APPLICATIVE CONSTRUCTIONS IN MAASAI

by

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Title: APPLICATIVE CONSTRUCTIONS IN MAASAI

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This thesis is a descriptive study of Applicative constructions in Maa, a Nilo-Saharan language spoken in Kenya and Tanzania. I analyze the syntax and semantics of the "Dative", "Instrumental" and "Directional" Applicatives.

The "Dative" introduces GOALs or BENEFACTIVEs; an additional function marks increased transitivity. The "Instrumental" introduces an INSTRUMENT, LOCATIVE, ASSOCIATIVE or THEME, and also function*s* as a Causative. The function of the Ventive Directional is to add the notion 'toward' to verbs without affecting valence, but as an Applicative, functions to introduce THEME arguments to verbs that otherwise would subcategorize for a SOURCE.

Dative and Instrumental Applicatives introduce new objects but do not demote arguments. The Directional is different because applied THEMEs co-occur with demotion of original SOURCE arguments to oblique status.

A description of Maa Applicative constructions is a contribution to the typology of argument altering mechanisms and is of interest to theoreticians of grammatical relations.

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CHAPTER 1

INTRODUCTION

1.1 Summary of Thesis

This thesis is a descriptive and typologically oriented study of Applicative constructions in Maa. Applicative constructions are typically treated in the domain of extended "voice" phenomena, or how a language syntactically codes an altered pragmatic construal of an event. An applicative morpheme is a morphosyntactic element carried on the verb, which functions to promote semantic arguments not otherwise required by the lexical verb, to core argument object status. The following example from Zulu, a Bantu language, illustrates that the applicative morpheme *-el(a)* introduces the BENEFACTIVE argument 'father' in (1a-b) (Taylor, 1998):

(1) a. Ngi-theng-e iphepha
1SG:SC-buy-PST 5paper
'I bought a newspaper'

b. Ngi-theng-el-e ubaba iphepha
1SG:SC-buy-APPL-PST 1father 5paper
'I bought father a newspaper'

Syntactic properties of applicative constructions in languages typically include an applicative morpheme that attaches to the verb which correlates with an increase in valence. The promoted argument can then exhibit formal and behavioral properties of a direct or primary object. In some languages, the promotion of a peripheral participant to objecthood co-occurs with a demotion of the semantic role originally occupying the

direct or primary object role of that verb. In Maa, applied participants behave like verbal Objects. They can occur as bare nominals (i.e. with no preposition) in the Accusative case; they can be pronominally indexed on the verb, and they can be the Nominative case Subject of a Middle construction. For some verbs, the lexically specified argument of the verb is demoted to oblique status in the presence of an applied Object, while other verbs permit applied Objects with no effect on the lexically specified Object. I will use the term "promote" to refer to the process of marking applied arguments with Applicatives.

Cross-linguistically, the *semantic* roles BENEFACTIVE and GOAL are commonly promoted with applicatives. This has been shown for many languages including Indonesian (Cole, 2004), Japanese (Shibatani, 1996), several Bantu languages (Baker, 1988) including Kinyarwanda (Kimenyi, 1976) and Chichewa (Alsina & Mchombo, 1990; Bresnan & Moshi, 1990), Mayan languages (Aissen, 1979; Zavala, 2002) and others (Peterson, 1999). Some languages such as Kinyarwanda (Bantu) (Kimenyi, 1976) have been shown to promote INSTRUMENT, LOCATIVE, DIRECTIONAL and even MANNER roles.

In Maa there are four verbal morphemes which serve an Applicative function. The Dative Applicative introduces a BENEFACTIVE or GOAL role and the Instrumental promotes an INSTRUMENT, LOCATIVE, ASSOCIATIVE and THEME or AGENT MANIPULEE role. There are two Directional Applicatives, which arguably do not promote a specific semantic role, but nonetheless alter the argument structure of the verb so that a THEME instead of the lexically specified SOURCE is instantiated.

Typological issues concerning Applicative constructions that will be dealt with in this study include (a) what *syntactic* effects result from Applicative constructions, and (b) which *semantic* roles are promoted by the Applicative morphemes. Applicatives can attach to both intransitive and transitive verbs, but Applicative constructions in Maa are shown to increase the valence of the verb only in some cases. I argue that with one verb type, the "extended intransitives", the principal applicative function can be better characterized in terms of clause level transitivity along the lines of Hopper and Thompson (1980).

The semantic functions of each Applicative appear polysemous. However, it will be argued that a unified semantic account for each Applicative is possible. Applicatives are generally understood as grammatical means for expressing altered event construal. A number of factors contribute to the pragmatic interpretation of a semantic role. I suggest that the factor of animacy and the related issues of agency (control), affectedness, mobility, and endpoint (Croft, 1994) contribute to this construal.

Chapter 2 surveys elements of Maa grammar that are relevant to this research including grammatical relations, the coding of obliques and the Middle construction. Chapters 3, 4 and 5 examine each of the Applicative morphemes in turn, looking at formal and semantic features.

1.2 The Maa Language

The Maa language belongs to the Eastern Nilotic subgroup of Nilo-Saharan. It is spoken by about 800,000 people in southern Kenya and northern Tanzania, East Africa (Bender, 2000). Tucker & Mpaayei (1955) published *A Grammar of Maasai with*

Vocabulary, the most complete linguistic work to date on the language, although subsequent works (Payne, Hamaya & Jacobs, 1994; Payne, 1998; Hamaya, 1993; Rasmussen, 2002; Schneider, 1998) have added to Tucker & Mpaayei's initial analysis, which focused primarily on word-level morphology. Unless specified otherwise, all the data presented in this thesis is taken from my own elicitation sessions[1] with Vincent Konchellah, a native Maasai speaker of the Ilwuasinkishu sub-dialect of Maasai of southern Kenya between October 2003 and May 2004. Additional cited examples come from previously elicited data provided by Doris Payne, Tucker & Mpaayei (1955) and the Maasai Dictionary project[2].

1.3 Theoretical and Conceptual Framework and Terminology

In this section, I will define my use of terminologythat will be relevant to this thesis[3]. Terms introduced in **bold** should be understood according my illustration of them in this section. First, the use of the term Applicative requires some explanation. In much of the transformational (Baker, 1988 and others), Relational Grammar (Aissen, 1979; Kimenyi, 1976) and Lexical Functional Grammar literature (Alsina & Mchombo, 1990; Bresnan &

[1] This work is partially supported by NSF grant SBR-9809387 (1998-ff) to Doris Payne and the University of Oregon.

[2] The Maasai (Maa) Dictionary is a project resulting from the work of numerous researchers including Doris Payne, Mitsuyo Hamaya, Philip Koitelel, Leonard Ole-Kotikash, Keswe Ole-Mapena, Kimeli Ole-Naiyomah, Daniel Nalangu, Kent Rasmussen, Renoi and Morompi Ole-Ronkei and Cynthia Schneider. Data collection was also made possible via logistical support from the Maasai Cultural Center, the University of Nairobi, the Nairobi Evangelical Graduate School of Theology. Financial support came from several sources including a Fulbright Foundation grant (1993-1994) to Doris Payne; the NSF grants SBR-9616482 (1987-1999) and SBR-9809387 (1998-ff) to Doris Payne.

[3] Notational conventions for this thesis are as follows: syntactic constructions and morphemes that are specific to Maa are labeled with initial caps (e.g. Applicative). Semantic roles are marked with small caps (e.g. AGENT). For the generic use of syntactic terms and when referring to languages other than Maa all lower case will be used (e.g. subject).

Moshi, 1990 and others), applicatives are treated as derivations affecting initial oblique referents that have been promoted to object status. I will refer to all of these approaches as syntactic "derivational". Derivations are illustrated as contrasting pairs where the deep structure form of a verb undergoes a derivation marked by the applicative, which promotes a peripheral participant to core. The following example from Kinyarwanda (Kimenyi, 1976, pg. 78) illustrates this thinking:

(2) a. umwáalímu a-ra-andik-a íbáruwa **n**- íikárámu
teacher he-PRES-write-ASP letter with-pen
'The teacher is writing a letter with a pen'

b. umwáalímu a-ra-andik-**iish**-a íbáruwa íkárámu
teacher he-PRES-write-INST-ASP letter pen
'The teacher is writing a letter with a pen'

The 'pen' is marked with an oblique instrumental prefix *n*- in (2a) but is an applied object in (2b), while the clauses have a shared deep structure. This implies that these two clauses are related, that (2a) corresponds more closely to the basic form and (2b) is derived from that more basic sentence. This type of definition is problematic because there is no evidence that the participants coded in obliques in one sentence like (2a) are syntactically related to their applied counterparts in (2b). This definition also ignores the different meanings associated with each form.

In a narrower syntactic definition, Shibatani (1996) defines applicatives as "specific grammatical elements—verbal affixes that increase valence". He says that there is no way to explain applicatives with rule-like derivations because a given verb is not always consistent in allowing an applicative in seemingly identical semantic role contexts. For example, in (3a) from Indonesian the verb 'stay' is marked with an applicative, with

'house' coded as an object. The same verb with 'Jakarta' as the object is considered strange or ungrammatical in (3b):

(3) a. Saya meninggal-i rumah-nya
I stay-APPL house-his
'I am staying in his house'
b. *?Saya meninggal-i Jakarta
I stay-APPL Jakarta
'I am staying in Jakarta' (Shibatani, 1996)

In a derivational approach, it would be hard to assign different underlying semantic representations to 'house' and 'Jakarta'.

Kay and Fillmore (1999a), Goldberg (1995) and others move away from a derivational approach in their Construction Grammar approach. **Constructions** are taken as a theoretical primitive and are assumed to be lexically stored with their semantic attributes, instead of being the result of one or more derivations. In this study, I assume an approach like that of Construction Grammar. An **Applicative** is a construction in which a verb carries a morpheme that licenses a semantic role not normally subcategorized for by the lexical verb (when appearing outside of the particular Applicative construction), as a core syntactic argument. This definition does not require a verbal valence increase with the use of the Applicative, but does imply that the verb will be altered in terms of its argument structure. This definition also assumes that there are two dimensions of analysis: syntactic and semantic.

The Applicative morphemes in Maa are called the **Dative**, the **Instrumental** and the **Directionals**. These Applicatives indicate the general semantic role of the applied argument, although interpretations of the semantic roles may vary according to the verb and the semantics of the applied argument. At the lexical syntactic level, and with some

oversimplication, most Maa verb roots have a default argument structure of one, two or three core participants which yield **intransitive**, **transitive** and **ditransitive** verbs respectively. In Maa, the syntactic roles of the core participants are understood as **Subjects** and **Objects**. When in their normal post-verbal position, Subjects and Objects are formally distinguished by **Nominative** and **Accusative** case forms (along with other morphosyntactic properties). The Subject syntactic category is where the single argument of an intransitive verb and most agent-like argument of a transitive verb pattern alike as Nominatives. All syntactic Objects (both second and third arguments of transitive and ditransitive verbs) pattern differently in Accusative case[4]. When a Maa ditransitive verb has two objects, this is called a **Double Object** construction. This is similar to the English **ditransitive** construction, which also has two objects and contrasts with the "**to-paraphrase**" (Goldberg, 1995) indirect object construction.

Concerning Maa, it is assumed here that core arguments can normally be assigned semantic roles by the **argument structure** of the verb. A typical event involves a **THEME**[5] which undergoes a change and arrives at a new state or location, the **GOAL**. A typically animate and volitional external cause for this change is called an **AGENT**. Additional semantic roles, often not coded as core arguments, are **BENEFACTIVE**, **GOAL**, **INSTRUMENT**, **LOCATIVE**, **ASSOCIATIVE** and **SOURCE**. A BENEFACTIVE is a participant for whom the action of the predicate is carried out. For example, *grandmother* is the

[4] In Maa, an exception to this generalization is when Subjects occur in preverbal position, in which case they appear in formal Accusative case, just as transitive objects do.

[5] Although the term THEME will be standard for this thesis, other authors have used the term PATIENT to refer to the same role. I will use the term PATIENT interchangeably with THEME when needing to refer to their work.

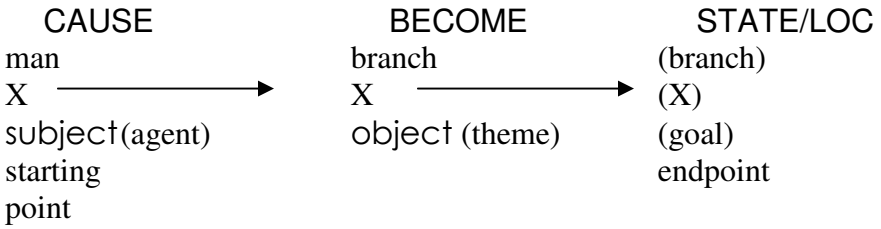
BENEFACTIVE in *He ran errands for his grandmother*. A non-core GOAL participant is the end location of a motion event (e.g. *store* in *John went to the store*). It contrasts with a SOURCE which is the origin location of a motion event (e.g. *store* in *John came from the store*). INSTRUMENT, LOCATIVE and ASSOCIATIVE roles will be defined in Chapter 4 in conjunction with the Maa Instrumental morpheme.

AGENT, THEME and GOAL are especially relevant for event schemas such as the "Idealized Cognitive Model of Events" (ICM) proposed by Croft (1994).

> The principle hypothesis underlying the ICM of verbs is that verbs represent self-contained events, that is, events which are conceptualized as isolated from the causal network and individuated for various purposes. Subjects and objects represent the **starting point** and **endpoint** respectively of the segment of the causal network that is represented by the verb; oblique NPs represent other entities involved more or less directly in the causal segment denoted by the verb. (Croft, 1994, pg.92)

An ICM of a prototypical event consists of a three-part causal sequence (cause-become-state), as shown in Figure 1.

FIGURE 1: Idealized Cognitive Model (Croft, 1994)



'The man broke the branch'

The symbol X in this figure represents a participant. An X with parentheses represents the same participant undergoing more than one portion of the tripartite event (e.g. become-state, above). Causation in an event is defined as a "transmission of force" (represented by arrows) from one participant (AGENT) to another (THEME) and stops at a

state (GOAL). The ICM of a given verb in a particular sentence represents one or more portions of this tripartite structure. When it encapsulates just a state (e.g. *The branch is broken*) where *branch* is in a state of brokenness, the starting point is also the endpoint. When it encapsulates become-state (e.g. *The branch broke*), the *branch* moves into a state of brokenness. The starting point is the unbroken *branch* and the endpoint is the broken *branch*. With all three sections (e.g. *He broke the branch*) as shown in the sentence under Figure 1, the external cause, *He,* with a transmission of force, is now the starting point and the broken *branch* is the state endpoint.

An example of an event involving three distinct core arguments comes from the to-paraphrase construction in English:

(4)	He	sent	a letter	to	his attorney
	AGENT		THEME		GOAL

The AGENT here has immediate contact with the 'letter', which he manipulates so that the 'letter' changes its physical location to the possession of 'his attorney,' indicated by the *to*-paraphrase.

Limiting a discussion to only the core argument labels AGENT, THEME and GOAL works for *to*-paraphrase constructions in English but is insufficient when discussing ditransitive constructions. In (4) above, the 'letter' is clearly the most physically affected participant. Presumbably 'attorney' is affected but only as an indirect result of the 'letter' being sent. In the ditransitive version of the above sentence, the *attorney* is clearly still the GOAL:

(4')	He	sent	his attorney	a letter
	AGENT		GOAL	THEME

However, there is a sense in (4') that the AGENT's action more directly affects the *attorney*. In fact, an entity less likely to be capable of affect is dubious as a GOAL in a ditransitive construction:

(5) ?He sent Pittsburgh a letter

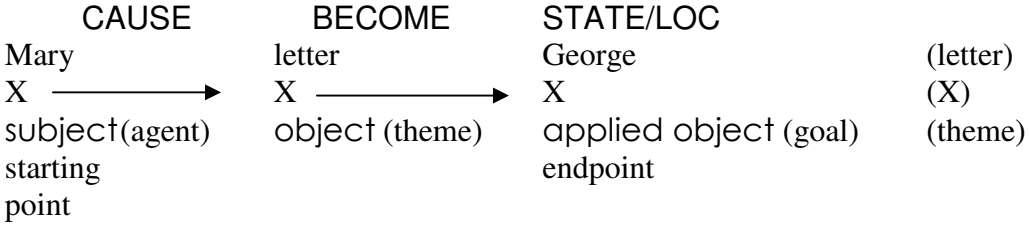
The clause in (5) is acceptable when the argument *Pittsburgh* is conceived of as a group of people located in *Pittsburgh*. This metonymic conception attributes humanness, and therefore potential affectedness. Goldberg (1995) adopts the view that a construction can carry information outside of semantic roles and that the basic meaning of a ditransitive construction is a willing AGENT's causing a successful "transfer" to a "recipient" (GOAL). *Attorney* in (4') would have actually received the *letter*. She argues against the view that the RECIPIENT (GOAL) in the ditransitive version (4') is more affected. Despite the difference in her interpretation with my own, it is apparent that the GOAL of a ditransitive construction as in (4') and (5), and the GOAL of a to-paraphrase construction (4) are semantically different. The real world scene of both versions may be identical, but the GOAL in a ditransitive construction is somehow a more "affected", "in perspective" (Fillmore, 1977), or the receiver of an "actual transfer" rather than "intended transfer" (Goldberg, 1995) in the event.

Croft's (1994) notion of starting point and endpoint is useful because it recognizes that semantic roles of the participants involved in an event are often distinct from the way a speaker conceptualizes an event. His model accounts nicely for causally complex applicative and causative constructions where the lexical verb's argument structure is modified to accommodate participants that are not permitted as core arguments in a

clause without some morphological derivation. According to Croft (1994), in applicative constructions the endpoint of an ICM is reassigned from the patient (THEME) of a verb's ICM to a participant other than the patient (THEME). The participant construed as the new endpoint assumes the syntactic role of object.

There are no morphological applicatives in English but an ICM of the functionally similar ditransitive construction *Mary sent George a letter* might be modeled like the following:

FIGURE 2: Applicative Construction ICM (adapted from Croft, 1994)

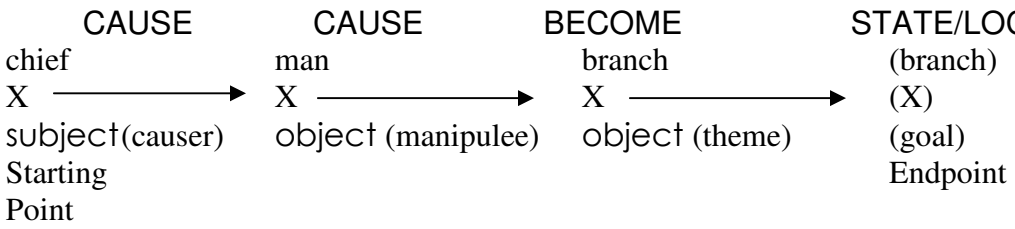


'Mary sent George a letter'

George is the GOAL in the ditransitive and is coded as the endpoint of the ICM.

I will now turn to the ICM of causative constructions as well, because in Maa, the Instrumental morpheme has both **Causative** and Applicative functions. Causatives are traditionally considered to be different from applicatives. According to Croft, a causative introduces an "ultimate cause" which becomes the new starting point and occupies the subject position. This **CAUSER** transmits a force on the intermediate **CAUSEE** (the AGENT of the base form of the verb, which I will refer to as **MANIPULEE**). In Figure 3, below, I add the ICM of a derived causative verb. Both an ultimate AGENT and a MANIPULEE participant are included in the event chain; the MANIPULEE in turn, transmits a force on the THEME participant.

Figure 3: Causative Construction ICM (adapted from Croft, 1994)



'The chief made the man break the branch'

The CAUSER 'chief' is seen as the ultimate starting point of the event and, as such, is coded as the subject. The 'branch' is the THEME of the base form of the verb. It is coded as an object and its broken state is the endpoint, as in the base form. 'Man' is an agentive MANIPULEE of the causative verb, and is also coded as an object.

In sum, causatives and applicatives represent altered event construals. Causatives adjust the starting point and applicatives adjust the endpoint. However, as we will see in the case of the Maa Instrumental, even with causative semantics, the starting point remains the AGENT of the base form of the verb and the MANIPULEE is coded as the Object endpoint. I will discuss this in more detail in Chapter 4.

CHAPTER 2

BACKGROUND TO MAASAI GRAMMAR

A complete finite clause in Maasai can consist of a verb which obligatorily takes a pronominal prefix. Nominal constituents are optional. Although full NPs and free pronouns are not required for grammaticality in a clause, when they are instantiated, the dominant word order in the language is VSO. Full NPs distinguish grammatical cases with contrasting Nominative and Accusative tone patterns. Free NPs and pronouns have been argued (Payne, Hamaya & Jacobs, 1994) to participate in a pragmatically motivated word order inverse pattern. In addition, pronominal prefixes on the verb express a 'direct-inverse' voicing opposition that also indicates grammatical relations. In this chapter, I will review these features of grammatical relations in more detail. The morphosyntactic features of core arguments vs. obliques established in this chapter will be used to determine the core vs. oblique status of applied arguments in Chapters 3 through 6.

2.1 Word Order

The dominant word order of the language is VSO(O), although the variations VOS, VSObl, VOblO, and VOObl are possible (Payne, Hamaya and Jacobs, 1994). In marked situations, NPs can occur pre-verbally as well. In ditransitive constructions either the THEME or the GOAL can occur first. In (6a) the THEME 'pot' follows the Subject 'woman' while in (6b) the GOAL 'girl' is in this position.

(6) a. ɛ́-pɨ̂k ɛn-tánkìlè e-motí ɛn-kárɛ[6]
3-put FSG-woman.NOM FSG-pot.ACC FSG-water.ACC
'The woman will put the pot in water'

b. ɛ̀-ɨshɔ(r) ɛn-tásât ɛn-títo ɛn-kijíkò
3-give FSG-old.person.NOM FSG-girl.ACC FSG-spoon.ACC
'The old woman will give the girl a spoon'

Although the details of word order variation are beyond the scope of this study, it is arguably motivated by the relative topicality of nominal arguments (see Payne, Hamaya & Jacobs, 1994 for details).

2.2 Pronominal Prefixes

As stated above, certain grammatical arguments are obligatorily marked by pronominal prefixes on the verb, while full NPs are syntactically optional in the clause. In (7a) the Subject, 1st person singular, is marked on the verb, while lexical NPs establish the identity of the other participants. In (7b) no lexical arguments are instantiated but it is a grammatically complete clause.

(7) a. á-ɨshɔ́ en-pálái kanísa
1SG-give FSG-letter.ACC church.ACC
'I will give a letter to the church'

b. á-ɨshɔ́
1SG-give
'I will give something to someone'

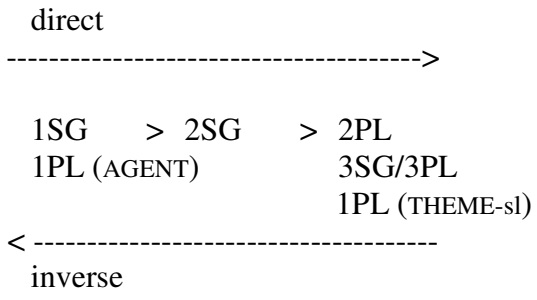
[6] Tucker & Mpaayei (1955) distinguished "close" vowels from "open" vowels. The difference has been described as a "vowel harmony" system which contrasts eight vowels in terms of an "advanced tongue root" feature as [+ATR] or [–ATR]. The ninth vowel /a/ does not exhibit this feature but participates in both systems. [-ATR] vowels become [+ATR] vowels in certain phonological conditions. The orthography that shows the vowel contrast is illustrated below:

[+ATR]		[-ATR]	
i	u	ɨ	ʉ
e	o	ɛ	ɔ
a		a	

Tone writing in this thesis follows the conventions of the Maasai Dictionary Project but needs rechecking.

The person prefixes follow a direct or inverse pattern according to a person hierarchy. It is commonly claimed that 1st and 2nd person arguments or speech act participants (SAPs) are inherently more animate and therefore more topical than 3rd person arguments (Comrie, 1989). Also the normally expected "flow of action" is a situation where a SAP is an AGENT acting on a 3rd person participant. There is a tendency for languages with a strong subject category to mark the most topical argument as the subject. It is most natural then, that a participant from higher on the hierarchy is the AGENT and Subject of a sentence and participant from lower on the hierarchy is the THEME and Object, in a 'direct' relation. If a situation occurs where a SAP is being acted upon by a 3rd person or plural, the "flow of action" is in opposition to the person hierarchy. This constitutes an 'inverse' relation. Figure 4, adapted from Hamaya (1993) illustrates the relative topicality/animacy ranking of participants in Maa and either the natural or unnatural flow of action that predicts whether a 'direct' or 'inverse' relation holds, respectively.

FIGURE 4. Direct and Inverse Flow of Action (Hamaya, 1993)



In Maasai, two distinct sets of bound person prefixes are employed which code either a 'direct' or 'indirect' relation. Tables 1 and 2 taken from Payne, Hamaya and Jacobs (1994), illustrate these two sets of prefixes. If the flow of action is consistent with the

person hierarchy in a 'direct' relation, then the prefixes in Table 1 are used. The vertical column at the left indicates the person of the Subject and the horizontal row at the top indicates the person of the Object. If a 1st person singular is acting on a 3rd singular or plural, for example, the prefix *á-* is used.

TABLE 1. Direct Bound Pronominal Prefixes
(with 3rd person or plural Objects or in intransitive clauses)

Subject	Object 3SG/Pl	1Pl	2Pl
1SG	á-	á-	á-
1Pl	kɨ̂-	---	kɨ̂-
2SG/Pl	ɨ̂-	ɨ̂-	---
3SG/Pl	ɛ́-	ɛ́-	ɛ́-

Notice that in Table 1 the prefixes reference the Subject argument alone when the Object is a 3rd person or 1st or 2nd person plural. In other words, the identity of the Object does not affect the form of the prefix.

In the case of an inverse relation, when the Subject acts on a 1st or 2nd person singular Object, a distinct prefix[7] (depending on the Subject person and whether the Object is a 1st or 2nd person) will be used to indicate this relation. In this case, both the Subject and Object are arguably referenced. The inverse prefix *kɨ́-* means either 3rd person acting on 2nd person or 2nd person acting on 3rd person.

[7] The *kɨ́-* '1st plural' prefix in Table 1 appears identical to the *kɨ́-* 'inverse' prefix in Table 2. However, the tone pattern of the word is different for these two prefixes. For additional details of this anomaly see Payne, Hamaya and Jacobs (1994).

TABLE 2. Inverse Bound Pronominal Prefixes (with 1st or 2nd person singular Objects)

Subject	Object 1SG	2SG
1SG	---	áá-
1Pl	---	kɨ̂-* (1st PL)
2SG/Pl	kɨ̂- (inverse)	
3SG/Pl	áa-	kɨ̂- (inverse)

In the following sections on transitivity, I will give examples that illustrate the use of these prefixes.

2.2.1 Intransitive Roots

In simple sentences that do not involve the External Possessor Construction[8] (Payne, 1998), intransitive verbs are grammatical with one pronominal argument indexed on the verb. Intransitive verbs can be identified because they do not take two full NPs, do not occur in a Middle construction and are normally ungrammatical if given an inverse prefix which indicates transitivity (Payne, 1998), as is shown in the difference between (8-9a) and (8-9b):

(8) a. á-kúɛ́t-à
1SG-run-PF
'I ran'

b. *áa-kuɛ́t
3>1SG-run
'He will run me'

[8] Intransitive verbs can appear with inverse prefixes in an External Possessor Construction with no additional argument altering morphology. See Payne (1998) for a thorough description of this construction.

(9) a. í-bík
2SG-stay
'You will stay'
b. *kí-bík
INV -stay
'You will stay me'

2.2.2 Transitive Roots

Transitive verbs contrast with those in Section 2.2.1 because they can occur with two full NPs, can occur in a Middle construction and can take one of the inverse prefixes from Table 2. As stated above, transitive verbs whose Subject arguments are higher on the person-number hierarchy than their Objects will mark the verb with a direct prefix. An inverse prefix is used if the Subject argument is lower on the hierarchy than the Object. In (10a) the 2nd singular Subject is acting on the 3rd person object in a 'direct' relation, but in (10b) the 3rd person Subject is acting on a 1st person Object in an 'inverse' relation.

(10) a. í-dúŋ
2SG-cut
'You will cut (it)'
b. áa-dûŋ
3>1SG-cut
'S/he will cut me'

2.2.3 Ditransitive Roots

In Maa, there are few simple ditransitive verb roots. The verbs *ɨshɔ* 'give' and *pɨk* 'put' both require three semantic arguments: AGENT, THEME and GOAL. In (11a-b) all three semantic roles are represented by NPs.

(11) a. ɛ́-ɨshɔ(r) ɛn-tásât ɛn-títo ɛn-kijíkò
3-give FSG-old.person.NOM FSG-girl.ACC FSG-spoon.ACC
'The old woman gave the girl a spoon'

b. ɛ́-pɨ̂k ɛn-tánkìlè en-motí ɛn-kárɛ
3-put FSG-woman.NOM FSG-pot.ACC FSG-water.ACC
'The woman will put the pot in water'

In (11a) the AGENT *tásât* 'old.person' occurs in its Nominative tone form while both the THEME *kijíko* 'spoon' and GOAL *títo* 'girl' occur in their Accusative tonal case. Neither the verb nor the noun phrases are marked by morphology that would differentiate the two Object arguments.

The decision to mark the THEME versus the GOAL on the verb is based on whether the THEME or the GOAL is a 1st or 2nd person singular regardless of semantic role. However, only one Object can be marked on the verb at a time. In (12a, c), the GOAL is 1st person singular and is therefore indicated with the inverse prefix *áa-*. In (12b), the GOAL is a 2nd person singular and is therefore indicated with the inverse prefix *kɨ́-*

(12) a. áà-ɨshɔ(r) ɛn-tásât ɛn-kijíkò
3>1SG- give FSG-old.person.NOM FSG-spoon.ACC
'The woman will give the spoon to me'
b. kɨ̂-ɨshɔ(r) kʉldɔ́ tʉŋaná(k) ɛn-kɨ̂tɛ́ŋ
INV-give those.M.NOM people.NOM FSG-cow.ACC
'Those people will give a cow to you'
c. áa-pɨ̂k en-kopíyìà
3>1SG-put FSG-hat.ACC
'They will put on hat on me' (lit: they will put me a hat')

Example (13) shows that in the absence of an overt NP in Nominative case, the inverse prefix *kɨ́-* is ambiguous between 3rd acting on 2nd person singular and 2nd person acting on 1st person singular:

(13) kɨ̂-ishɔ́ ɛn-kɨ̂tɛ́ŋ
INV-give FSG-cow.ACC
'i.They will give a cow to you (sg)'
'ii.You (sg) will give a cow to me'

In ditransitives, if there is a verbally marked argument it is often the GOAL, because GOALs tend to be animate. However, if the THEME is 1st or 2nd person singular, the THEME instead is indexed on the verb. Because only one Object can be indicated on the verb at a time, ambiguous interpretations between the THEME and the GOAL are possible if both NPs are animates. In (14) below, in the first interpretation (i), 'you' is the THEME, while in (ii) 'you (sg)' is interpreted as the GOAL.

(14) kɨ̀-ɨshɔ(r) ɔl-payían
INV-give MSG-man.ACC
'i. They will give you (sg) to the man'
'ii. They will give the man to you (sg)'

If both Objects are 1st or 2nd person singular, such as in the attempted elicitation of 'They will give me to you (sg)', there is no way to express it without a periphrastic detour or leaving one of the arguments unstated, as in (15). In (15i), the THEME is referenced by the prefix *áa-* and the GOAL must be inferred from the Ventive morpheme *-ʉ̀(n)* which means 'towards'. This additional suffix serves to imply the missing GOAL. In (15ii), the GOAL is referenced by the prefix *áa-* and the identity of the THEME can only be determined from context.

(15) áa-ɨshɔr-ʉ̀(n)
3>1SG-give-VENT
'i. They will give me (out to you)'
'ii. They will give (you) to me'

Because either argument can be (ambiguously) marked on the verb, this suggests that THEME and GOAL both have Object status with the verb in a Double Object construction. Different patterns have been described for double object constructions in languages. Dryer (1986) used the terms "primary" and "secondary" object marking to describe case-

marking patterns of objects where the THEME of a monotransitive and the GOAL of a ditransitive pattern alike (primary object) while the THEME of a ditransitive patterns differently (secondary object). The motivation to mark the "primary" participants alike is due to the relatively high degree of topicality or perceived affectedness of typically animate RECIPIENTS (GOALS). In monotransitives, there is no choice and topicality and affectedness are irrelevant. In the case of Maa, inverse verbal indexation can be coreferential with the THEME Object of monotransitives and coreferential with either the THEME or the GOAL of ditransitives, but not both at the same time. When both Objects are 3rd person, neither argument is indicated on the verb, as was shown in (11). It seems that neither a direct/indirect object nor primary/secondary object pattern occurs in Maa because these are systems based on mapping relationships between grammatical relations and semantic role. In contrast, verbal marking of Objects in Maa is determined strictly by the SAP status of the THEME or GOAL, that is, the presence of a 1st or 2nd singular person Object.

Double object constructions described for Bantu languages have been labeled "symmetrical" or "asymmetrical" (Bresnan & Moshi, 1990) based on whether both objects display identical properties or not. In the English ditransitive construction, for example, the GOAL occupies post-verbal position, and can be the subject of a passive, while the THEME is clause-final and sometimes marginally accepted as the subject of a passive. This suggests that both bare NPs do not share an equal relation with the verb. With ditransitives in Maa, verbal indexation is possible for either Object suggesting a symmetrical status. Verbal indexation will be used as one of several morphosyntactic

tests for the core argument status of applied arguments in Double Object and multiple Object constructions.

2.3 Case-marking

In addition to the obligatory coding of SAPs on the verb, NPs bearing grammatical case can be optionally instantiated in the clause. Nouns differ according to the tone classes they fall into but each particular noun has only two possible tone patterns, which Tucker and Mpaayei (1955) labeled Nominative and Accusative case. Each NP is marked with one of approximately nineteen contrasting Nominative and Accusative tone patterns (Tucker & Mpaayei, 1955). Nominative case is marked on the only NP argument of intransitive clauses (16a) and the most agent-like argument of transitive clauses (16b) when they are post-verbal. An NP displaying case without a preposition will be referred to as a "bare NP". Observe the tone occurring with the bare NP *kitók* 'woman'.

(16) a. ɛ-kʉ́ɛ́t ɛn-kítok
3-run FSG-woman.NOM
'The woman will run'

b. ɛ́-isʉj ɛn-kítok in-kiláni
3-wash FSG-woman.NOM FPL-clothes.ACC
'The woman will wash the clothes'

The same NP in the Accusative case will exhibit a different tone pattern:

c. ɛ́-tɨ̂-mɨ̂r-à ɛn-kɨ̂tɛŋ ɛn-kitók
3-PF-chase-PF FSG-cow.NOM FSG-woman.ACC
'The cow chased the woman'

In ditransitives, the postverbal Subject occurs in Nominative case and both Objects occur in Accusative case:

(17) ɛ́-pɨ̂k ɛn-tánkìlè en-motí ɛn-kárɛ̀
3-put FSG-woman.NOM FSG-pot.ACC FSG-water.ACC
'The woman will put the pot in water'

Bare NP status and Accusative case marking on nouns will be used in addition to verbal indexation as tests of the core argument status of applied Objects in Maa.

2.4 Obliques

There are three types of obliques in Maasai. Semantic participants that are not core arguments can be expressed in oblique prepositional phrases with the prepositions *tɛ̀-* or *o-*, or as bare NPs (for a limited set of verbs).

2.4.1 The *tɛ̀* construction

The morpheme *tɛ̀* governs Nominative case tone on its following NP. Examples of several uses of *tɛ̀* are given in (18a-e) for the semantic roles (at/in) LOCATION (a), SOURCE (b), INSTRUMENT (c), TIME (d), and MANNER/REASON (e).

(18) a. k-áá-ány-ʉ́ t-ɔl-cánì
D-1SG>2SG-wait.for-VENT OBL-MSG-tree.NOM
'I will wait for you at/near/in the tree'

b. k-á-ɨ̂dʉ̀rr tɛ̀ Náɨ̀rɔ̀bɨ̀
D-1SG-move OBL Nairobi.NOM
'I will move from Nairobi'

c. á-dúŋ tɛ̀-nk-alɛ́m
1SG-cut OBL-FSG-knife.NOM
'I will cut it with a knife'

d. k-é-gól-ù in-kíshù t-ɔl-árì
D-3-be.strong-INCEP FPL-cow.NOM OBL-MSG-rain.season.NOM
'The cows will be strong during the rainy season'

e. k-ɛ́-ákʉ ɔl-aɨsɨ̀nànì t-ɛn-calán
D-3-become MSG-poor.man.ACC OBL-FSG-laziness.NOM
'He will become a poor man because of/with laziness'

As can be seen by the examples above, the same morpheme *tɛ̀* is used for a broad range of semantic roles. However, the roles BENEFACTIVE and GOAL cannot be expressed in this oblique construction. For example, (19a) is ungrammatical when 'woman' is a beneficiary and (19b) is ungrammatical when 'woman' is a GOAL although (19b) can have an INSTRUMENT interpretation. (19c) shows that a physical location GOAL 'river' is ungrammatical in the *tɛ̀-* construction. The same form is grammatical when interpreted as a SOURCE.

(19) a. ɛ́-tɨ̂-mɨ̂r-á ɛn-kɛráí ɛn-kɨ̂tɛ́ŋ tɛ-ɛn-kítok
3-PF-chase-PF FSG-child.NOM FSG-cow.ACC OBL-FSG-woman.NOM
'*The child chased the cow for the woman' (Brainard, 1991)

b. á-rɛ́ʉ́-ʉ́ in-kíshú tɛ̀ yéyioô
1SG-drive-VENT FPL-cow.ACC OBL mother.NOM
'*I will drive cows to my mother'
'I will use my mother to drive cows'

c. ɛ-shɔmɔ́ ɛn-kítok t(ɛ)-ɔl-réyiet
3-go.PF FSG-woman.NOM OBL-MSG-river.NOM
'*The woman went to the river'
'The woman came from the river'[9] (Brainard, 1991)

Modifications to the syntax are required in order to achieve a BENEFACTIVE or GOAL reading. (20) shows that in using the oblique marker *tɛ̀* to express a BENEFACTIVE the noun *arakɨ̂* 'reason' is added. However, this BENEFACTIVE is better translated as 'on his/her behalf' into English. Example (21) illustrates that to achieve a semantic GOAL with an animate participant, a relative clause with a verb of location is used instead of a *tɛ̀* oblique.

[9] Brainard's (1991) translation 'come' is better kept as 'go from'. 'Come' is typically indicated by the Ventive suffix although it is not present in this example.

(20) ɛ́-tɨ̂-mɨ̂r-á ɛn-kɛráí ɛn-kɨ̂tɛ́ŋ
3-PF-chase-PF FSG-child.NOM FSG-cow.ACC
t-ɛnk-árakɨ̂ ɛn-kitók
OBL-FSG-reason.NOM FSG-woman.ACC (Brainard, 1991)
'The child chased the cow on behalf of the woman'

(21) a-rɛ́ʉ́-ʉ́(n) in-kíshú en-n-e-tíi yéyioô
1SG-drive-VENT FPL-cow.ACC FSG-RC-3-be.at.location mother.NOM
'I will drive the cows to where my mother is'

That the semantic roles GOAL and BENEFACTIVE are not simply expressed by the oblique marker *tɛ̀* indicates that the bare NPs that express these semantic roles have a status distinct from the NPs that express the semantic roles in (18). I will show that certain GOALs can be expressed in a third type of oblique in Section 2.4.3. In Chapter 3, I will show that Maa also frequently uses a single Applicative morpheme, the Dative, to express BENEFACTIVE and GOAL.

Because only one morpheme *tɛ̀* is used for most obliques, speakers are left to interpret the semantic role of the *tɛ̀* oblique NP from context. This suggests that semantic detail, such as spatial and temporal information, is housed inside the verb in Maa. English, in contrast, has a vast set of prepositions (e.g. *in*, *at*, *on*, *into*, *over*, *after*, *until*, *with*, *by* etc.) to help indicate the semantic role of NPs in oblique phrases.

2.4.2 Associative *ɔ́*

A second type of oblique can code the ASSOCIATIVE role. This consists of the preposition *ɔ́* governing an NP in Accusative case. The morpheme *ɔ́* is the same morpheme used in conjoining two NPs in the same syntactic role (Park, 1991). The 'woman' in (22) can be coordinated with either the Object or the Subject.

(22) ɛ́-tɨ̂-mɨ̂r-à ɛn-kɛráí ɛn-kɨ́tɛŋ
3-PF-chase-PF FSG-child.NOM FSG-cow.ACC
w-ɛn-kitók
ASSOC-FSG-woman.ACC
i. 'The child chased the cow and the woman'
ii. 'The child and the woman chased the cow'

2.4.3 Goals in Extended Intransitives and Transitives

A third type of Maa oblique is expressed as a bare NP (i.e. without a preposition). This oblique expresses a GOAL location endpoint with a certain set of translational motion verbs that I will refer to as "extended intransitives". Translational motion verbs such as these have been called "vector" verbs (Talmy, 2000) because they convey both the type of motion and the direction of the movement with one lexeme. Extended intransitives in Maa express movement and the notion 'to' or 'towards' which Talmy classifies as "MOTION.TO" verbs. Examples of this verb type are:

(23) a. ɛ́-kʉ́ɛ́t o-reyíét
3-run.to MSG-river.ACC
'He will run to the river'
b. ɛ-shɔmɔ́ o-reyíét
3-go.to.PF MSG-river.ACC
'He went to the river'

Because these GOALs appear as bare NPs it may be hypothesized that they are true Objects. However, this set of verbs cannot take the transitive inverse prefixes:

(24) a. *áa- shɔmɔ́
3>1SG-go
'He went (to) me'
b. *áa-kuɛ́t
3>1SG-run
'He will run (to) me'

This shows that these verbs are intransitives.

Like other bare NPs, GOALs are not required for grammaticality.

(25) a. ɛ-shɔmɔ́ ɔl-páyìàn
3-go.PF MSG-man.NOM
'The man left'
b. ɛ-kʉ́ɛ́t ɛn-tánkìlè
3-run FSG-woman.NOM
'The woman will run'

Unlike core arguments, it is not clear that the GOALs of extended intransitives are included in the meaning of the verb when they are not instantiated. By contrast, the verb 'cook', below, is transitive. 'Cook' does not require the instantiation of an overt NP Object but the Object's meaning 'it' is asserted in the translation. To get rid of an assertion of the THEME with such verbs, the Antipassive suffix must be used (D. Payne, personal communication).

(26) ɛ-yɨ̂ɛ́r en-kítok
3-cook FSG-woman.NOM
'The woman will cook it'

But the verbs in (23-25) cannot take the Antipassive. This suggests that the NP carrying the semantic role GOAL in (23) is expressed in an oblique with these motion verbs. Other verbs of this type include *ipirri* 'run', *baya* 'arrive.there', *baʉ* 'arrive.here', *lo(t)* 'go', *rriny* 'return' and *puo* 'go.PL'.

It was stated above that extended intransitives cannot occur with inverse prefixes. However, inverse prefixes do occur on transitive verbs that express movement and direction 'to', i.e. "extended transitives". Extended transitives can also occur with bare NPs expressing a GOAL, but like with the extended intransitives, the GOAL participant cannot be indicated on the verb by the bound pronominal prefixes.

(27) a. áa-tɨ-mɨr-á(k) ɛn-kɛráí (o-reyíét)
3>1SG-PF-chase-PF FSG-child.NOM (MSG-river.ACC)
'The child chased me (to the river)'

b. ɛ-tʉ́-sʉ́j-á Kónené in-kíshú (o-reyíét)
3-PF-follow-PF Konene.NOM FPL-cow.ACC (MSG-river.ACC)
'Konene has followed the cows (to the river)'

In (27a-b) are examples of two verbs of this type, *mɨr* 'chase' and *sʉj* 'follow'. Other verbs belonging to this set include *rɛʉ* 'drive', *yaʉ* 'bring'and *ya* 'take'. On the surface, when they occur with unmarked GOAL nominals, these transitive verbs appear very much like ditransitive verbs that *require* the GOAL participant (see examples in 11), but as stated above, the GOAL is not pronominally indicated with the extended intransitives and they, thus, differ from ditransitives. In addition, without an overt NP expressing a GOAL, that notion would not be included in the interpretation

I have presented evidence for intransitive, transitive, ditransitive, extended intransitive and extended transitive roots. I have shown that the formal features of an NP Object include 1) bearing Accusative case, 2) bound pronominal indexation for SAPs, 3) not being marked by a preposition, and 4) the notion of the argument is included even if it is not overtly expressed. With the exception of the GOAL participants of extended intransitives and transitives, which occur as bare NPs, Objects are formally distinguished from obliques. In the next section, I present an additional property of non-AGENT core arguments in Maa, the capacity to be the Subject of a Middle construction.

2.5 The Middle construction

Maasai has morphological means for altering the voice of basic active transitive verb roots. Among them is a Middle construction where the Middle suffix *-a* or *-o* (imperfective) and *–ɛ* (perfective) attaches to the verb stem. According to Hopper and Thompson's (1980) notion of clause-level transitivity, a typical semantically transitive event involves two participants, one whose volitional action (AGENT) affects the other (THEME) with a transmission of force. Middle morphemes or "middle diathesis" (Klaiman, 1988) deviate from this semantic prototype because the event denoted by the verb "affects" the subject rather than the object. Kemmer (1994), in a cross-linguistic study of middles and reflexives, argued that the tendency for their being coded identically in languages comes from their shared semantics. She says that while both subsume the notion of "affectedness" of the subject in a one-participant event, middles involve less differentiation of AGENT and THEME participants than reflexives. Full differentiation would be characteristic of transitives. In Maa, middle and reflexive semantics are both expressed with the Middle morpheme. Because the Middle marks situations of participant "affectedness", the capacity for a NP to be a Middle Subject is a good test for semantic core argument status and transitivity.

An example from English illustrates how a typical affected THEME that is undergoing a change of state can be expressed as the subject of a middle, though English has no middle morpheme. The THEME that is coded as the object 'window' in (28a) is the subject of the semantic middle event (28b) and resultant state (28c):

(28) a. The man broke the window
b. The window broke
c. The window is broken

In languages with double object constructions, the multiple objects are not always treated in identical ways. As was mentioned in Section 2.2.3 on ditransitives in Maa, either Object can potentially be pronominally indexed on the verb, a feature of "symmetrical" double object constructions. An additional feature of a symmetrical object system would be if both objects could be subjects of corresponding middle constructions.

In (29a), the Object of the simple transitive verb *duŋ* 'cut' is the affected THEME ɔl-*payián* 'man'. In (29b), the verb shows pronominal agreement with the NP in Nominative case ɔl-*páyìàn* 'man' but this participant remains the semantic THEME or affected participant of the verb. (29b) is also distinct from the active direct sentence in (29a) because the verb carries the Middle suffix. The direct clause in (29c) shows pronominal agreement coreferential with the 1st person AGENT. However, with the Middle suffix in (29d), the 1st person is indicated as the Subject although it is clearly the affected THEME participant.

(29) a. ɛ-dúŋ ɛn-kɛ́ráí ɔl-payián
3-cut FSG-child.NOM MSG-man.ACC
'The child cut the man'
b. ɛ-dúŋ-ò ɔl-páyìàn
3-cut-MID MSG-man.NOM
'The man is cut'
c. á-dúŋ ɔl-tʉŋánì
1SG-cut MSG-person.ACC
'I will cut the person' (Verbs Database)
d. á-dúŋ-ò
1SG-cut-MID
'I am cut'

The following examples illustrate several uses of the Middle with transitive roots. The active form of the sentence is given in the (a) examples and a corresponding Middle is given in (b):

(30) a. ɛ-ɨ̀d ɔl-páyìàn o-sóít
3-jump MSG-man.NOM MSG-rock.ACC
'The man will jump over the rock'

b. ɛ-ɨ̀d-à o-soít
3-jump-MID MSG-rock.NOM
'The rock is jumped over'

(31) a. ɛ́-jɨ̀ŋ ɛn-kají
3-enter FSG-house.ACC
'He will enter the house'

b. ɛ-jɨ̀ŋ-à ɛn-kájì
3-enter-MID FSG-house.NOM
'The house is entered'

(32) a. á-úr ɔl-catá
1SG-make.fall MSG-tree.ACC
'I bend the tree'

b. é-úr-ò ɔl-cátà
3-make.fall-mid MSG-tree.NOM
'The tree is bent'

(33) a. á- ígèr em-pálai
1SG-write FSG-letter.ACC
'I will write a letter'

b. é- ígér-ò ɛm-paláí
3-write-MID FSG-letter.NOM
'The letter is written'

Looking at Middles of ditransitive verbs, the THEME participant can be the Subject of a Middle, but the GOAL participant appears to be restricted. For example, in (34a), the verb *pɨ̀k* 'put' takes a bare THEME 'water' and a bare GOAL 'pot' both in Accusative case. In (34b), a Middle construction, the Nominative argument is the THEME 'pot' and the

Accusative ‘water’ is the GOAL. In (34c), also a Middle, the Nominative argument is again the THEME ‘water’. In both (34b) and (34c), the Nominative argument is the THEME, not the GOAL. This is the preferred interpretation. In (34d), however, interpreting the Subject ‘woman’ as the GOAL is ambiguous with interpreting it as the THEME.

(34) a. ɛ-pɨ̂k ɛn-tánkìlè emotí ɛnk-árɛ́
3-put FSG-woman.NOM FSG.pot.ACC FSG-water.ACC
‘The woman will put water in the pot’

b. ɛ-pɨ́k-à ɛná mótì ɛn-kárɛ́
3-put-MID this.NOM pot.NOM FSG-water.ACC
‘The pot is put in the water (pot is floating around in the water)’

c. ɛ-pɨ́k-à ɛn-kárɛ̀ en-motí
3-put-MID FSG.water.NOM FSG-pot.ACC
‘The water is put in the pot’

d. ɛ-pɨ́k-à ɛn-tánkìlè enk-áré
3-put-MID FSG-woman.NOM FSG-water.ACC
i. ‘The woman has been put water (as with sprinkling in baptism)’
ii. ‘The woman has been put into the water’

It appears that the GOAL participants of ditransitives do not consistently behave like the highly affected THEME of transitives. For the verb *pɨ́k* ‘put’, the ‘pot’ as a GOAL is not capable of being the Subject of a Middle, while ‘woman’ as GOAL is. This is a construction that is clearly sensitive to semantics of the nouns themselves. Nevertheless, in Chapters 3-6, I will use the Middle construction as a final test for the core argument status of applied Objects in Maa.

CHAPTER 3

THE DATIVE APPLICATIVE

In this chapter, I will introduce the Dative Applicative and illustrate its syntactic functions on intransitive, transitive and ditransitive clauses (3.1). In 3.2, I will use syntactic tests to determine the core argument status of applied arguments of the Dative. In 3.3, I will discuss additional GOAL semantic functions of the Dative with extended intransitives and transitives, and in 3.4 I will offer a unified interpretation of the various semantic functions.

3.1 Syntactic Functions

Tucker & Mpaayei (1955) identified the Maasai Dative suffix *-akɨ(n)*[10], which has the allomorphs *-okɨ(n)* (*-aka/-oko)* in the Perfective). The Dative Applicative allows for the syntactic expression of semantically peripheral GOAL and BENEFACTIVE arguments. In doing this, it creates an additional argument slot in the core argument structure of the derived verb stem. The Dative can attach to intransitives, which makes them transitives; it can attach to transitives rendering them ditransitives; and to ditransitives which derives four argument verbs.

[10] Tucker and Mpaayei did not include the final *-n* as part of this suffix. The *-n* has been identified by Payne (personal communication).

3.1.1 Intransitive Roots

The Dative allows otherwise intransitive roots to accept a bare Accusative NP. The following examples with intransitive roots illustrate BENEFACTIVE applied arguments.

(35) a. á-gól
3>1SG-be.strong
'I will be strong'
b. *áa-gól
3>1SG-be.strong
'He will strong me'
c. áa-gól-ókì
3>1SG-be.strong-DAT
'He will be strong for me'

(36) a. k-ɛ́-dálà[11]
D-3-be.playful
'He will play'
b. *áa-dálà
3>1SG-be.playful
'He will play me'
c. áa -dal-ákɨ̀
3>1SG-be.playful-DAT
'He will play for me'

The verb *ɨrɔ* 'greet', an intransitive verb of communication, appears with the Applicative when action is directed toward a participant:

(37) a. k-e-ɨrɔ(r)-ɔkɨ́[12]
D-3-talk-DAT
'He will greet someone' (Tucker & Mpaayei, 1955)
b. áa-bu-akɨ́ ɔl-áyíóní
3>1SG-shout-DAT MSG-boy.NOM
'The boy will shout at me' (Maa Dictionary)

[11] The root *dálà* 'play' is likely a frozen Middle form composed of the root *dál* and Middle suffix *-a*.

[12] Tucker and Mpaayei do not include tone marking in much of their data.

c. a-ɨŋɔmɨŋɔm-akɨ̂
INF.SG-whisper-DAT (Maa Dictionary)
'To whisper to'

d. áa-rany-akí
3>1SG-sing-DAT
'He will sing to/for me' (Tucker & Mpaayei, 1955)

With motion intansitive roots, the applied argument can have a literal GOAL interpretation. The verb *ɨdʉrr* 'move' is intransitive. In the unapplied form it does not accept an object NP (38a). If an additional NP is instantiated it must be coded in an oblique as in (38b), which is interpreted as a SOURCE semantic role. The Dative Applicative permits the GOAL 'Nairobi'.

(38) a. *k-á-idʉrr Nairóbi
D-1SG-move Nairobi.ACC
'I will move (from/to) Nairobi'

b. k-á-ɨ̂dʉ̀rr tɛ Náírɔbɨ
D-1SG-move OBL Nairobi
'I will move from Nairobi'

c. k-á-ɨ̂dʉrr-ákɨ̂ Nairóbi
D-1SG-move-DAT Nairobi.ACC
'I will move to Nairobi'

3.1.2 Transitive Roots

Example (39a) shows a transitive verb which normally requires two arguments. The ungrammaticality of (39b) shows that a Double Object construction is not possible without the Dative Applicative for this verb. (39c) shows that the Dative licenses the promotion of the NP 'woman' to the clause.

(39) a. ɛ́-tá-ból-ó ɛn-kɛráí ɛnk-ají
3-PF-open-PF FSG-child.NOM FSG-house.ACC
'The child has opened the house' (Maa Dictionary)

b. *ɛ́-tá-ból-ó ɔl-páyìàn en-kitók ɛnk-ají
3-PF-open-PF MSG-man.NOM FSG-woman.ACC FSG-house
'The man has opened the house for the woman'

c. ɛ-ta-bol-ókò ɔl-páyìàn en-kitók ɛnk-ají
3-PF-open-DAT.PF MSG-man.NOM FSG-woman.ACC FSG-house
'The man has opened the house for the woman' (Maa Dictionary)

Following are additional examples of the Dative Applicative licensing a BENEFACTIVE:

(40) a. ɛ-yɨ́ɛ́r en-kítok ɛn-dáà
3-cook FSG-woman.NOM FSG-food.ACC
'The woman will cook food'

b. *ɛ-yɨ́ɛ́r en-kítok ɛn-dáà ɔl-payián
3-cook FSG-woman.NOM FSG-food.ACC MSG-man.ACC
'The woman will cook for the man'

c. ɛ-yɨ́ɛ́r-ákɨ́ en-kítok ɛn-dáà ɔl-payián
3-cook-DAT FSG-woman.NOM FSG-food.ACC MSG-man.ACC
'The woman will cook for the man'

(41) a. ɛ́-ɨ́sʉ́j en-kítok in-kiláni
3-wash FSG-woman.NOM FPL-clothes.ACC
'The woman will wash clothes'

b. *ɛ́-ɨ́sʉ́j en-kítok in-kiláni ɔl-payián
3-wash FSG-woman.NOM FPL-clothes.ACC MSG-man.ACC
'The woman will wash clothes for the man'

c. ɛ́-ɨ́sʉ́j-ákɨ́ en-kítok in-kiláni ɔl-payián
3-wash-DAT FSG-woman.NOM FPL-clothes.ACC MSG-man.ACC
'The woman will wash clothes for the man'

(42) a. á-úr il-paék
1SG-make.fall MPL-corn.ACC
'I will bend the corn'

b. *e-ur en-kítok il-paék nɨnyɛ́
3-make.fall FSG-woman.NOM MPl-corn.ACC 3SG.ACC
'The woman will bend the corn on/for him/her'

c. e-ur-ókɨ́ en-kítok il-paék nɨnyɛ́
3-make.fall-DAT FSG-woman.NOM MPl-corn.ACC 3SG.ACC
'The woman will bend the corn on/for him/her'

In (a) of each example above, the verb in its underived state accepts two participants. The ungrammaticality of (b) in each case shows that the Dative is required to license the applied argument.

A GOAL interpretation is also pragmatically plausible with certain verbs that express motion that could be directed toward a GOAL. The following ungrammatical examples in (a) illustrate that these verbs cannot accept more than two arguments without the Applicative (b).

(43) a. *á-pʉ́rd ɔl-pílipílì atúà[13] ɛn-dáà
1SG-smash MSG-pepper.ACC into.ACC FSG-food.ACC
'I crush the pepper into the food'

b. á-pʉ́rd-akɨ́ ɔl-pílipílì atúà ɛn-dáà
1SG-smash-DAT MSG-pepper.ACC into.ACC FSG-food.ACC
'I crush the pepper into the food' (Maa Dictionary)

(44) a. *á-ɨ́rrɨ́n ɔl-ɔ́sɨ́rɨ́ ɔl-caní
1SG-twist MSG-rope.ACC MSG-tree.ACC
'I will twist the rope around the tree'

b. k-á-ɨ́rrɨ́n-akɨ́ l-gíitâ l-caní
D-1SG-twist-DAT MSG-rope.ACC MSG-tree.ACC
'I will twist the rope around the tree' (Maa Dictionary)

(45) a. *é-dúŋ ɔl-páyìàn kítòk ɨlapá tʉ́ŋánák
3-cut MSG-man.NOM senior.NOM those.ACC people.ACC
l-ɛnyɛ́nak
M-POSS.ACC
'The old man divides (his wealth) to all those people'

b. é-dúŋ-okí ɔl-páyìàn kítòk ɨlapá tʉ́ŋánák
3-cut-DAT MSG-man.NOM senior.NOM those.ACC people.ACC
l-ɛnyɛ́nak
M-POSS.ACC
'The old man divides (his wealth) to all those people' (Maa Dictionary)

[13] *atúà* is a relational noun which agrees in case with the following NP.

In Section 2.4, GOALs of verbs of directed motion were described as capable of occurring as bare NPs. However, I analyzed these as obliques and the verbs as extended intransitives and extended transitives. The Dative is not required to express inanimate GOALs with extended verbs. Additional GOAL functions of this morpheme with extended verbs, compared with other motion verbs such as those just presented, will be discussed in more detail in 3.3.

3.1.3 Ditransitive Roots

Three participant roots can be increased to four participant stems with the promotion of a BENEFACTIVE role, but not a GOAL role.

(46) a. á-ɨshɔ́ ɛm-páláí kanísà
1SG-give FSG-letter.ACC church.ACC
'I will give a letter to the church'

b. á-ɨshɔ́-ɔkɨ́ ɛm-páláí kanísà ɔl-payían
1SG-give-DAT FSG-letter.ACC church.ACC MSG-man.ACC
'I will give a letter to the church for the man'

(47) a. ɛ́-pɨ́k ɛn-kijíkò ɛn-kɨkómpè
3-put FSG-spoon.ACC FSG-cup.ACC
'She will put the spoon in the cup'

b. ɛ-pɨk-ákɨ́ en-kitók en-kijíkò ɛn-kɨkómpè
3-put-DAT FSG-woman.ACC FSG-spoon.ACC FSG-cup.ACC
'She will put the spoon in the cup for the woman'

3.2 Core Argument Status

In Section 2, it was shown that tests for objects in Maasai include Accusative marking of a bare NP, pronominal indexation and the capacity to be the Subject of a Middle construction. Like core arguments, all of the applied nominals in the previous examples occur as bare NPs in Accusative case. In this section, the features of verbal indexation

and the capacity of an applied argument to be the Subject of a Middle will be used to test the core argument status of both applied and original arguments in applied constructions.

3.2.1 Verbal Indexation

3.2.1.1 Intransitive Roots

As discussed in 2.2.1, intransitive verbs normallycannot appear with transitive prefixes. When the Dative suffix is attached, an applied BENEFACTIVE or GOAL argument can be pronominally indicated on the verb in an inverse situation and the valence is increased to two. Because intransitive roots do not have Objects, the applied Objects do not demote or displace a previous argument.

(48) a. áa-dal-ákɨ̀
3>1SG-be.playful-DAT
'He will play for me'

b. áa-gól-ókì
3>1SG-be.strong-DAT
'He will be strong for me'

c. áa-ipid-ókì
3>1SG-jump-DAT
'He will jump for me'

d. áa-shɔm-ɔkɔ́ o-reyíét
3>1SG.-go-DAT.PF MSG-river.ACC
'He has gone to the river for me'

e. áa-kʉɛt-akɨ́
3>1SG-run-DAT
'He will run to/for me'

Applied arguments of the extended intransitives in (48d-e) yield either an additional BENEFACTIVE argument that can be marked on the verb when it is 1st or 2nd person singular as in (48d), or the lexically licensed extended GOAL is the applied Object with no additional semantic argument as in (48e). In either case, the applied argument is capable of being marked on the verb.

3.2.1.2 Transitive Roots

As with intransitives, the *applied* argument of otherwise transitive roots can be indicated with inverse prefixes.

(49) a. áa-isɯj-ákɨ̀
3>1SG-wash-DAT
'He will wash for me'

b. áa-ur-okɨ̀ ɔl-catá
3>1SG-make.fall-DAT MSG-tree.ACC
i. 'He will bend the tree for me'
ii. 'He will bend the tree on me'

c. áá-yá-ákɨ̀ em-búkù
1SG>2SG-take-DAT FSG-book.ACC
'I will take you the book'

d. áa-iger-ókì ɔl-páyìàn ɛm-pálái
3>1SG-write-DAT MSG-man.ACC FSG-letter.ACC
'The man will write a letter to/for me'

With transitive roots, when there is an SAP, it is marked on the verb regardless of semantic role. *Either* the applied argument or the original object argument of a transitive verb can still be marked on the verb in an inverse relation. Below are examples where the original THEME argument of a transitive root and the applied argument are ambiguously coreferenced on the verb.

(50) a. áa-tɨ-mɨr-ak-á ɛn-kɛráí ɛn-kɨ́tɛ́ŋ
3>1SG-PF-chase-DAT-PF FSG-child.NOM FSG-cow.ACC
i. 'The child chased the cow to me'
ii. 'The child chased me to the cow'

b. áa-sɯj-akɨ̀ ɛn-kítɛ́ŋ
3>1SG-follow-DAT FSG-cow.ACC
i. 'He will follow the cow for/to me'
ii. 'He will pursue me to the cow'

c. áa-úr-okí il-paék
3>1SG make.fall-DAT MPL-corn.ACC
i. 'He will bend corn for/on me'
ii. 'He will make me fall on the corn'

d. áa-ɨ̀d-ákɨ̀ ɔl-páyìàn
3>1SG-jump-DAT MSG-man.NOM
i. 'The man will jump on top of me'
ii. 'The man will jump (over) me (toward something)'

These examples show that the Applicative can promote 'me' as a BENEFACTIVE or GOAL argument which is then marked on the verb, such as interpretation (50ai, bi, ci), while the THEME is an unmarked 3rd person. Interpretations (50aii, bii, cii, dii) are based on promotion of a 3rd person unmarked BENEFACTIVE or GOAL while the THEME 'me' is marked on the verb. In (50di), the only non-AGENT argument is the GOAL. To summarize, with basic lexical ditransitives, the THEME in Dative applied constructions can receive the same treatment as the GOAL, by being marked on the verb pronominally.

3.2.1.3 Ditransitive Roots

The *applied* argument of ditransitive roots can also be marked on the verb if it is a singular SAP. With ditransitives, the applied argument is always a BENEFACTIVE. The most natural interpretation is that the BENEFACTIVE is human and therefore most likely to be marked. Most likely, the THEME and GOAL can be marked on the verb as well but examples to show this are not available.

(51) áa-ɨshɔ́-ɔ́kɨ́ em-pálái kanísa
1SG-give-DAT FSG-letter.ACC church.ACC
'He will give a letter to the church for me'

3.2.2 Middle Subjects

In 2.5, it was shown that a typical THEME of a transitive root could be the Subject of a Middle. The verb takes the Middle suffix *-a / -o* (imperfective), or *ɛ-/-e* (perfective), and agrees with the THEME Subject. If the THEME NP is instantiated it appears in the

Nominative case. Depending on the verb type, this construction can have the interpretation of the Subject being affected, or a reciprocal or reflexive one.

3.2.2.1 Intransitive Roots

The following pairs illustrate intransitive verb stems with a Middle Subject, contrasted with applied Middle Subjects, with selected interpretations.

(52) a. ɛ-dálà
3-play.MID
'They/He will play'
b. ɛ-dal-akín-o
3-play-DAT-MID
'They will play for each other'

(53) a. ɛ-ŋɨ̂dà
3-be.proud.MID
'They/He is proud'(Verbs Database)
b. ɛ-ŋɨ̂d-akɨ̂n-o
3-be.proud-DAT-MID
'They will be proud for each other'(Verbs Database)

As we have seen, the GOALs of extended intransitives can be expressed as bare NPs, that is, without the oblique preposition *tɛ̀-*. Unless promoted with the Dative, the GOALs of these verbs cannot be the Subject of the Middle construction, as shown in (54-56b). This is some of the evidence showing that these NPs are not true objects of transitive roots. In order to achieve a middle-like interpretation, a Dative suffix *-akɨ(n)* must be added to the verb, as shown in (54-56c).

(54) a. á-îpîrrì áŋ
1SG-run home.ACC
'I will run home'
b. *ɛ-ipírrí-o ɛndá ájì
3-run-MID that.FEM.NOM house.NOM
'The house has been run to'

c. e-ipírrí-ókí(n)-o o-réyìèt
3-run-DAT-MID MSG-river.NOM
'The river has been run at/for/in'

(55) a. ɛ-ta-báy-ie o-reyîét
3-PF-arrive.here-PF MSG-river.ACC
'He arrived at the river'

b. *ɛ-báy-a o-réyìèt
3-reach-MID MSG-river.NOM
'The river is reached'

c. ɛ-báy-akín-ó o-réyìèt
3-arrive.there-DAT-MID MSG-river.NOM
'The river is reached'

(56) a. ɛ-shɔmɔ́ o-reyîét
3-go.to.PF MSG-river.ACC
'He went to the river'

b. ɛ-shɔmɔ́-kɨ̂n-ɔ́ o-réyìèt
3-go.PF-DAT-MID MSG-river.NOM
'The river has been gone to'

3.2.2.2 Transitive Roots

Verb roots that take two Accusative-marked NPs also participate in Middle constructions when carrying Applicatives. The following examples illustrate that when the Middle suffix is added to the verb, the applied GOAL or BENEFACTIVE too can be the Subject of the Middle. In (57-58a), the Dative argument is an unspecified BENEFACTIVE. The Subject 'woman' is in the Nominative. In (57-58b), the applied argument is the Subject of the Middle in a reciprocal interpretation:

(57) a. ɛ́-isʉ̀j-ákɨ̂ en-kítok in-kilání
3-wash-DAT FSG-woman.NOM FPL-clothes.ACC
'The woman washes clothes for him/her/it/them'

b. ɛ́-isʉ̀j-ákɨ̂n-ɔ́ in-kilání inkítùààk
3-wash-DAT-MID FPL-clothes.ACC FPL-women.NOM
'The women wash clothes for each other'

(58) a. ɛ-yɨɛ́r-ákɨ́ en-kítok ɛn-dáà
3-cook-DAT-MID FSG-woman.NOM FSG-food.ACC
'The woman cook food for him/her/it/them'

b. ɛ-yɨɛ́r-ákɨ́n-ɔ́ ɛn-dáà in-kítùààk
3-cook-DAT-MID FSG-food.ACC FPL-women.NOM
'The women cook food for each other'

The following are additional examples of applied arguments that are Middle Subjects:

(59) a. ɛ-pɛt-akɨ́n-ɔ̀ ɨl-tʉŋanák átɛ́
3-lean.on-DAT-MID MPL-people.NOM selves
'The people will lean against each other'

b. e-itíám-ákín-ó in-kíshù
3-jump.on-DAT-MID cows.NOM
'The cows have been served'

c. e-irrúg-ókín-ó ɔl-aigúánání
3-bend.down-DAT-MID MSG-chief.NOM
'The chief is bowed to'

d. k-é-íger-okín-o
D-3-write-DAT-MID
'They will write for each other'

In the Middle, the *original* THEME argument of the base verb can occur in the Nominative case and is interpreted as the Subject. See 2.5 (examples 30-33) for Middle forms of verbs without the Dative.

(60) a. e-ur-ókɨ́n-ó en-kítok ɔl-catá
3-make.fall-DAT-MID FSG-woman.NOM MSG-tree.ACC
'The woman is fallen on the tree'

b. ɛ́-ísʉ́j-ákɨ́n-ó in-kílaní en-kitók
3-wash-DAT-MID FPL-clothes.NOM FSG-woman.ACC
'The clothes are washed for the woman'

c. ɛ-yɨɛ́r-ákɨ́n-ɔ́ ɛn-dáâ in-kitúààk
3-cook-DAT-MID FSG-food.NOM FPL-women.ACC
'The food is cooked for the women'

d. é-ígér-òkɨ̀n-ò ɛm-paláí ɔl-payián
3-write-DAT-MID FSG-letter.NOM MSG-man.ACC
'The letter is written for the man'

3.2.2.3 Ditransitive Roots

It was illustrated in 2.5 that the GOAL of ditransitive roots could be understood as an applied Middle Subject in a plausible semantic context. The *applied* BENEFACTIVE argument can also be the Middle Subject.

(61) ɛ-pɨ̂k-ákɨ̂n-ó em-búkù en-gúmótó
3-put-DAT-MID FSG-book.ACC FSG-hole.ACC
'They put a book in the hole for each other'

(62) ɛ-ɨ̂shɔ́-kín-ɔ́ ɨm-pálà
3-give-DAT-MID FPL-letters.ACC
'They give letters (to someone) for each other'

The *original* THEME argument too can be understood as a Middle Subject,

(63) ɛ-pɨ̂k-ákɨ̂n-ó en-gúmótó
3-put-DAT-MID FSG-hole.ACC
'They put each other in the hole'

as can the original GOAL:

(64) ɛ-ɨ̂shɔ́-kín-ɔ́ ɛm-pálâí kánisa il-payaní
3-give-DAT-MID FSG-letter.ACC church.NOM MPL-men.ACC
'The church is given a letter for the men'

3.3 Semantic Functions

I illustrated that the two semantic roles BENEFACTIVE and GOAL are promoted with the suffixation of the Dative Applicative. In this section, I will illustrate three additional semantic functions of the Dative that primarily concern two types of vector motion verbs, extended intransitive and transitive MOTION.TO verbs and MOTION.VIA verbs (Talmy, 2000). The function of the Applicative construction is sensitive to these verb types and to the semantics of the GOAL argument.

3.3.1 Obligatory Promotion

"Obligatory promotion" is a situation where there is an animate BENEFACTIVE or GOAL in the clause that can only be expressed as a core object argument. This phenomenon has been described for a number of Bantu languages such as Lunda (Kawasha, 1999), Kinyarwanda (Kimenyi, 1976), Sesotho (Demuth, 1998), Gitonga (Mchombo and Firmino, 1999) and the Mayan languages Tzotzil (Aissen, 1979) and Olutec (Zavala, 2002).

In order to explain how obligatory promotion works in Maa, it is important to review a few notions involving extended intransitive and transitive MOTION.TO verbs. In Section 2.4, I introduced GOALs of extended intransitives and transitives and argued that they are a type of oblique. They share more morphosyntactic properties with obliques (lack of verbal indexation, incapability of being a middle Subject) than with objects (bare NP status). I gave examples of the extended intransitive verb stems *kuɛt* 'run' and *shɔmɔ* 'go'. Additional examples of this verb type are given here. The GOAL is not required for a complete clause, as is shown by the optional parentheses, and its presence does not transitivize the verb stem.

(65) a. á-ípírrì (áŋ)
1SG-run (home.ACC)
'I will run (home)'

b. ɛ-ta-báy-ie (o-reyíét)
3-PF-arrive.here-PF (MSG-river.ACC)
'He arrived (at the river)'

c. é-ló (ol-dóynío)
3-go (MSG-mountain.ACC)
'He will go (to the mountain)'

Extended transitive verbs also permit GOALs. Observe the following:

(66) a. ɛ-tʉ́-sʉ́j-á Kónené in-kíshú (o-reyíét)
3-PF-follow-PF Konene.NOM FPL-cow.ACC (MSG-river.ACC)
'Konene has followed the cows (to the river)'

b. ɛ́-yá en-kítòk ɛn-dáà (ɛm-ányátá)
3-SG-take FSG-woman.NOM FSG-food.ACC (FSG-warrior.village.ACC)
'The woman takes food (to the warrior village)'

c. a-rɛ́ʉ́-ʉ́ in-kíshú (sokónì)
1SG-drive-VENT FPL-cow.ACC (market.ACC)
'I will bring cows (to the market)'

I also showed that the oblique *tɛ̀* construction in (19b-c) does not permit a GOAL interpretation for any verb type. In the last two sections, I presented examples of promoted GOALs with verb roots that do not themselves subcategorize for GOAL. The Dative was required for the expression of these GOALs as bare NPs. *Physical* GOALs, therefore, can either be expessed as bare NPs with extended verbs (above), or as bare NPs with other verbs with the Dative, or as subcategorized core arguments with ditransitive verbs like 'put'.

Animate GOALs, in contrast, are expressible in a periphrastic relative clause with a 'to where he/she is' meaning. For example, in the following construction *ɛn-á-tíi* is a relative clause with the feminine singular nominal prefix *ɛn-*, the person prefix *a-* '1SG' and the verb *tii* 'be.at.location' which here translates as 'to/toward'.

(67) a. ɛ-kuɛt-ʉ́ ɛn-á-tíi
3-run-VENT FSG-1-be.at.location
'He will run to me' (lit: to where I am)

b. á-ípírrì en-e-tíi ɨl-tʉŋanák
1SG-run FSG-3SG-be.at.location MPL-people.ACC
'I will run to the people' (lit: to where the people are)

c. a-rɛ́ʉ́-ʉ́(n) in-kíshú en-e-tíi yéyioô
1SG-drive-VENT FPL-cow.ACC FSG-3-be.at.location mother.NOM
'I will drive the cows to my mother' (lit: to where my mother is)

d. áa-sʉ̂j en-e-tíí en-kìtók
3>1SG-follow FSG-3-be.at.location FSG-woman
'He will follow me to the woman' (lit: to where the woman is)

e. áa-mɨr ɛn-kɛráí en-í-tíi
3>1SG-chase FSG-child.NOM FSG-2-be.at.location
'The child will chase me to you' (lit: to where you are)

Unlike physical GOALS, animate GOALS cannot be expressed as bare Accusative NPs if the verb remains in its simple non-applicative form. Compare the preceding examples with the following set of examples to see this. The first set of ungrammatical clauses (68) involves extended intransitive roots and the second set involves extended transitive roots (69).

(68) a. *ɛ-shɔmɔ́ ɔl-aigúánànì
3-go.PF MSG-chief.ACC
'He went to the chief'

b. *ɛ-kʉ́ɛ́t en-kitók
3-run FSG-woman.ACC
'He will run to the woman'

c. *á-ípírrì eŋ-kítɛ̀ŋ
1SG-run FSG-cow.ACC
'I will run to the cow'

(69) a. *áa-mɨr ɛn-kɛráí iyíé
3>1SG-chase FSG-child.NOM you.ACC
'The child will chase me to you'

b. *e-sʉ́j eŋ-kítɛ̀ŋ en-kìtók
3>1SG-follow FSG-cow.ACC FSG-woman
'He will follow the cow to the woman'

c. *e-yá em-búkù ɨl-tʉ́ŋánák
3-take FSG-book.ACC FPL-people.ACC
'He will take the book to the people'

For animates such as people, cows, goats, rabbits and 1st or 2nd person singular to be GOALs of motion verbs as bare Accusative NPs the verb must take the Dative Applicative. There is no other way to express these without resorting to a periphrastic relative clause. Observe the examples that illustrate this:

(70) a. á-kúɛ́t-ɨ́kɨ̀ kʉndâ kɛ́rá
1SG-run-DAT those.ACC children.ACC
'I will run to those children'

b. á-ípírrí-ókì ɛn-tankɨ́lɛ́
1SG-run-DAT FSG-woman.ACC
'I will run to/for the woman'

c. ɛ-shɔm-ɔ́kɔ́ ɔl-aigúánànì
3-go-DAT.PF MSG-chief.ACC
'He went to the chief'

d. é-lót-ókì en-kíné
3-go-DAT FSG-goat.ACC
'He will go to the goat'

(71) a. kɨ́-tɨ́-mɨ́r-áká ɛn-kɛráí en-kitók
INV-PF-chase-DAT.PF FSG-child.NOM FSG-woman.ACC
'The child chased you to the woman'

b. e-sʉ́j-ákɨ́ ɛn-kítɛŋ en-kitók
3>1SG-follow-DAT FSG-cow.ACC FSG-woman.ACC
'He will follow the cow to the woman'

c. e-yá- ákɨ́ em-búkù ɨl-tʉ́ŋánák
3-take-DAT FSG-book.ACC FPL-people.ACC
'He will take the book to the people'

d. e-rɛʉ-ákɨ́ in-kinejí ɔl-ŋátúny
3-drive-DAT FPL-goats MSG-lion.ACC
'He will drive the goats to the lion'

It was also shown in Section 2.4 that BENEFACTIVE roles could not occur in the oblique *tɛ̀* construction (see 19a). BENEFACTIVE roles expressed as obliques in a *tɛ̀* construction

must occur with the noun *arakɨ́* 'reason'[14]. In the last two sections (3.1-2), numerous examples of the Dative with a BENEFACTIVE sense were given. The BENEFACTIVE role, which is animate in all examples, is an obligatorily applied Object. There is no alternative way to express this semantic role as a bare NP. The obligatory promotion of animate BENEFACTIVEs and GOALs suggests that these have a special status with respect to inanimate participants and with respect to other semantic roles.

The next pair of examples, however, appears to deviate from the generalization just stated because the Dative is optional with an animate GOAL 'sheep':

(72) a. ɛ-kʉ́ɛ́t ɨn-taré
3-run FPL-sheep.ACC
'He will run to the sheep'
("The sheep are there, in sight, just waiting for him all together")

b. ɛ-kʉ́ɛ́t-ákɨ̀ ɨn-taré
3-run-DAT FPL-sheep.ACC
'He will run to the sheep'
("He doesn't know where the sheep are. He's just running to them")

In (72a) the Dative is not employed even though the GOAL is animate. Below the literal translation of each example is the speaker's interpretation of the event. The speaker's interpretation of (72a) compared with (72b) suggests that animacy is not the issue here. Rather, it suggests that if the GOAL is interpreted as a fixed permanent location, without regard to animacy, then a bare non-applied NP can be used (as in 72a). Most animate beings are mobile, especially humans and most livestock when conceived of as individual moving entities. In example (72a), without the Dative, a flock of sheep is conceived as a visible unmoving stative landmark. In (72b), the 'sheep' are conceived of as moving

[14] Doris Payne (personal communication) notes that this root synchronically almost always occurs in the oblique phrase *tɛnk-árakɨ́*.

entity that a sheepherder presumably has lost sight of and needs to track down. This is supported by the following example where it is not possible to express an individuated 'woman' without a Dative.

(73) *ɛ-kʉ́ɛ́t en-kitók
3-run FSG-woman.ACC
'He will run to the woman'

Additionally, not all animates can easily be conceptualized as mobile. Example (74) with 'elephant' is not acceptable with the verb 'reach, arrive'; but with the same verb in (75a) and the animate 'hare' the Dative is required (75b):

(74) *ɛ-báy-(a)kí ɔl-tɔ́mɛ́
3-arrive.there-DAT MSG-elephant.ACC
'He will arrive at the elephant'

(75) a. *ɛ-báyá en-kitejó
3-reach FSG-hare.ACC
'He will reach for the hare'
b. ɛ-báy-(i)kí en-kitejó
3-reach-DAT FSG-hare.ACC
'He will reach for the hare'

An elephant is a large, often stative animal, in contrast to a hare which seems to be continually bounding away, especially when in sight of a human. These examples suggest that animacy may not be the main factor here, but that the conceptual status of GOAL requires a permanent, large, unmoving entity, features which rarely overlap with animates. This issue will be reconciled with other GOAL functions in Section 3.4.

3.3.2 Extended Intransitives and Transitives

In the discussion so far, Applicatives have been understood and illustrated as a valence increasing mechanism where intransitive roots become transitive stems, transitive roots become ditransitive stems and ditransitives assume four arguments. We have seen for most verbs that the expression of BENEFACTIVE and GOAL semantic roles require promotion by the Applicative. In the case of extended intransitives and transitives, a GOAL can be expressed without the Applicative. However, in Section 3.3.1 the expression of *animate* and *mobile* GOALs with extended verbs was shown to require the Dative in obligatory promotion. In the following examples of extended verbs in (c), the Dative optionally occurs with a *physical* and *immobile* GOAL as well.

(76) a. ɛ́-tɨ̂-mɨ̂r-a ɛn-kɨ̂tɛŋ ɛn-kitók
3-PF-chase-PF FSG-cow.NOM FSG-woman.ACC
'The cow chased the woman'

b. áa-tɨ-mɨr-á(k) ɛn-kɛráí o-reyíét
3>1SG-PF-chase-PF FSG-child.NOM MSG-river.ACC
'The child chased me to the river'

c. ɛ-mɨ̂r-ákɨ̀ ɔl-ŋatúny ɛn-kitók o-reyíét
3-chase-DAT MSG-lion.NOM FSG-woman.ACC MSG-river.ACC
'The lion will chase the woman to the river'

(77) a. ɛ́-sʉ́j ɛn-kɛ́ráí ɛn-kɨ̂tɛ́ŋ
3-follow FSG-child.NOM FSG-cow.ACC
'The child will follow the cow'

b. ɛ-tʉ́-sʉ́j-á Kónené in-kíshú o-reyíét
3-PF-follow-PF Konene.NOM FPL-cow.ACC MSG-river.ACC
'Konene has followed the cows to the river'

c. ɛ́-sʉ́j-akɨ̀ ɛn-kɛráí ɛn-kɨ́tɛ́ŋ en-tîm
3-follow-DAT FSG-child.NOM FSG-cow.ACC FSG-forest.ACC
'The child will follow the cow into the forest'

Examples (76-77) show the Dative occurring with several extended intransitives and transitives that can lexically specify a GOAL. In the (a) examples the verb has two arguments and is a complete clause. In the (b) examples, the GOAL 'river' occurs with no Applicative. But in the (c) examples, the Applicative is added and no additional semantic argument is introduced.

The additional examples in (78) show a Dative marking extended verbs that already lexically specify GOALs. In these examples, I have included, below the translation of each example, the speaker's description of the motion involved in the event.

(78) a. á-ípírri-ok-o o-reyíét
1SG-run-DAT-PF MSG-river.ACC
'I ran to the river'
"some kind of final destination, maybe something was chasing me and I found refuge in the river."

b. ɛ-shɔmɔ́-k-ɔ́ o-reyíét
3-go.PF-DAT-PF MSG-river.ACC
'He went to the river'
"He is making his movements towards the river that he is approaching"

c. áa-sʉj-akɨ́ ol-dóínyó
3>1SG-follow-DAT MSG-mountain.ACC
'He will follow me to the mountain'
"…follow me all over the place…to track me…to find a safe place"

d. ɛ-ta-báya-kí-a o-reyíét
3-PF-arrive.there-DAT-PF MSG-river.ACC
'He reached the river'
"He has tried to go to several places on the way to end up at the river"

e. ɛ-kʉ́ɛ́t-ak-a o-reyíét
3-run-DAT-PF MSG-river
i. 'He ran to the river'
ii. 'He ran for the river'

One interpretation of the events described in examples (78a, c, d) suggests that when the Dative *-akɨ(n)* occurs, the final destination is important. The purpose of the

movement involves actually reaching the GOAL or "final destination", "ending up" somewhere and finding "a refuge" there.

A slightly different notion is interpretable from the descriptions in examples (78b, c, d) which suggests that the nature, not the GOAL, of the movement is affected with the addition of *-akɨ(n)* . Specific words that illustrate this are "all over the place", "go several places" and "making movements". These latter descriptions therefore include information about the *manner*, not just the *final destination* of the movement.

The following contrasting sentences appear to highlight the final destination interpretation:

(79) a. ɛ́-sʉ́j-íé ɛn-kɛráí ɛn-kɨ̂tɛ́ŋ e-ŋúdì
3-follow-INST FSG-child.NOM FSG-cow.ACC FSG-stick.ACC
en-tîm
FSG-forest.ACC
'The child will use the stick to follow the cow into the bush'
(The child may not go into the bush)

b. ɛ́-sʉ́j-ákín-ìè ɛn-kɛráí ɛn-kɨ̂tɛ́ŋ e-ŋúdì
3-follow-DAT-INST FSG-child.NOM FSG-cow.ACC F.SG-stick.ACC
en-tîm
FSG-forest.ACC
'The child will use the stick to follow the cow into the bush'
(The child will definitely enter the bush)

(80) a. áa-tɨ-mɨ̂r-á(k) ɛn-kɛráí o-reyíét
3>1SG-PF-chase-PF FSG-child.NOM MSG-river.ACC
'The child chased me to the river'

b. ɛ-tɨ-mɨ̂r-ák-á ol-dîâ ɛn-cɛrɛ́rɛt atûâ
3-PF-chase-DAT-PF MSG-dog.NOM FSG-monkey.ACC into.ACC
en-tîm
FSG-forest.ACC
'The dog chased the monkey into the bush'

In the (79-80a) examples above, the GOAL is the point toward which the action is directed while in the (79-80b) examples this is still true but the participant's motion 'into' rather than simply 'towards' means that the GOAL is actually reached.

The next set of contrasting pairs illustrates the manner interpretation. Examples (81-82a-b) give an example where the 2nd person argument is indicated in a relative clause, both with and without the Dative.

(81) a. áa-mɨ̄r ɛn-kɛráí en-í-tíi
3>1SG-chase FSG-child.NOM FSG-2-be.at.location
'The child will chase me to where you are'
("Maybe the child doesn't run all the way with me")

b. áa-mɨ̄r-akɨ́ ɛn-kɛráí en-í-tíi
3>1SG-chase-DAT FSG-child.NOM FSG-2-be.at.location
'The child will chase me to where you are'
("I am followed closely" [by the child-SL])

(82) a. kórè ɔl-tápʉ̄t l-a-baya náà dɔ́rrɔ́p
CONT MSG-ceiling.ACC RC.M-1SG-reach FOC short.ACC
'The ceiling I will reach is short'
("…makes sense if my body is floating up to the ceiling")

b. kórè ɔl-tápʉ̄t l-a-bay-ɨ́kɨ́ náà dɔ́rrɔ́p
CONT MSG-ceiling.ACC RC.M-1SG-reach-DAT FOC short.ACC
'The ceiling I will reach for (e.g. with my arm) is short'

In (81a), the speaker describes the event as a situation where, "maybe the child does not run all the way with me" which implies looser causation over the running from the AGENT. In (81b), the speaker describes the event where "the person ('me') is followed closely from behind." This implies that the AGENT 'chaser' has more continuous control over the running. In (82a-b), the verb *baya* 'reach' retains the sense where the AGENT is moving towards a GOAL. In (82b), the verb is used with the Applicative but the AGENT is not moving towards a GOAL but is using an arm to 'reach for' the ceiling. It is plausible to

suggest that the ceiling in this latter case has a greater degree of "affectedness". The English verb *reach for* is more closely synonymous with *touch* or *grab* which imply closer physical contact with something than does *reach,* which is synonymous with *arrive at* and where the GOAL is not likely to be "affected" by the arriving of a participant. According to these interpretations, the meaning difference is not whether the ceiling has been reached or not. What is relevant is that the AGENT has the *intention* to make contact with it. By the same token, the AGENT, in deliberately extending his arm, seems to have a greater degree of "volition" or "control" over the event. The Dative Applicative with extended verbs, therefore, is syntactically optional, but is pragmatically used for physical GOALs under the construal where the destination is achieved or where the AGENT has more control over the movement toward the GOAL.

3.3.3 Other Motion Verbs

A final semantic function of the Dative affects verbs of motion that do not subcategorize for a GOAL. These verbs have been called "MOTION.VIA" verbs (Talmy, 2000), different from the "MOTION.TO" verbs, which are extended intransitives and transitives in Maa. According to Talmy, the English equivalents of MOTION.VIA verbs include motion and an additional spatial notion such as 'along' 'on top of' or 'out of' that indicates the nature of the movement with respect to some entity or location. This is distinct from MOTION.TO verbs which include motion and the spatial information of 'to' or 'toward' a GOAL entity or location. Although the objects of MOTION.VIA verbs, if transitive, can arguably be construed as GOALs, they do not exhibit the same morphosyntactic properties of the GOALs of extended verbs. For example, the participants

of these verbs can be marked pronominally in 1st or 2nd person singular without the Applicative.

(83) a. áa-párɛ̀ ɨŋ-kíshù
3>1SG-go.along.side.of FPL-cow.NOM
'The cows will go alongside me'

b. áa-ɨ̂d ɔl-páyìàn
3>1SG-jump MSG-man.NOM
'The man will jump (over) me'

c. áa-ɨ̂m-áá e-lo-ito sokónì
3>1SG-pass-AWAY 3-go-PROG market.ACC
'He will pass me on his way to the market'

d. áa-iŋuáá
3>1SG-leave
'He will leave me'

e. áa-láŋ ɔl-páyìàn
3>1SG-cross MSG-man.NOM
'The man crossed (by) me'

Animates too can occur as bare NPs without obligatory Applicative promotion requirements with these verbs.

(84) ɛ-shɔmɔ́ ɨn-kɛ́râ áà-pàrɛ̀ ɨn-kɨ̂shʉ́
3-go FPL-children INF.PL-go.along.side.of FPL-cow.ACC
'The children have gone alongside the cows'

As with the prototypical valence-increasing function of Applicatives, the Dative can increase the valence of MOTION.VIA verbs by promoting a GOAL argument. Example (85a) illustrates the underived verb and (85b) illustrates the promoted GOAL argument with *-akɨ(n).*

(85) a. ɛ́-ítìàm ol-túáà
3-jump MSG-frog.NOM
'A frog hops'

b. e-te-réú-á ɔl-páyìàn ɔl-ɔɨŋɔ́nɬ́ o-itíám-akɨ
3-PF-drive-PF MSG-man.NOM MSG-bull.ACC REL-jump-DAT
in-kíshú
FPl-cows.ACC
'The man has brought a bull that will mount/serve the cows'

In the following sets of transitive examples, the lexically specified locational argument of the verb is present in (a). With the Dative in (b), there are still just two overt NPs; the locational argument remains and is the GOAL.

(86) a. ɛ-ɨ́d ɔl-páyìàn o-sóít
3-jump MSG-man.NOM MSG-rock.ACC
'The man will jump (over) the rock'
b. ɛ-ɨ́d-ákɨ̀ ɔl-páyìàn o-sóít
3-jump-DAT MSG-man.NOM MSG-rock.ACC
'The man will jump on top of the rock'

(87) a. No simple verb form with the root *do* 'descend' exists.
b. ɛ-do-ókì bɔɔ́
3-descend-DAT corral.ACC
'He will jump into the corral'

(88) a. ɛ́-jɨ́ŋ ɛn-kají
3-enter FSG-house.ACC
'He will enter the house'
b. ɛ́-jɨ́ŋ-ákɨ̀ ɛn-kají
3-enter-DAT FSG-house.ACC
'He will enter into the house'

(89) a. k-á-búkú en-kárɛ́
D-1SG-pour FSG-water
'I will pour out water'
b. e-buk-ókì
3-pour-DAT
'He will pour into it.'

The English translations of the clauses in (86-89) above (e.g. 'He jumps the rock' vs. 'He jumps onto the rock') appear to work in the same way. In the first clause (87a), the 'rock'

is the THEME. It is the item jumped over and the landing point is unstated; whereas in the second case, the 'rock' is the GOAL endpoint and any item jumped over is irrelevant. These examples indicate that the Applicative does not always function to increase valence. The Dative nonetheless introduces a GOAL into the event.

In this section, I presented three semantic functions of the Dative. I illustrated the obligatory promotion of animate BENEFACTIVEs and animate mobile GOALs. I presented a function of the Dative with extended intransitives and transitives where inanimate physical GOALs can optionally be marked to show more agency or control or destination reached. Finally, the non-GOAL locational arguments of MOTION.VIA verbs can be interpreted as GOALs with the Dative. These functions do not increase the semantic valence. In the next section, I will attempt to unite these different functions of the Dative.

3.4 Unified Functional Account

In the examples presented so far, two questions are important: 1) what are the syntactic effects of the Applicative and 2) what are its semantic effects? The syntactic question involves whether the Dative is promoting a peripheral argument to be a core argument, whether the additional argument increases syntactic valence, and whether the applied argument displays the properties of an Object. It was shown in 3.2 that applied Objects of the Dative display formal properties of Objects. They occur as bare NPs, can be indexed pronominally on the verb and be Middle Subjects. The semantic question concerns what semantic roles the Applicative promotes and any other semantic effects the Dative might produce. BENEFACTIVEs and GOALs are the semantic roles promoted by the Dative. Additionally, three non-valence-increasing functions of the Dative concerning the

expression of GOALs with movement verbs were presented. They are summarized as follows:

a) to mark an animate or mobile GOAL with extended verbs.

b) to mark a physical GOAL as a reached/affected destination or to render the AGENT's movement toward that GOAL more deliberate and volitional.

c) to mark a lexically specified argument of a MOTION.VIA verb as a GOAL.

The distinct issues of increased "agency", "control" and perhaps "affectedness" appear to motivate the use of the Dative Applicative in cases where the valence of the verb does not increase. To better explain these functions of the Dative, I will appeal to Hopper and Thompson's (1980) definition of transitivity as a gradient clausal phenomenon dependant on multiple factors. Their proposal is that "transitivity" is composed of multiple parameters all of which contribute to greater clausal transitivity. Among the parameters that Hopper and Thompson list, several correspond with the semantic features summarized above. They are the "affectedness of O (object)", an increase in the number of "participants", and an increase in the "agency" and "volitionality" of the AGENT.

The ambiguity in the next example suggests that the semantic situation described in (b) above is ambiguous with one where there is a valence increase:

(90) ɛ́-sʉ́j-ákɨ̀ ɛn-kɛráí ɛn-kɨ́tɛ́ŋ
3-follow-DAT FSG-child.NOM FSG-cow.ACC
i. 'The child will follow the cow into something (e.g. forest)'
ii 'The child will follow closely after the cow' (as in a formation)

In the first interpretation, (i) the Applicative promotes an unspecified GOAL, with a possible increase in verbal valence. The word *en-tîm* 'forest' is permissible here as a bare NP extra argument. In (ii) there is no increase in valence and the nature of the movement

is changed to one where the AGENT has greater "control" over the action of 'following' as indicated by "closely" and "as in a formation".

A traditional notion of transitivity where applicatives promote an extra argument would be difficult to apply to situations where the object remains unchanged in degree of "affectedness" and the AGENT seems to be exercising more "control", as in (90ii). Hopper & Thompson's (1980) definition of gradient transitivity accounts for the Dative functioning in multiple ways. It could be concluded that the Dative simply increases clausal transitivity and it does so by tinkering with agentivity, control and affectedness and the number of participants.

I would like to propose one additional generalization that corresponds with features of gradient transitivity. In Section 1.3, I described Croft's Idealized Cognitive Model of a verb. A verb's ICM will include a natural starting point and endpoint. In Figure 2, applicatives are shown to alter the endpoint of the ICM of a verb. Croft's model accounts for the similar semantics of the obligatory promotion of mobile animate GOALs and the optional promotion of inanimate GOALs. In both scenes, the Dative appears when the AGENT exercises more deliberate control over the movement directed toward the GOAL. If an animal or human GOAL is moving, or is out of sight, then movement toward such a GOAL would require more deliberate, controlled direction to reach the GOAL. The Dative can optionally code this kind of control with an unmoving GOAL as well, although this is not a result of the intractable nature of the GOAL itself. In contrast, if the animals are in sight, immobile and easily reached, just as a physical GOAL (e.g. river or mountain) is a static location, the Dative is not necessary. When the Dative is added to a verb root that

does not subcategorize for a GOAL, a new endpoint to the action is specified. The new endpoint in this case can be an extra semantic argument or it can replace the original locational argument of a MOTION.VIA verb. In each of these situations, it is the endpoint of the movement that is being specified. Therefore, the presence of the Dative marks a tighter semantic relation between an AGENT and whichever participant is specified as the endpoint. A tighter semantic relation entails the notions of agency, control and affectedness, all features of gradient transitivity.

CHAPTER 4

THE INSTRUMENTAL APPLICATIVE

The morpheme *-íé(k)* (or *-yíé(k)* after a vowel) is the Instrumental Applicative, that operates to license the core status of otherwise peripheral participants. This morpheme is associated with a broad range of semantic roles: INSTRUMENT (not to be confused with Instrumental, the morpheme), ASSOCIATIVE, LOCATIVE and AGENT or THEME MANIPULEE. In Section 4.1, I will illustrate the syntactic functions of the Instrumental and in 4.2 the core argument status of its applied participants. I will illustrate varied semantic functions in Section 4.3. Like the Dative, interpretations of the various semantic roles promoted by the Instrumental morpheme depend on verb root type and are highly sensitive to the animacy (or agentiveness) of the applied participant.

4.1 Syntactic Functions

The applied participant of the Instrumental is not a part of the argument frame of verb roots that it occurs with in Maa. If an argument expressing one of the semantic roles above is instantiated in a clause with a simple root verb form, it is coded as an oblique (91a). The participant *ɛn-kɨ́má* 'fire' is not part of the argument frame of the verb root alone. If the Instrumental Applicative occurs (91b) 'fire' is permitted as a bare NP. In (91c), 'fire' is disallowed as a bare NP without the Instrumental.

(91) a. ɛ-yɨ́ɛ́r en-kítok ɛn-dáà t-ɛn-kɨ́mà
3-cook FSG-woman.NOM FSG-food.ACC OBL-FSG-fire.NOM
'The woman will cook food with/on/in the fire'

b. ɛ-yíér-íé en-kítok ɛn-kɨmá ɛn-dáà
3-cook-INST FSG-woman.NOM FSG-fire.ACC FSG-food.ACC
'The woman will use the fire to cook food'

c. *ɛ-yíér en-kítok ɛn-kɨmá ɛn-dáà
3-cook FSG-woman.NOM FSG-fire.ACC FSG-food.ACC
'The woman will use the fire to cook food'

The following sets of examples illustrate that the Applicative derives transitives from intransitives, ditransitives from transitives and four-argument verbs from ditransitives.

4.1.1 Intransitive Roots

(92) a. k-á-ɨlɛ̀p
D-1SG-climb.up
'I will go up'

b. k-ɛ́-ɨlɛp-á(r)-ie
D-3-climb-AWAY-INST
'He will use it to go up'

(92) a. é-ló (o-reyíét)
3-go (MSG-river.ACC)
'He will go (to the river)'

b. á-lót-íé (o-reyíét)
1SG-go-INST (MSG-river.ACC)
'I will use it to go (to the river)'

c. á-lót-íé o-reyíét
1SG-go-INST MSG-river.ACC
'I will use the river to go somewhere'

(93) a. ɛ-tɔ́n-ɨ́
3SG-sit-PASS
'They sit' (non-specific people sit)

b. e-ton-íék-ì
3SG-sit-INST-PASS
'It will be used to sit' (Verbs Database)

(94) a. ɛ-shɔmɔ́ (o-reyíét)
3-go.PF (MSG-river.ACC)
'He went (to the river)'

b. ɛ-shɔm-íé ɛn-kɨ̀tɛ́ŋ (o-reyíét)
3-go-INST FSG-cow.ACC (MSG-river.ACC)
i.'He went by cow (to the river)'
ii.'He rode the cow to go (to the river)'

In (92a), the extended intransitive verb *lo(t)* 'go'optionally accepts the oblique physical GOAL 'river' as a bare NP. In (92b), the 'river' is still syntactically optional. In (92c) the 'river' is required. The verb *shɔmɔ* 'go' in (94a-b) operates in the same way. The GOAL is optional, but the Applicative licenses the THEME 'cow' as the means (i) or the manner (ii) for going.

4.1.2 Transitive Roots

Examples (95-96a) show a simple verb root with a peripheral participant coded in an oblique. Examples (95-96b) show the same participant as a bare NP in the clause and a derived verb with the Instrumental. (95-96c) show that the applied argument is ungrammatical when it occurs without the Applicative in a Double Object construction.

(95) a. ɛ-ár ɔl-tʉŋánì t-ɔl-alɛ́m
3-kill MSG-person.ACC OBL-MSG-sword.NOM
'He will kill the person with a sword'

b. ɛ-ár-íé ɔl-tʉŋánì ɔl-álɛ́m
3-kill-INST MSG-person MSG-sword.ACC
'He will kill the person with a sword'

c. *ɛ-ár ɔl-tʉŋánì ɔl-álɛ́m
3-beat MSG-person MSG-sword.ACC
'He will kill the person with the sword'

(96) a. á-ɨ̂ŋɔ̀r ɔl-ŋátúny t-ɔl-tɔ́rɔbìnì
1SG-look.at MSG-lion.ACC OBL-MSG-binoculars.NOM
'I will look at the lion with the binoculars'

b. á-ɬŋɔ́r-ìè ɔl-ŋátúny ɔl-tɔrɔbínì
1SG-look.at-INST MSG-lion.ACC MSG-binoculars.ACC
'I will use the binoculars to look at the lion'

c. *á-ɬŋɔ̀r ɔl-ŋátúny ɔl-tɔrɔbínì
1SG-look.at MSG-lion.ACC MSG-binoculars.ACC
'I will look at the lion with the binoculars'

4.1.3 Ditransitive Roots

The Instrumental Applicative licenses an extra argument on the ditransitive verb *pɬk* 'put', yielding a verb stem that takes four core arguments:

(97) a. á-pɬk ɛnk-árɛ́ e-motí t-en-kíkòmpè
1SG-put FSG-water.ACC FSG-pot.ACC OBL-FSG-cup.NOM
'I put water in the pot with the cup'

b. á-pɬk-ìè en-kikómpè ɛnk-árɛ́ e-motí
1SG-put-INST FSG-cup.ACC FSG-water.ACC FSG-pot.ACC
'I will use the cup to put water into the pot'

The verb *ɬshɔ* 'give' however does not prefer a fourth argument. In (98a), the INSTRUMENT is expressed in an oblique. If the Applicative occurs (98b), the clause is ungrammatical unless the GOAL is left out (98c). All four arguments, however, are acceptable if the INSTRUMENT is fronted (98d):

(98) a. á-ɬshɔ́ Konéné ɛnk-alámù t-ɛn-gárrî
1SG-give Konene FSG-pen.ACC OBL-FSG-car.NOM
'I will give Konene a pen using a car'

b. *á-ɬshɔr-íé Konéné ɛnkalámù ɛngárrì
1SG-give-INST Konene FSG-pen.ACC FSG-car.ACC
'I will use a car to give Konene a pen'

c. á-ɬshɔ́r-íé ɛnk-alámù ɛn-gárrì
1SG-give-INST FSG-pen.ACC FSG-car.ACC
'I will use the car to give away the pen'

d. ɛn-gárrì á-ɬshɔ́r-íé Konéné ɛnk-alámù
FSG-car.ACC 1SG-give-inst Konene FSG-pen.ACC
It's the car that I will use to give Konene the pen

4.2 Core Argument Status

In this section, I will present evidence for core argument status of the applied argument of the Instrumental. It will be shown that promoted arguments display the properties of Objects in Maa: verbal indexation and Middle Subject capacity.

4.2.1 Verbal Indexation

The *applied* argument of the Instrumental can be indexed on the verb regardless of semantic role if it is the 1st or 2nd person singular Object.

(99) a. áà-ìd-ìè ɔl-pááshíé.
3>1SG-jump-INST MSG-fence.ACC
i. 'He will make me jump over the fence'
ii. 'He will use me to jump over the fence'

b. áa-úr-ìè ɔl-páyìàn il-paék
3>1SG-bend-INST MSG-man.NOM MPL-corn.ACC
'The man will make me bend the corn'

The *original* THEME argument does not lose this object property. It can be ambiguously indicated on the verb, as in (100) with the applied MANIPULEE argument. The argument indexed on the verb is the MANIPULEE 'me' in (i) and the THEME of the verb root 'me' in (ii).

(100) áa-ɨŋɔr-íé ɔl-ŋátúny
3>1SG-look.at-INST MSG-lion.ACC
i. 'He will show the lion to me'
ii. 'He will make the lion see me'

4.2.2 Middle Subjects

In a situation where an argument is applied in the Middle construction, the combined Instrumental *-íé(k)* and Middle *-a* suffixes yield the form *-are (-ore)*. Applied arguments can occur in Middles as core arguments and either it or a lexically specified non-AGENT

argument becomes the Middle Subject. In (101a) the *applied* INSTRUMENT 'stick' is in the Nominative, making it the Subject while the 'cow' remains an Accusative Object. In (101b), the *original* THEME argument of the transitive root 'follow' is the 'cow' which appears in the Nominative as Middle Subject and the applied argument 'stick' is an Object. This shows that the original (non-AGENT) semantic argument of the verb root does not lose its core status. The same pattern holds in (102a-b) with 'knife' as well:

(101) a. ɛ́-sʉ́j-árɛ́ e-ŋúdí ɛn-kɨ̂tɛ́ŋ
3-follow-INST.MID FSG-stick.NOM FSG-cow.ACC
'The stick is used to follow the cow'

b. ɛ́-sʉ́j-árɛ́ ɛn-kɨ̂tɛ̀ŋ e-ŋúdì
3-follow-INST.MID FSG-cow.NOM FSG-stick.ACC
'The cow is followed with the stick'

(102) a. e-duŋ-óré ɨn-kɨ̂rɨ́ ɔl-alɛ́m
3-cut-INST.MID FPl-meat.ACC MSG-knife.NOM
'The knife is used to cut the meat'

b. e-duŋ-óré ɨn-kɨ̂rɨ́ ɔl-álɛ́m
3-cut-INST.MID FPL-meat.NOM MSg-knife.ACC
'The meat is cut with the knife'

Additional examples of applied arguments as Middle Subjects follow (103a-b). The *applied* MANIPULEE 'women' here is the Middle Subject in a reciprocal interpretation:

(103) a. ɛ-ɨŋɔ́r-áré in-kítùààk in-kíshú
3-look.at-INST.MID FPL-women.NOM FPL-cows.ACC
'The women show each other cows'

b. ɛ-iŋɔ́l-árɛ́ ol-kɨ̂pʉ̂rɛ̀
3-stir-INST.MID MSG-whisk.NOM
'The whisk is used to stir' (Verbs Database)

The INSTRUMENT 'whisk' is the applied argument of the verb 'stir' in (b). It occurs in the Nominative and the original THEME argument of this verb is unspecified.

Following are additional examples where the *original* THEME of the verb root is the Middle Subject:

(104) a. ɛ-yɨɛ́r-árɛ́ ɛn-dáâ ɛŋ-kɨ́má
3-cook-INST.MID FSG-food.NOM FSG-fire.ACC
'The food is cooked in the fire'

b. ɛ-ɨnyàŋ-árɛ̀ ɨl-payianí ɛn-kɨ́tɛŋ
3-buy-INST.MID MPL-men.ACC FSG-cow.NOM
'The men buy a cow from/with eachother'

c. e-isʉ́j-arɛ in-kítùààk ɛnk-árɛ́
3-wash-INST.MID FPL-women.NOM FSG-water.ACC
'The women wash with the same water together'

In (104a), the applied INSTRUMENT argument is 'fire' and the Middle Subject is the THEME 'food'. In (104b) the applied argument is the SOURCE or ASSOCIATIVE 'men', but the Nominative argument is the THEME 'cow'. In (104c) the applied argument is 'water' but the Subject of the Middle is 'women' here in a reciprocal interpretation.

This and the previous section illustrated the syntactic properties of applied arguments of the Instrumental morpheme. I will now present the range of semantic roles represented by the Instrumental.

4.3 Semantic Functions

4.3.1 Instrument

An INSTRUMENT is defined here as an inanimate tool used by an AGENT to assist in the action carried out by the predicate. Many of the examples presented so far included INSTRUMENTs (e.g. examples 95-96). Below are several additional examples of the applied argument as a semantic INSTRUMENT:

(105) a. á-rríny n-taré t-en-ŋúdî bɔ́ɔ́
1SG-return FPL-sheep.ACC OBL-FSG-stick.NOM corral.ACC
'I will return these sheep to the corral with a stick'

b. á-rríny-íé en-ŋúdì n-taré bɔ́ɔ́
1SG-return-INST FSG-stick.ACC FSG-sheep.ACC corral.ACC
'I will use a stick to return the sheep to the corral'

(106) a. ɛ-ɨ̂d ɔl-pááshíé tɛ-o-soít
3-jump MSG-fence.ACC OBL-MSG-rock.NOM
'He will jump (over) the fence with the rock'

b. ɛ-ɨ̂d-ìè o-sóít ɔl-pááshíé
3-jump-INST MSG-rock.ACC MSG-fence.ACC
'He will use a rock to jump (over) the fence'

(107) a. á-ɨ̂ŋàt tɛ-ɛn-gárrî
1SG-flee OBL-FSG-car.NOM
'I will flee with the car'

b. á-ɨ̂ŋát-ìè ɛnâ gárrì
1SG-flee-INST this.F.ACC car.ACC
'I will flee with this car'

4.3.2 Locative

The Instrumental morpheme also functions to promote a participant that specifies a location where an event occurs.

(108) a. á-bík tɛ̀ Náírɔbì
1SG-stay OBL Nairobi.NOM
'I will stay in Nairobi'

b. á-bík-íé Nairɔ́bì
1SG-stay-INST Nairobi
'I will stay in Nairobi'

(109) a. ɛ-t(a)-ááp-á tɛ̀ Náírɔbì
3-PF-get.pregnant.before.circumcision-PF OBL Nairobi.NOM
'She got pregnant before circumcision in Nairobi'

b. ɛ-t(a)-ááp-íé Nairɔ́bì
3-PF.get.pregnant.before.circumcision-INST.PF Nairobi.ACC
'She got pregnant before circumcision in Nairobi'

LOCATIVE interpretations of the applied argument are sometimes ambiguous with INSTRUMENT ones, as in the following examples:

(110) a. ɛ́-ɨsʉ̀j en-kítok in-kilání t-o-réyiet
3-wash FSG-woman.NOM FPL-clothes.ACC OBL-MSG-river.NOM
'The woman will wash the clothes in the river'

b. ɛ́-ɨsʉ́j-ìè en-kítok in-kilání o-reyiét
3-wash-INST FSG-woman.NOM FPL-clothes.ACC MSG-river.ACC
'i. The woman is washing the clothes in the river'
' ii.The woman is using the river to wash clothes'

The 'river' is plausibly interpreted as a tool with which or a place where an action is carried out.

4.3.3 Associative

With the ASSOCIATIVE, an event is carried out in the company of another animate participant where both participants engage in the action of the predicate. The following examples illustrate an ASSOCIATIVE argument. In (111a) the action of speaking can be done by one person, but with the ASSOCIATIVE in (111b) 'talk to/with', the action is shared such as in a conversation where both participants take turns in a dialogue. In (112b), the applied argument 'me' also can only be understood as participating in the event. It would be unlikely that the 1st person 'me' would be interpreted as a toy with which the AGENT 'he' plays by himself. In (113b) the 'man' can be interpreted as an ASSOCIATIVE, or arguably a REASON for the 'boy' being in the house. With either meaning, the event is carried out by both participants. The 'boy's' existence in the 'house' is entirely dependant on the 'man's' existence in the house.

(111) a. e-ɨrɔ́
3-speak
'He will speak'

b. e-ɨrɔ́(r)-íé iyióók
3-talk-INST we.ACC
'She talks to/with us'

(112) a. ɛ-dála
3-play.MID
'He will play'
b. áa-ta-dál-àrè
3>1SG-PF-play-INST.MID
'He played with me'

(113) a. ɛ-tíi ɔl-páyìàn ɛnk-ají
3-be.at MSG-man.NOM FSG-house.ACC
'The man is in the house'
b. ɛ-tíi-ìè ɔl-ayíóní ɔl-payían ɛnk-ají
3-be.at-INST MSG-boy.NOM MSG-man.ACC FSG-house.ACC
'The boy is in the house with/because of the man'
(The boy depends on the man for food or accomodation)

4.3.4 Causative

The Instrumental morpheme has a final function as a morphological Causative. The argument structure of the derived verb consists of a CAUSER, a MANIPULEE (AGENT or THEME of the base form of the verb) and a THEME (the THEME of the base form of the verb). Causatives, like applicatives, are valence increasing constructions. Causatives (see Figure 3 in Section 1.3) are generally different from applicatives in that the additional argument is an AGENT which assumes the CAUSER role. As we will see in the following discussion, in the case of Maa, the additional argument is an AGENT or THEME *MANIPULEE*, an interpretation that is consonant with applicative functions of the Instrumental morpheme. First, I will illustrate the examples that yield causative readings.

Maasai has two verbal classes, Class I and Class II (Tucker and Mpaayei, 1955, pg. 52). If the verbal stem begins with the prefix *i-* (*ɨ-)*, it is (almost always) a Class II verb, such as the intransitive *ɨrrábal* 'lie on stomach'. A Class I transitive verb such as *yɨɛr* 'cook' has no historical *i-* prefix attached to the root. Class I and Class II are also

distinguished according to the Causative morphemes that they accept. Class I verbs take the prefix *ɨt(V)-* (114a), while Class II verbs take the same form as the Instrumental Applicative *-íé(k)* or *-ɣíé(k)* as shown in (114b):

(114) a. k-áa-**ɨta**-ɣiɛr-á
D-3>1SG-CAUS-cook-PF
'He made me cook (e.g something)'
b. ɛ-ɨrrábal-**ìè**
3-lie.on.stomache-INST
'He made him lie on his stomache'

In what follows, only Class II verbs are relevant.

4.3.4.1 Theme Manipulee

The Instrumental Applicative in the following set of examples licenses a semantic THEME MANIPULEE as an Object of an otherwise intransitive Class II verb root. The intransitive roots below become transitive stems when suffixed with the Instrumental.

(115) a. á-iwùàŋ
1SG-move
'I will move'
b. á-íwúáŋ-ìè em-búkù
1SG-remove-INST FSG-book.ACC
'I will move the book'

(116) a. ɛ́-írràg
3-lie.down
'He will lie down' (Verbs Database)
b. ɛ-gɨ̂rà ɔl-páyìàn a-ɨrrag-íé in-ŋúsìdìn
3-prog MSG-man.NOM INF.SG-lie.down-INST FPL-sticks.ACC
ɛnyɛ́na pɔɔkɨ
her.ACC all
'The man is laying down all his sticks' (Maa Dictionary)

(117) a. k-á-ɨ̂dʉ̀rr tɛ̀ Náírɔbɨ
D-1Sg-move OBL Nairobi.NOM
'I will move from Nairobi

b. k-á-ɨ̂dʉ́rr-ìè ɨn-kíshú t-ol-doyníó
D-1SG-move-INST FPL-cow OBL-MSG-mountain.NOM
'I will move the cows away from the mountain'

(118) a. k-ɛ́-ɨ̂rówùà kʉ́ná lɛ̂
D-3-be.hot these.FPL.NOM milk.NOM
'This milk is hot' (Maa Dictionary)

b. ɛ-gɨ̂rà ɛn-tásât a-ɨrowua-íé kʉlɛ́
3-PROG FSG-woman.NOM INF.SG-warm-INST milks.ACC
'The old woman is warming up the milk' (Maa Dictionary)

(119) a. á-ɨ̂bál-à
1SG-be.conspicuous-PF
'I became conspicuous' (Verbs Database)

b. ɛ-ɨbál-ìè
3-be.conspicuous-INST
'He will reveal it' (Verbs Database)

(120) a. ím-(i)pàŋ aulúó ɛnk-ají
2SG-exit outside.ACC FSG-house.ACC
'You go outside the house'

b. á-ípáŋ-ìè ɔl-órika tɛ-ɛnk-ájì
1SG-exit-INST MSG-chair.ACC OBL-FSG-house.NOM
'I will take the chair out of the house'

The Instrumental can introduce an argument for transitives verb roots as well, making them ditransitive stems:

(121) a. á-ɨ̂ŋɔ̀r ɔl-ŋátúny t-ɔl-tɔ́rɔbìnì
1SG-look.at MSG-lion.ACC OBL-MSG-binoculars.NOM
'I will look at the lion with the binoculars'

b. á-ɨ̂ŋɔ́r-ìè ɔl-ŋátúny ɔl-payían o-adɔ́
1SG-look.at-INST MSG-lion.acc MSG-man.ACC REL.M-be.tall
'I will show the tall man the lion'

(122) a. é-íŋàt ɨŋ-kɛjɛ́k ɛŋ-kɔ́p
3-CL-move.away FPL-leg.NOM FSG-ground.ACC
'The legs will move away from the ground'

b. á-íŋát-ìè ɨŋ-kɛjɛ́k ɛŋ-kɔ́p
1SG-lift-INST FPL-leg.ACC FSG-ground.ACC
'I will lift my legs from the ground'

4.3.4.2 Agent Manipulee

Following are further examples of Class II verbs that require the Instrumental morpheme for the causative meaning. The MANIPULEE corresponds to an AGENT of the base form of the verb, but it is expressed as an Object:

(123) a. k-á-ílɛ̀p
D-1SG-climb
'I will climb'

b. á-ɨ́lép-ìè
1SG-climb-INST
'I will make it climb'

(124) a. ɛ-ɨ́d ɔl-pááshíé t-o-soít
3-jump MSG-fence.ACC OBL-MSG-rock.NOM
'He will jump (over) the fence with the rock'

b. ɛ-ɨ́d-íé ɔl-páyìàn ɛnk-áyónì ɛnk-árɛ́
3-jump-PF.INST MSG-man.NOM FSG-boy.ACC FSG-water.ACC
'The man has made the boy jump (over) the water'

(125) a. á-ɨ́nyàŋ-ù ɛn-kɨ́tɛ́ŋ
1Sg-buy-VENT FSG-cow.ACC
'I will buy a cow'

b. á-ɨ́nyaŋ-un-íé ɛn-kɨ́tɛ́ŋ
1SG-buy-VENT-INST FSG-cow.ACC
'I will make him buy a cow'

(126) a. k-á-ígèr ɛm-pálai
D-1SG-write FSG-letter.ACC
'I will write a letter'

b. áà-ìgèr-ìè
3>1SG-write-INST
'He will make me write (e.g. something)'

I have illustrated five semantic functions of the Instrumental morpheme; it promotes an INSTRUMENT, a LOCATIVE, an ASSOCIATIVE, and a THEME or AGENT MANIPULEE argument. It could be suggested that this is simply a polysemous morpheme, or a single

semantic function could be proposed that is subject to distinct pragmatic interpretations. In the next section, I will argue that the latter is the better interpretation.

4.4 Unified Functional Account

Because the Causative morpheme *-ie(k)* looks identical to the Instrumental morpheme *-ie(k)*, but occurs only with Class II verbs, it may seem that Causatives are simply expressed differently according to whether a verb falls into Class I or Class II. This would make the identical forms of the Causative on Class II and the Instrumental on Class I and Class II verbs accidental. However, this morpheme can be interpreted as a Causative even with Class I stems:

(127) á-úr-íé ɨn-kɛ́rà il-paék
1SG-make.fall-INST FPL-children.ACC MPL-corn.ACC
'I will make the children bend the corn'

By itself, the verb root *ur* 'make.fall' takes an AGENT and a THEME. In (127), an agentive CAUSER makes an agentive MANIPULEE carry out the action on the THEME of the verb.

Additionally, an applicative interpretation of *-ie(k)* is often ambiguous with a causative one on Class II verbs. In the following example, a second interpretation that the speaker agreed was possible is included in (ii):

(128) ɛ-ɨd-íé ɔl-páyìàn ɛnk-áyónì ɛnk-árɛ́
3-jump-PF.INST MSG-man.NOM FSG-boy.ACC FSG-water.ACC
i. 'The man has used the boy the get across the water'
ii. 'The man has made the boy jump (over) the water'

The promoted argument in (128) is (i) an INSTRUMENT and (ii) an AGENT MANIPULEE. This ambiguity suggests that there is overlap between the causative and applicative functions of the Instrumental morpheme regardless of verb class.

While both causatives and applicatives add arguments, how might these functions be linked when they operate at opposite ends of the causal event sequence? Compare Figure 2 in Section 1.3, which shows that an applicative construction modifies the endpoint of the ICM of a verb, with Figure 3, which shows that a causative construction modifies the starting point of the ICM of a verb.

In a derived causative, languages have to figure out how to code the MANIPULEE which would be the subject of the simple non-causative (Comrie, 1985). In Maa, the MANIPULEE is always expressed as an Object along with the THEME of the base form of the verb in a Double Object construction. Both the MANIPULEE of a Causative construction and the promoted argument of an Applicative construction are coded as Objects. In a Maa Causative *–ie(k)* with Class II verbs, the endpoint, not the starting point, is adjusted, which is consistent with the applicative function. While this deviates from Croft's (1994) assertion that in a causative, it is the starting point that is adjusted, Figure 3 still works as a model for the causative interpretations of the Instrumental when there is an AGENT MANIPULEE because there are two transmissions of force. Reference to Figures 1 and 2 in addition will help explain that the semantics of the verb combined with the agentiveness or patientiveness of the additional Object are the factors that underlie an applicative or causative interpretation of the Instrumental morpheme.

In what I will call a **Type A** causative situation (see the discussion in Section 1.3 corresponding with the schema in Figure 3), a CAUSER AGENT exerts minimal control over the MANIPULEE's event, whether by some physical or verbal force, to incite a MANIPULEE to carry out the act of the verb root. The MANIPULEE is allowed a degree of

control in performing the event, and therefore some agency. I have simplified the causal event in Figure 3 here showing just the transfer of force segments:

Type A AGENT ⟶ AGENT MANIPULEE ⟶ THEME

In this case there are two distinct "verbal segments" (Croft, 1994) or aspects of a verb's self-contained event: the CAUSER's manipulation of an agentive MANIPULEE. The latter succeeds in carrying out his own transmission of force (e.g. CAUSER tells > MANIPULEE walks), as is shown by the two arrows above.

Shibatani and Pardeshi (1997) propose a second causative subtype called "sociative" causation, which I will call **Type B**. This type explains the typological pattern where causatives and applicatives are expressed by the same morpheme. This pattern has been demonstrated for Indonesian (Cole, 2004), Olutec (Zavala, 1997) Kinyarwanda (Kimenyi, 1976), Asheninka (Payne, 2002) and others.

In contrast to Type A, in Type B the CAUSER's degree of control over the outcome of the MANIPULEE's event is complete, the MANIPULEE is affected like a THEME role of a change-of-state transitive verb (e.g. CAUSER kills > MANIPULEE dies), and yet takes part in the main action of the verb. In this case, there is only one main causal event segment because the CAUSER is overseeing the entire event:

> When the causee [MANIPULEE-sl] is patientive, the execution of the caused event is wholly dependent on the causer's action. In most cases this dependence entails a spatiotemporal overlap of the causer's activity and the caused event, to the extent that the two relevant events are not clearly distinguishable. (Shibatani & Pardeshi, 1997, pg. 89)

The Type B "sociative" or "assistive" (Comrie, 1985) meaning results when the MANIPULEE is more patientive than agentive (i.e. Type A). This requires that the CAUSER

oversee the entire event by engaging in the activity with the MANIPULEE. I have modified Figure 2 here with a dotted arrow causal link between INSTRUMENT and ASSOCIATIVE acting on THEME. This dotted arrow is a mini-causal link in a sense because these semantic roles are both directly acted on by the AGENT and who therefore indirectly acts on a THEME, which may or may not be instantiated.

Type B AGENT → { INSTRUMENT / ASSOCIATIVE } ⇢ THEME

The "sociative" is therefore an intermediate category between a two-event causative such as the kind described in Figure 3 (Type A) and a typical singular transitive event such as the kind described in Figure 1. I will refer to the type of event in Figure 1 as **Type C** causation which is restated here:

Type C AGENT → THEME

In English, the difference between Type B "sociative" causation and Type C singular event causation might be illustrated by the contrasting examples, *Let's walk with Mary (*Let's walk Mary)*, where Mary is involved in the singular event with the AGENT and is expressed as an ASSOCIATIVE oblique; vs. *Let's walk the dog (*Let's walk with the dog),* where the dog is a less agentive THEME and is expressed as an object.

I will now offer examples from Maa that illustrate these interpretations. The following example shows that when the promoted argument is not overtly instantiated, an ambiguous interpretation between a causative and applicative can result. The MANIPULEE expressed as an Object could be interpreted as an agentive animate (129i), yielding a Type A causative interpretation; or as patientive inanimate, yielding a Type B sociative applicative interpretation (ii):

(129) á-ɬnyàŋ-un-ié ɛn-kɬtɛ́ŋ
1SG-buy-VENT-INST FSG-cow.ACC
i. ‘I will make him/her buy a cow’
ii. ‘I will use something (e.g. money) to buy a cow’

With an animate participant such as ‘children’, a Type A causative reading is natural in the following:

(130) á-úr-íé iŋ-kɛ́rà il-paék
1SG-make.fall-INST FPL-children.ACC MPL-corn.ACC
‘I will make the children bend the corn’

The causative meaning is ‘He made someone do something’ (by manipulation), where the MANIPULEE is an AGENT in its own event.

With an inanimate participant like ‘machete’, an applicative reading is natural, and because of its meaning, is understood as an INSTRUMENT:

(131) e-ur-íé ɔl-pánkà ɔl-catá
3-make.fall-INST MSG-machete.ACC MSG-tree.ACC
‘He will use the machete to fell the tree’

The ‘machete’ has no volition, and must be physically manipulated by the AGENT to carry out the action, because it could never do that on its own. Unlike a true THEME, it is not entirely affected, but participates in the action of ‘felling’; which in turn affects a change on the THEME ‘tree’. The INSTRUMENT applicative meaning is ‘He used it to do something’ (by total physical manipulation), where the INSTRUMENT participates in the main event with the AGENT, and so is a Type B sociative, but has no control of its own.

An ASSOCIATIVE reading (132) occurs with an animate participant and a verb with a plausible social setting, such as the verb ‘play’. Here, it is easy to see the possible

causative sense of the Instrumental morpheme in the paraphrase, ‘He played with me’ (by making me play with him).

(132) áa-ta-dál(a)-àrè
3>1Sg-PF-play.MID-INST
'He played with me'

The degree of control over the ASSOCIATIVE is looser than with an Instrument, but the action is still carried out with the CAUSER’s assistance. The ASSOCIATIVE meaning is ‘He made someone do something’ (by doing it with him) and is therefore sociative.

The Type C causative with a THEME MANIPULEE means ‘He did something to someone/something’ (by total physical manipulation). Interpretation (133ii) illustrates how this reading is little different from a single transitive event.

(133) á-ɨ̂lép-ìè
1SG-climb-INST
i. 'I will make it climb’
ii. ‘I will raise it up’

In sum, the various interpretations of the Instrumental morpheme, therefore, are reliant on verb type and the semantics of the promoted participant. The AGENT MANIPULEE executes an independent event and there are two causal links (Type A). INSTRUMENT and ASSOCIATIVE applicative readings require the AGENT to be in total or partial charge of the event in a sociative situation (Type B); the participants in some sense co-participate in the action carried out by the AGENT. The THEME MANIPULEE, in contrast, does not actively participate in the main event and therefore has no independent verbal segment. The semantics of these causatives are like simple transitive events (Type C).

CHAPTER 5

THE DIRECTIONAL APPLICATIVES

This section describes the 'Away' and 'Ventive' Directional morphemes with a limited Applicative function. The suffix *–ɨ́(n)* has been called the "Motion Towards" form (Tucker & Mpaayei, 1955) or the "Venitive" (Heine & Claudi, 1986) morpheme because its primary function appears to be adding the notion 'towards' or 'movement toward' the point of reference to the meaning of the verb. I will refer to it as the Ventive (VENT). Tucker & Mpaayei also identified the "Motion Away" Directional *–áà (–óò)* which denotes motion directed away from the speaker. Since their Applicative functions are identical, I will concentrate on the Ventive with only some reference to the Away morpheme. In their principal use, the Directionals do not alter the argument frame of the verb. However, when a Directional is used with a specific set of verb roots whose argument frame includes a SOURCE participant, the Ventive functions to permit a semantic THEME as Object, in place of the SOURCE as Object.

5.1 Directional Functions

The main function of the Ventive Directional renders the verb as an event directed toward the speaker or other point of reference. The following examples (134-136a) illustrate verbs with movement without reference to where the speaker may be situated in

the event. With the addition of the Ventive (134-136b), the speaker is the default deictic center towards which the action terminates.

(134) a. é-ló ol-dóynío
3-go MSG-mountain.ACC
'He will go to the mountain'

b. e-lot-ú ol-dóynió
3-go-VENT MSG-mountain.ACC
'He is coming to the mountain'

(135) a. ɛ-kúɛ́t ɛn-tánkìlè
3-run FSG-woman.NOM
'The woman will run'

b. ɛ-kúɛ́t-ʉ́ ɛn-tánkìlè
3-run-VENT FSG-woman.NOM
'The woman will run this way'

(136) a. ɛ-jɨ̂ŋ ɛnk-ájì
3-enter FSG-house.ACC
'He will enter the house' (doesn't matter where I am)

b. ɛ-jɨ̂ŋ-ʉ́ ɛnk-ájì
3-enter-VENT FSG-house.ACC
'He will enter in the house' (I'm already in the house)

The Away *-áà* morpheme directs the motion away from the point of reference. The Away morpheme may also have a distributive aspectual meaning (137b). Compare the contrasting pairs of Ventive and Away uses:

(137) a.. peê a-sʉ̀j-ʉ́
so.that 1SG-follow-VENT
'...so that I will follow him (in this direction)'

b. á-sʉ̀j-aá
1SG-follow-AWAY
'I will follow from one place to another all over the place'

(138) a. a-rɛ́ʉ́-ʉ́ in-kíshú sokónì
1SG-drive-VENT FPL-cow.ACC market.ACC
'I will bring cows to the market'

b. á-rɛ́ʉ-áà in-kíshu en-t̂im
1SG-drive-AWAY FPL-cow.ACC FSG-forest.ACC
'I will drive the cows away to the forest'

The addition of the Ventive to verbs that do not already indicate motion can add the element of motion to the meaning of the verb. For example, the meaning of the verb *ɨŋɔr* 'look at/after' does not include any physical motion. With the Ventive suffix, the meaning can be changed to 'look for' or 'search' in an event which implies simultaneous movement from one location to another while looking. Observe the following examples:

(139) a. k-á-ɨ̂ŋɔ̀r n-kíshú.
D-1SG-look.at FPl-cows.ACC
'I am looking at/after cows'
b. á-ɨ̂ŋɔ́r-ʉ̀ ɨn-taré
1SG-look.at-VENT FPl-sheep.ACC
'I look for sheep'

(140) a. ɨ̂-sʉ́j-ʉ
2-wash-VENT
'You will wash it while coming'
b. ɛ-inɔ́s-ʉ̀
3-eat-VENT
'He will eat it coming'

The Ventive also appears to function in a partitive sense. It removes a portion of the affected participant by adding the notion with the expression 'from', 'off' or 'of' in English (e.g. 'He cut off a branch).

(141) a. áa-duŋ ɔl-murraní ɔl-caní
3>1SG-cut MSG-warrior MSG-tree.ACC
'My warrior will cut the tree'
b. e-duŋ-ú ɛn-kɛráí ɛ-ŋúdì t-ɔl-cáta
3-cut-VENT FSG-child.NOM FSG-stick.ACC OBL-MSG-tree.NOM
'The child will cut a stick from the tree' (Verbs Database)

(142) a. á-iŋuár en-kiriŋó
1SG-cut FSG-meat.ACC
'I will cut the meat'

b. á-iŋuár-ʉ̀ en-kiriŋó
1SG-cut-VENT FSG-meat.ACC
'I will slice off some meat' (I will have the meat afterwards)

(143) a. ɛ-gɨ̂rà enk-áyíóní a-bɛ́l o-sóít
3-PROG FSG-boy.NOM INF.SG-break MSG-stone.ACC
'The boy is breaking a stone' (Maa Dictionary)

b. k-áa-bɛl-ʉ́ ol-alay tɛ-ŋúdì
D-3>1SG-break-VENT MSG-tooth.ACC OBL-stick.NOM
'He will knock my teeth out with a stick' (Verbs Database)

Finally, the Ventive in the next example appears to reverse the otherwise understood directional movement of the THEME of the verb 'put', so that it is understood as 'pour out'.

(144) a. ɛ́-tɨ̂-pɨ̂k-ʉ́-a en-kítòk ɛn-kárɛ́
3-PF-put-VENT-PF FSG-woman.NOM FSG-water.ACC
t-ɛm-bɨ̂lbɨ̂l
OBL-FSG-cup.NOM
'The woman poured water out of the cup' (Brainard, 1991)

b. *ɛ́-tɨ̂-pɨ̂k-ʉ́-a en-kítòk ɛn-kárɛ́ ɛm-bɨ̂lbɨ̂l
3-PF-put-VENT-PF FSG-woman.NOM FSG-water.ACC FSG-cup.ACC

5.2 Applicative Function

The Directionals, in their applicative function, are limited to a certain set of transitive verbs in Maasai that subcategorize for a semantic SOURCE participant. Verbs that fall into this class include *purr* 'rob'; *ɨnyaŋ* 'buy'; *dot* 'pull'; *or* 'sweep'; and *barn* 'shave'.

Examples (145a-c) illustrate the verb *purr* 'rob'. In (145a) the 'shop' is a bare NP that specifies what entity was robbed, which is the SOURCE, not the item stolen. In (145b), when the item stolen is instantiated, the Ventive appears on the verb and the SOURCE

participant can only be coded as an oblique. (145c) illustrates that the SOURCE 'store' cannot be coded in an oblique without the Ventive and (145d) shows that the THEME 'pen' cannot occur as a bare NP without the Ventive.

(145) a. á-púrr ol-dúkà
1SG-steal.from MSG-shop.ACC
'I will rob the shop'

b. á-púrr-ú ɛn-kalámù t-ɔl-dúkâ
1SG-steal.from-VENT FSG-pen.ACC OBL-MSG-shop.NOM
'I will steal a pen from the shop'

c. *á-púrr t-ɔl-dúkâ

d. *á-púrr ɛn-kalámù

The next example shows the same verb with the Away morpheme. In (146a), it is the SOURCE 'his father' instantiated as Object, while in (146b), with the Away morpheme, it is the THEME 'eggs'.

(146) a. n-é-pùrr ɔl-áyíóní mɛ́nyɛ́
D-3SG-steal.from MSG-boy.ACC father.ACC
'The boy stole from his father'

b. n-é -púrr-óò ɔl-áyíóní il-mósòrr
D-3SG-steal.from MSG-boy.ACC MSG-eggs
'The boy stole eggs (and went away with them)'

The following contrasting pairs illustrate other verbs that follow the same pattern. The (a) example in each case illustrates the core SOURCE participant while the (b) example illustrates the THEME participant promoted by the Ventive Applicative:

(147) a. k-á-ɨnyáŋ-à Móses
D-1SG-buy-PF Moses.ACC
'I have bought something from Moses'

b. ɨ-nyáŋ-ʉ̀ ɛn-kɨ́tɛ́ŋ
2SG-buy-VENT FSG-cow.ACC
'You are buying a cow'

(148) a. á-dót ɛm-párɛ̂t
1SG-pull FSG-field.ACC
'I will weed the field'

b. á-dót-ú in-kɨ́jɨ̂t t-ɛm-parɛ́t
1SG-pull.out-VENT FPl-grass.ACC OBL-FSG-field.NOM
'I will pull out the grass in/from the field'

(149) a. ɛ-bárn ɛn-kɛ́rái
3-shave FSG-child.ACC
'He will shave the child'

b. ɛ-bárn-ɨ́ ɨl-pápɨ̂t
3-shave-VENT FPl-hair.ACC
'He will shave the hair'

In (150), below, the Away suffix is behaving in the same way as the Ventive. Its presence on the verb introduces a THEME participant which in turn demotes the SOURCE.

(150) a. á-ór-ítò ɛn-kɔ̀p
1SG-sweep-PROG FSG-ground.ACC
'I am sweeping from the floor'

b. á-ór-óò in-kulukwók t(ɛ)-ɛ̀ŋ-kɔ̂p
1SG-sweep-AWAY FPl-dirt.ACC OBL-FSG-ground.NOM
'I will sweep dirt from the floor'

Some stems that belong to this group either do not have the underived variant or the meaning of the underived form seems unrelated. For a large group of verbs, which include *anyɨ́* 'wait for'; *íú* 'give birth'; *ɨtúku* 'clean'; *ɨtɨ́* 'remove one by one'; *ibirú* 'miscarry'; *buku* 'pour from' the Ventive or some other derivational morpheme is synchronically obligatory. Evidence that these verbs are suffixed by the Ventive comes from the morphology. For example, with the Antipassive, *-isho*, the *-ɨ́* is stripped off.

(151) a. ɛ-íú ɛn-tánkɨ̀lɛ̀ ɛn-kɛ́rái
3-give.birth FSG-woman.NOM FSG-child.ACC
'The woman gives birth to a child'

b. e-í-sho
3-give.birth-APASS
'She does giving birth'

If the Instrumental suffix is added to the Ventive, as will be seen in the next section, the allomorph variant *-ʉ́n* appears rather than the *-ʉ́* alone.

5.3 Core Argument Status

It was demonstrated in the previous sections that with the Dative and Instrumental, both applied and lexically specified arguments exhibit all properties of objecthood. With the Directional Applicative, however, the presence of the Directional morpheme permits a semantic THEME as a bare NP in Accusative case and the lexically specified argument of the verb is not permitted unless in an oblique *tɛ̀* phrase. It was shown in Section 2.4 that arguments marked with *tɛ̀* are not core. They cannot be indicated pronominally on the verb nor can they be Subjects of Middle constructions. Therefore, in the following two sections, the properties of Objects will be illustrated only for the bare NP argument.

5.3.1 Verbal Indexation

The THEME argument promoted by the Ventive behaves like a core argument in that the verb agrees with it if 1st or 2nd singular. In the (a) examples below, the SOURCE is marked on the verb and in the (b) examples, with the Ventive, the THEME argument is marked:

(152) a. áa-purr
3>1SG-rob
'He will rob me'
b. áa-purr-ú
3>1SG-rob-VENT
'He will steal me' (as in a kidnapping)

(153) a. áa-ór
3>1SG-sweep
'He will sweep me' (in the event that I am covered in dirt)
b. áa-òr-òò
3>1SG-sweep-AWAY
'He will sweep me up' (if I am on the floor like dirt)

(154) a. áa-ɨnyáŋ
3>1SG-buy
'He will buy from me' (e.g. things that I'm selling)
b. áà-ɨnyàŋ-ʉ
3>1SG-buy-VENT
'He will buy me' (as in slavery)

5.3.2 Middle Subjects

The SOURCE argument of the verb roots can be Subjects of the Middle construction, as seen in the (a) examples below. In each (b) example, the Directional is required to have a THEME as Subject in the Middle construction. The 'woman' is the SOURCE from whom something was stolen in (155a), but the 'woman' is the stolen entity or THEME in (155b). The *-ʉ́n* and Middle (normally *–a*) is lexicalized as *-úno.*

(155) a. e-púrr-ò en-tánkìlè
3-steal.from-MID FSG-woman.NOM
'The woman has been robbed'
b. e-púrr-ún-o en-tánkìlè
3-steal.from-VENT-MID FSG-woman.NOM
'The woman has been stolen'

The Motion Away suffix combined with the Middle yields the combined irregular suffix *-óro*.

(156) a. é-ór-o ɛn-kɔ̂p
3-sweep-MID FSG-ground.NOM
'The floor is swept'

b. é-ór-ór-o in-kúlùkùòk
3-sweep-AWAY-MID FPL-dirt.NOM
'The dirt is swept'

The Ventive suffix *-ú(n)* combined with a Middle *-a* yields the irregular form *-únìè* for some verbs.

c. e-ór-ún-ìè in-kúlùkùok
3-sweep-VENT-MID MPl-dirt.NOM
'The dirt can sweep' (easily)

(157) a. e-dót-ò ɛm-parɛ́t
3-pull-MID FSG-field.NOM
'The field is weeded'
b. e-dót-ún-ìè ɨn-kʉ́jɨ̂t
3-pull.out-VENT-MID FPl-grass.NOM
'The grass pulls' (easily)

(158) a. ɛ-ɨnyáŋ-á ɔl-páyìàn
3-buy-MID MSG-man.NOM
'The man is bought from'
b. ɛ-ɨnyáŋ-ún-ó ɛn-kɨ̂tɛ̀ŋ
3-buy-VENT-MID FSG-cow.ACC
'The cow is bought'

(159) a. ɛ-bárn-à ɛn-kɛráí
3-shave-MID FSG-child.NOM
'The child is shaved'
b. ɛ-bárn-ún-ó ɨl-papít
3-shave-VENT-MID MPl-hairs.NOM
'The hair is shaved off'

5.4 Unified Functional Account

The use of the Directional morphemes on different verb types has distinct outcomes. In their most common function, the Directionals add the element of 'motion toward' or 'motion away' without affecting the argument structure of the verb. On verbs with no inherent motion, such as 'look' or 'write' or 'wash', they can add the element of

movement. With verbs that have motion but no direction, such as 'cut' or 'lie down' the Ventive marks the motion as directed toward the point of reference much like the English deictics *here* vs. *there*. The weak partitive function was shown to remove a portion of the lexically specified argument such as 'tear off', 'slice off' or 'cut from'. In all of these cases, the Ventive acts to impart motion toward the deictic center.

With verbs that express motion from a SOURCE (e.g. 'rob', 'sweep', 'pull.out', 'smooth.over', 'clean' etc.), however, the use of a Directional licenses a semantic THEME and disallows the original SOURCE argument, only permitting it to be expressed in an oblique phrase. Many scholars (e.g. Givón, 2001; DeLancey, 2003) have noted that verbs of this type, such as the English verbs *rob, irrigate, water, feed, stoke (the fire), paint (the wall), dust (the table)* and *harvest (the field)* have "incorporated patients" Givón (2001, vol.I, pg. 132). Givón says that these verbs have an understood patient (THEME) while the instantiated location is coded as an object onto or from which "the implied patient moves". The verbs *purr* 'rob', *or* 'sweep'and *dot* 'pull, weed' bear a remarkable semantic similarity to the English verbs *rob*, *dust* and *harvest* above. Talmy (2000) uses the example *rob* vs. *steal* in English to exemplify verbs of this type. These verbs denote the same semantic scene, but place a different focus on "Agent", "Figure" and "Ground" (which correspond with AGENT, THEME and GOAL/ SOURCE locations in the present model of event structure). In English, the phrase *I stole his money from him* (**I stole him of his money*) contrasts with *I robbed him of his money* (**I robbed his money from him*). *Steal*, Talmy (2000) says, focuses on the Figure (THEME) by permitting *his money* as direct object, and *rob* focuses on the Ground (SOURCE) by permitting *him* as direct object. Other

languages, such as German, employ morphemes to mark a change of focus, in this case from Figure to Ground:

(160) a. Ich raubte ihm seine Tasche
I stole him(DAT) his(ACC) wallet
'I stole his wallet from him' (Figure as direct object)

b. Ich **be**-raubte ihn seiner Tasche
I SHIFT-stole him(ACC) his(GEN) wallet
'I robbed him of his wallet' (Ground as direct object) (Talmy, 2000, pg. 97)

The "SHIFT" morpheme *be-* is the "grammatical device" that alters the event so that the Ground (SOURCE) is in focus.

Maa verb roots that lexically specify a SOURCE therefore place a default focus on the Ground according to Talmy's categories. Where English has two distinct lexical items, *rob* vs. *steal,* to mark this difference, German has a "SHIFT" morpheme and Maa employs a Directional morpheme. The applicative function of the Directionals, therefore fits with other functions of Maa applicatives. The Directionals morphologically adjust the verb so as to alter the default endpoint in an event from the lexically specified SOURCE argument to the previously "incorporated" THEME in that event.

CHAPTER 6

MULTIPLE PROMOTIONS

In the previous three chapters, three Applicative constructions were introduced. It was shown that the Dative and Instrumental Applicative morphemes can license the presence of an additional semantic and syntactic argument. The newly applied argument exhibits all the properties of an object and the lexically specified argument does not lose its syntactic properties in the presence of an applied argument. This suggests that there is no syntactic differentiation between the THEME of a transitive verb and the semantic roles coded by the Dative or the semantic roles coded by the Instrumental. The Directional morpheme, in contrast, licenses a THEME argument but demotes the original SOURCE argument to oblique status and therefore does not permit a Double Object construction.

This section illustrates verbs with two Applicative combinations. In other languages such as Kinyarwanda (Kimenyi, 1976), in the case of multiple promotions, some participants (e.g. BENEFACTIVES) exhibit all the properties of objecthood while others (e.g. INSTRUMENTS) maintain only some of the object properties. It will be shown for Maa that again there is no different syntactic treatment for different semantic roles except in the case of the demoted SOURCE with a Directional. The core argument properties of bare NP status, verbal indexation for 1st and 2nd person singular, and Middle Subject capacity are accessible for all applied participants. In the following sections, I will briefly

overview the combinations Dative and Instrumental (6.1), Dative and Directional (6.2) and Instrumental and Directional (6.3).

6.1 Dative and Instrumental

Both promoted arguments of the Dative and Instrumental are capable of being instantiated as bare NPs in one clause.

(161) a. k-í-(n)dʉ́rr-akɨ́n-yìè en-gárrì ol-doyníó
D-2SG-move-DAT-INST FSG-car.ACC MSG-mountain.ACC
'You will use the car to move to the mountain'

b. ɛ́-ísʉ́j-ákɨ́n-yíé en-kítok in-kilání o-reyíet
3-wash-DAT-INST FSG-woman.NOM FPL-clothes.ACC MSG-river.ACC
ol-payián
MSG-man.ACC
'The woman uses the river to wash clothes for the man'

c. ɛ-ɨ́d-ák-íé ɔl-páyìàn ɛnk-áyonì ɛnk-árɛ́
3-jump-DAT-INST MSG-man.NOM FSG-boy.ACC FSG-water.ACC
'The man has made the boy jump the water'

d. á-ur-okɨ́n-yìè ɔl-payián ɔl-pánkà
1SG-make.fall-DAT-INST MSG-man.ACC MSG-machete.ACC
il-paék
FPL-cornACC
'I will use the machete to bend corn for the man'

6.1.1 Core Argument Status

6.1.1.1 Verbal Indexation

In the most common interpretation, the BENEFACTIVE argument is verbally indexed:

(162) a. kí-ɨ́dʉ́rr-akɨ̀n-yíé en-gárrì
2>1SG-move-DAT-INST FSG-car.ACC
'You will move with the car for me'

b. áa-duŋ-okín-yìè ɔl-páyìàn ɨn-kɨ́rɨ́ ɛnk-álɛ́m
3>1SG-cut-DAT-INST MSG-man.NOM FPl-meat.ACC FSG-sword.ACC
'The man will use the sword to cut meat for me'

However, as (163-4) show, the argument referenced on the verb can ambiguously be a BENEFACTIVE (c-di), an AGENT MANIPULEE (c-dii), a lexical THEME (ciii), or an

INSTRUMENT (diii) as this all depends on person and number and is ultimately motivated by SAP status:

c. áa-ɨd-aki(n)-yíé ɔl-páyìàn ɛn-kayíónì ɛn-kárɛ́
3>1SG-jump-DAT-INST MSG-man.NOM FSG-boy.ACC FSG-water.ACC
i. 'The man will make the boy jump the water for my sake'
ii. 'The man will make me jump the water for the boy's sake'
iii. 'The man will make the boy jump (over) me into the water'

d. áa-ur-okɨ̀n-íé il-paék en-kitók
3>1SG-make.fall-DAT-INST MPL-corn.ACC FSG-woman.ACC
i. 'He will use the woman to bend the corn for me'
ii. 'He will make me bend the corn for the woman'
iii. 'He will use me to bend the corn for the woman'

6.1.1.2 Middle Subjects

The applied argument of the Dative in (163a), which is a BENEFACTIVE 'people', is also the reflexive Subject of the Middle and occurs in the Nominative case. In (163b), the applied argument of the Instrumental 'knife' occurs in the Nominative case and is the Middle Subject. Example (163c) shows that 'meat', the THEME of the base form of the verb, is the Middle Subject. This shows that all three non-AGENT roles of Dative and Instrumental combinations with transitives roots can potentially be Middle Subjects with no demotion of any argument.

(163) a. e-duŋ-ókɨ̀n-óré ɨn-kɨ̀rɨ́ ɔl-álɛ́m ɨl-tʉŋanák
3-cut-DAT-INST.MID FPl-meat.ACC MSG-knife.ACC MPl-people.NOM
'The people will cut meat for each other with the sword'
b. e-duŋ-ókín-óré ɨn-kɨ̀rɨ́ ɔl-alɛ́m en-kitók
3-cut-DAT-INST.MID FPl-meat.ACC MSG-knife.NOM FSG-woman.ACC
'The knife is used to cut meat for the woman
c. e-duŋ-ókɨ̀n-óré ɨn-kɨrɨ́ ɔl-álɛ́m en-kitók
3-cut-DAT-INST.MID FPl-meat.NOM MSG-knife.ACC FSG-woman.ACC
'The meat is cut with the knife for the woman'

6.2 Dative and Directional

When a Dative and Directional morpheme operate on the verb, the Ventive is not permitted (e.g. **a-ɨnyáŋ-ú-ákɨ́* 'to buy something for someone). In order to expess the Directional morpheme and the Dative, the following results:

(164) áá-púrr-óò a-purr-okí ɛn-tankile
1>2SG-steal.from-AWAY INF.SG-steal.from-DAT FSG-woman.ACC
'I will steal you to take you to the woman'
(lit: I will steal you to steal you for the woman)

The verb is repeated where one bears the Directional and an infinitive form bears the Dative. Since the Directional and Dative combination is not possible, I will not address the core status of the applied arguments.

6.3 Instrumental and Directional

The comination of the Ventive and the Instrumental suffixes yields the form *-únìè*[15] (Tucker & Mpaayei, 1955). Following are examples with the tone patterns and semantics of the Ventive and Instrumental:

(165) a. e-dót-ún-ìè ɔl-pánkà
3-pull-VENT-INST MSG-machete.ACC
'He will pull it out using the machete'

b. e-or-ún-ìè in-kulukwók
3-sweep-VENT-INST FPl-dirt.ACC
'He will use it to sweep the dirt'

c. á-ɨ̀nyaŋ-ùn-ié ɛn-kɨ̀tɛ́ŋ m-pésaí
1SG-buy-VENT-INST FSG-cow.ACC FSG-money.ACC
'I will use the money the buy the cow'

d. e-buk-ún-ìè
3-pour-VENT-INST
'He will use it to pour them from them.'

[15] The Ventive suffix combined with the irregular Middle yields the form *-úníè* which is identical to the Ventive combined with the Instrumental. They are distinguishable by their tone patterns, the details of which are beyond the purposes of this study.

6.3.1 Core Argument Status

6.3.1.1 Verbal Indexation

Verbal indexation for a Directional plus Instrumental combination could target one of two arguments since the Directional allows the displacement, not the addition, of an argument. The Directionals function to displace a SOURCE argument with a THEME. If it is a full NP, the demoted argument can then only be expressed in an oblique *tɛ̀-* phrase. However, even if the Directional demotes a SOURCE, the Instrumental Applicative can apparently re-promote this oblique to core status where it can receive verbal indexation, as is shown below. None of the previously illustrated instances of the semantic roles promoted by the Instrumental have a SOURCE role. This is an unusual function of this Applicative:

(166) a. áa -purr-or-íé ɔl-mʉrraní ɨm-bɛníá
3>1SG-rob-AWAY-INST MSG-warrior.NOM FPL-bag.ACC
'The warrior will steal the bags from me'

b. áa-ɨnyàŋ-ún-ìè
3>1SG-buy-VENT-INST
'He will buy (something) from me'

c. áa-ór-ór-íé in-kulukwók
3>1SG-sweep-AWAY-INST FPl-dirt.ACC
i. 'He will use me to sweep the dirt'
ii. 'He will sweep the dirt from me'

No examples of Middle forms were recorded for this combination.

CHAPTER 7

CONCLUSIONS

In this thesis, I analyzed three Applicative morphemes in Maa in terms of their syntactic and semantic behavior. The Dative morpheme *–akɨ(n)* attaches to verb stems and introduces a semantic BENEFACTIVE or GOAL into the clause. The Instrumental Applicative *–íé(k)* introduces INSTRUMENT, ASSOCIATIVE, LOCATIVE, THEME and AGENT MANIPULEE, and is the same morpheme used in Causative formation for Class II verbs. The Ventive *–ʉ́(n)* and Away *–áà* Directionals normally add the information of 'towards' and 'away' respectively to a verb, but in their applicative function with verbs that subcategorize for a SOURCE they introduce a THEME argument. Syntactically the Dative and Instrumental morphemes permit Double Object constructions while the Directionals only permit a THEME while demoting the SOURCE argument. Multiple promotions are possible in Maa. The combinations Instrumental plus Dative and Instrumental plus Directional derive three Object clauses from transitive roots.

The promoted BENEFACTIVEs and GOALs of the Dative display all properties of core argument status. They can occur as bare NPs in the clause, occur in Accusative case, be the Subject of a Middle construction, and be marked with the bound pronominal prefixes. The lexically specified arguments of the verb remain core arguments by exhibiting these same syntactic features in an Applicative construction. Extended verbs do not require the

Dative to express a physical GOAL as a bare Accusative NP. However, it was shown that most animate GOALs must be promoted by the Dative and that physical GOALs can optionally be promoted. I showed that animates that are individuated and mobile must be promoted because they otherwise could not be conceived of as a possible GOAL. Similarily, marking physical GOALs with the Dative represents a situation where the AGENT has more deliberate control over the movement towards the GOAL. In both cases, the Dative marks a tighter semantic relation between the AGENT and the GOAL.

The Instrumental morpheme, like the Dative, permits applied arguments to have Object status with no change to the Object status of the lexically specified argument. The various semantic roles promoted by the Instrumental are based on the semantics of the verb and of the promoted argument. If the promoted argument is animate and the verb is active, there is a tendency to interpret it as the AGENT MANIPULEE of a Type A causative. If the AGENT exercises tighter control over an applied INSTRUMENT or ASSOCIATIVE participant, a Type B sociative applicative meaning is most natural. If the AGENT has complete control over the THEME MANIPULEE such that there is only one event, it is interpreted as a Type C causative or simple transitive event. As with the Dative, the Instrumental Applicative marks a situation where the AGENT has more control over the additional argument.

I argued that the Dative and Instrumental constructions can be understood as manipulations to the ICM of a verb (Croft, 1994) in order to alter the verb's natural *endpoint*. The event alterations described in this thesis all involve a tighter semantic relation between the AGENT and the additional argument. Describing Applicative

promotion has involved the terms *agency*, *control* and greater *affectedness*, all features of transitivity according to Hopper and Thompson (1980). In the case of both the Dative and Instrumental morphemes, the Applicative construction marks a situation where the promoted argument is easily manipulated, controlled by, or physically reached by the AGENT.

The traditional definition of an applicative, therefore, which is to increase verbal valence by promoting an argument from an oblique, is inappropriate for Maa. A valence increase is a frequent side-effect of a more general phenomenon of the *construction*, to mark a closer semantic relation between an Agent and a promoted participant than would be the situation without the Applicative.

APPENDIX

LIST OF ABBREVIATIONS

ACC	accusative
AGT	agent
APASS	antipassive
APPL	applicative
AWAY	allative
BEN	benefactive
CAUS	causative
D	discourse marker
DAT	dative
F	feminine
INF	infinitive
INST	instrumental
LOC	locative
M	masculine
NEG	negative
NOM	nominative
OBJ	object
OBL	oblique
OM	object marker
PASS	passive
PL	plural
PF	perfective
PROG	progressive
PSSR	possessor
PSSD	possessed
PST	past
RC	relative clause marker
SC	subject concord
SG	singular
SM	subject marker
SUB	subjunctive
VENT	ventive
1, 2 etc.	noun class#

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