS later night OBL bread

‘We will (plan to) eat some bread later tonight.’

- (11) *Makaan* *kay* *kani* *kilem* *ta* *tinapay*.
ma- =*kaan* *kay* *kani* *kilem* *ta* *tinapay*
 ACT/AG/IRR =eat 1PL-EX/ABS later night OBL bread

‘We can eat some bread later tonight.’

In (10), *mag-* again signals intentional action. In (11), *ma-* signals the ability to perform the action. In comparison, *m-* in (9) is neutral with respect to both intention and ability.

Now consider the bodily process verb *indis* ‘to defecate’ in (12)–(14).

- (12) *Mindis* *kani* *bata* *i*.
m- =*indis* *kani* *bata* *i*
 ACT/AG/IRR =defecate later child DEF

‘The child will defecate later.’

- (13) *Mag-indis* *bata* *ya* *kani* *naan* *ta* *baybay*.
mag- =*indis* *bata* *ya* *kani* *naan* *ta* *baybay*
 ACT/AG/IRR =defecate child DEF later SPAT OBL beach

‘The child will possibly defecate later on the beach.’

- (14) *Maindis* *bata* *i*.
ma- =*indis* *bata* *i*
 ACT/AG/IRR =defecate child DEF

‘The child will be able to defecate later.’

In (13), *mag-* signals the possibility that the action will occur, and in (14), *ma-* signals ability to perform the action. In (12), *m-* is neutral with respect to both possibility and ability.

Examples (6)–(14) clearly demonstrate that *m-* is less semantically restricted and more semantically neutral than either *mag-* or *ma-* when these affixes occur on motion, activity, or bodily process verbs in intransitive clauses. Thus, the semantic restriction/ semantic neutrality criterion confirms that *m-* is the unmarked affix for these verbs.

6. THE FUNCTION OF *M-* AS AN INDICATOR OF SEMANTICALLY INTRANSITIVE CAUSATION

Having confirmed that *m-* is an unmarked affix, we are left with one final question. Why should motion verbs, activity verbs, and bodily process verbs all take the same affix as their unmarked affix? Is this an arbitrary association, or does *m-* occur on these verbs because they share some common feature? With respect to bodily process verbs, the association does appear to be mainly arbitrary. Cross-linguistically this verb class has a tendency to pattern like activity verbs. Furthermore, if we compare those bodily process verbs that take *m-* with those that do not (see footnote 7), there does not appear to be any obvious semantic motivation distinguishing the two groups. On the basis of this evidence, we will assume that bodily process verbs take *m-* arbitrarily, i.e. they take *m-* because they pattern like activity verbs and activity verbs take *m-*; consequently, we will ignore this class for the rest of the discussion. Activity verbs and motion verbs, however, appear to be different. We suggest that for these verbs, the presence of *m-* is not arbitrary, and propose that *m-* is an overt signal that these verbs share three semantic features, the most important of which are semantic intransitivity and causation.

An obvious feature shared by verbs taking *m-* is semantic intransitivity, since *m-* never occurs with semantically transitive verbs. On the other hand, *m-* does not occur on all semantically intransitive verbs and so those verbs taking *m-* must share at least one other feature as well. Considering all the semantically intransitive verb classes listed in table 2, a second feature shared by verbs taking *m-* would appear to be dynamism, since *m-* never occurs with stative verbs or emotion verbs, both of which are analyzed as states. If we factor out these semantically intransitive verbs, we are left with activity verbs and motion verbs which take *m-*, and non-bodily process verbs which do not take *m-*, and so one more feature is needed in order to factor out process verbs. This additional feature cannot be the semantic role of the absolutive NP, since the semantic role cross-referenced by *m-* is not the same for activity and motion verbs. Recall that for motion verbs, *m-* cross-references an absolutive Theme, but for activity verbs, it cross-references an absolutive Agent.

We suggest that the solution to the distribution of *m-* centers upon Themes of motion verbs. Motion Themes appear to have something in common with Agents that process Themes (and Themes of any other verb class) do not. In localist case grammar, one unique feature noted for all Themes is that they are inherently designed to undergo the state or event of the verb. Thus, cars can move, people can enter rooms, water can boil, and tin cans can rust; however, if we compare motion Themes with process Themes, we notice that they are not quite the same. Specifically, motion Themes seem to have an internal power source that enables them to initiate the event of the verb, whereas process Themes do not. In other words, cars and people are not only designed for locomotion, they also have the internal power to initiate the action—cars by means of engines and people by means of their own energy. Water, on the other hand, cannot bring itself to a boil nor can a tin can make itself rust. Certain external conditions are required, namely heat for boiling and moisture for rusting, in order for either process to take place. Thus, motion Themes are able to initiate, or cause, an event in a way that process Themes cannot. Agents, on the other hand, are primary causes by definition, and so can

initiate the event of the verb without any external condition or cause. Taken together, Themes of motion verbs and Agents of activity verbs would seem to be alike in that they can both initiate events, thereby functioning as causes.⁹ We conclude then that in intransitive clauses, *m-* occurs on motion verbs and activity verbs to signal that these verbs, and only these verbs, share two semantic features: semantic transitivity and causation, i.e. the ability to initiate an event.

7. CONCLUSION

Previously the distribution and function of the verbal affix *m-* in Kagayanen have eluded precise identification. With respect to distribution, we have verified that *m-* occurs exclusively in intransitive clauses with three semantically intransitive verb classes: motion verbs, activity verbs, and bodily process verbs. With respect to function, we have argued that *m-* is the unmarked affix for these verbs. As an unmarked affix, *m-* cross-references a core semantic role of the underlying cognitive event schema of the verb. For motion verbs, it cross-references an absolutive Theme; for activity and bodily process verbs, it cross-references an absolutive Agent. We have also argued that *m-* occurs with these three verb classes because: 1) verbs of these classes are semantically intransitive, 2) they are dynamic, and 3) the Theme of motion verbs and the Agent of activity and bodily process verbs share the semantic feature of causation, i.e. the ability to initiate the action of the verb without the intervention of an external Agent.

⁹ One might conclude that since the absolutive argument of a motion verb can initiate an event, it is not a Theme, but an Agent. Localist case grammar, however, states that an element that changes location must be a Theme. If we assume that localist case grammar is correct on this point (and on the basis of cross-linguistic evidence there is no reason to believe that this element is anything other than a Theme), then the unique ability of motion Themes to initiate motion events must be a consequence of the verb class. In other words, the ability of a Theme to initiate a motion must be an inherent feature, not of the semantic role, but of motion verbs. Just as only change-of-state verbs (e.g. process verbs and causative verbs) have Themes that undergo changes of state, so only motion verbs have Themes that can initiate changes of location.