This here thing: Specifying Morphemes *an³*, *nai¹*, and *mai²*
in Tai Khamti Reference-point Constructions

by

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A thesis submitted in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

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Abstract

There are three facets to this dissertation—a descriptive analysis of the minority language Tai Khamti, a grammaticalization account of three basic morphemes in the language, and a theoretical account of how the three morphemes, and their extensions, are motivated by a conceptual reference-point schema.

The Tai Khamti language has approximately 15,000 speakers and is spread across northern Myanmar and northeast India. A linguistic description of their language is a priority as the people work together for education and development for the next generation. The descriptive analysis in this dissertation is a portion of an overall language development project for Khamti, initiated in 2005.

As a portion of this description, the target morphemes *an³* 'thing', *nai¹* 'this', and *mai²* 'here' are basic morphemes that extend in grammatical function to over 35 constructions in the nominal system. The constructions feature a nominal juxtaposition between a head noun and what I analyze as a *conoun:* [NOUN] [CONOUN]. The noun is a bare head noun and the conoun is comprised of one of the target morphemes. The basic grammaticalization pathways observed in the analysis are well-recognized constructions in the literature, with several Khamti-specific extensions. In a reference grammar, these constructions would be described under discrete section headings, but to do this here would result in the loss of a helpful generalization. All of the extensions form reference-point constructions, which impose an embedded, relational structure, [NOUN [CONOUN]], on the juxtaposition template. In this asymmetrical conceptual relationship, the head noun is construed as a reference point and the conoun is construed as an embedded target. Moreover, the

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three morphemes an^3, nai^1, and mai^2, as part of the target, are realized at a conceptual level as specifiers. These three specifiers *identify* the target entity and *point to* a reference head noun, resulting in a coherent composite conception. Because all of the grammaticalized constructions are also analyzed as conceptual reference-point constructions, I posit the overarching reference-point schema as a single motivation which forms the underpinning of the grammaticalization processes involved. The reference-point analysis assumes a cognitive linguistic framework with a symbolic basis to grammar. More specifically, the theoretical notion of Cognitive Reference Point, first introduced in Cognitive Grammar and expanded upon in a variety of subsequent studies, is used for the Tai Khamti reference-point analysis.

Preface

This thesis is an original work by Douglas Maxton Inglis. The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board, Project Name "Documenting endangered languages: A community-based approach among the Tai Khamti", ID: Pro00010356_CLS5, Januray 27, 2014.

For Connie

Acknowledgements

I came to the University of Alberta to specifically study under Dr. Sally Rice and Dr. John Newman, students of Dr. Ronald Langacker. I want to expressly thank Sally Rice, my supervisor, who has provided an example of academic excellence. Her love of science and people—a great combination, in my opinion—is evidenced in the amount of time she has pored over my drafts and interacted with me at length over perplexing aspects of the analysis. The interest she divests in her student's lives, both personal and academic, and her wholehearted dedication to the languages we bring her way is an encouragement for me to do the same with my own students some day. I also want to thank John Newman for his direction and encouragement on several papers that I have written while studying at the university, along with some helpful revision of this dissertation. He is understated as a person, which makes his comments, feedback, and encouragement all the more significant to me.

I thank the other members of my committee, Dr. Antti Arppe, Dr. Gregory Forth, and Dr. Diessel Holger for the time they have taken to read my dissertation and offer insights from their respective fields of expertise. I especially want to highlight the work that Diessel Holger has presented over the years on demonstratives. His 1999 reference work on demonstratives has stood the test of time for me and my research on Tai Khamti demonstratives.

The Linguistics Department at the University of Alberta has provided the perfect environment in which to solve linguistic conundrums that have been nagging me for years in the field. I thank the entire department, especially other key faculty members—Dr. Harold Baayen, Dr. David Beck, and Dr. Ben Tucker—as well as my fellow students who are engaged in such diverse and intriguing topics in corpus and cognitive linguistics.

Furthermore, I thank my Tai Khamti colleagues and friends who have spent much of their day teaching me their language, providing excellent texts, and explaining these texts with such helpful cultural detail. Foremost among them are Mann Han and Lwin Lwin Maw. I hope to see their time and effort rewarded with practical language materials for their ongoing needs as a speech community.

My family is a great encouragement, especially during these years of study. My father passed away during my time at the University of Alberta. He has always been a source of strength for me and a model of courage and loyalty. I miss him.

And finally, I thank my wife, Connie, for the initial editing of my drafts, but much more significantly, for the home that she furnishes with love and artistic expression.

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List of Abbreviations

σ^1	syllabic low falling tone		DUR	durative
σ^2	syllabic mid rising tone		EXCS	excessive
σ^3	syllabic mid falling tone		F.OBJ	foregrounded object
σ^4	syllabic high falling tone		FOC	focus
σ^5	syllabic high level tone		HAB	habitual
1, 2, 3	first, second, third person		HORT	hortative
A.PL	associative plural		IMPF	imperfective
ABL	ablative		INCL	inclusive
ADD	addressee		IND	indirect
ADJ	predicate adjective nominal		INDEF	indefinite determiner
ADV	adverbial clause		INT	intent
ALL	allative		IRR	irrealis
AND	andative		LOC	locative
APPL	applicative		NEG	negative
BIN.CRD	binary coordination		NOM	deverbal nominal
BEN	beneficiary		NUM	numeral
CAUSV	causative		OPT	optative
CAUS	causal undergoer (or causee)		PASS	passive
CERT	certainty		PERF	perfective
CHORT	cohortative		PL	plural
CLF	classifier		POL	polite register
CNT	sentence connective		POSS	possessor
COMPL	complement clause		PRF	perfect
COMP	comparative		PROG	progressive
CONC	concessive		PUR	purposive
CONJ	conjunction		Q	interrogative (question) particle
CONT	continuous		QT	quotation
COP	copula, linking subject-predicate		RCPR	reciprocal
CRD	coordinating conjunction		REAS	reason
DEF	definite		REC	recipient
DEM.POSS	demonstrative possessive		RCNT	recent time
DIR	direct		RECG	recognitional demonstrative
DISC	discourse deictic		REL	clausal nominal (relative cl)
DIST	distant time		REQ	request
DU	dual		RFLX	reflexive
DUB	dubitative		RPRT	reported speech

EMPH	emphatic sentence	SP.INDEF	specific indefinite
EQU	equative, linking two nominals	STD	standard of comparison
EXCL	exclusive	TMP	temporal
EXCLM	exclamative	TOP	topic in information structure
		VENT	ventitive

List of Grammaticalized Morphemes with Sources

TARGET	SOURCE	GRAM	TARGET	SOURCE	GRAM
A.PL	this	*nai¹*	PRF	come	*maa⁴*
ABL	here	*mai²*	PUR	this	*nai¹*
ADD	here	*mai²*	Q	this	*nai¹*
ADJ	thing	*an³*	QT	this	*nai¹*
ADV	this	*nai¹*	RCPR	share	*kan³*
ALL	here	*mai²*	REAS	this	*nai¹*
AND	go	*kaa⁵*	REC	here	*mai²*
APPL	give	*haeu²*	RCNT	come	*maa⁴*
BIN.CRD	you.two	*khaa⁵*	RECG	this	*nai¹*
BEN	here	*mai²*	REL	thing	*an³*
CAUSV	take	*au³*	SP.INDEF	thing	*an³*
CAUS	here	*mai²*	STD	here	*mai²*
CLF	thing	*an³*	TMP	here	*mai²*
CNT	this	*nai¹*	VENT	come	*maa⁴*
COMPL	this	*nai¹*			
COMP	this	*nai¹*			
CONC	this	*nai¹*			
CONT	be.plenty	*nam⁵*			
COP	be.plenty	*nam⁵*			
CRD	this	*nai¹*			
DEF	this	*nai¹*			
DIR	this	*nai¹*			
DISC	this	*nai¹*			
DUR	keep	*wai¹*			
EMPH	this	*nai¹*			
F.OBJ	here	*mai²*			
HAB	go	*kaa⁵*			
HORT	give	*haeu²*			
IMPF	live/stay	*uu⁵*			
INDEF	one	*leeung³*			
LOC	here	*mai²*			
NOM	thing	*an³*			
PERF	finish/already	*yau¹*			
PL	they	*khau⁵*			
POSS	here	*mai²*			

List of Sources with Grammaticalized Morphemes

SOURCE	TARGET	ABBREVIATION
an³ 'thing'	CLF	classifier
	DEM.POSS	demonstrative possessive
	ADJ	predicate adjective nominal
	REL	clausal nominal
au³ 'take'	CAUSV	causative
haeu² 'give'	APPL	applicative
	HORT	hortative
kaa⁵ 'go'	AND	andative
	DIST	distant time
	HAB	habitual
khaa⁵ '2DU'	BIN.CRD	binary coordination
kan³ 'share'	RCPR	reciprocal
maa⁴ 'come'	VENT	ventitive
	RCNT	recent time
	PRF	perfect
leeung³ 'one'	INDEF	indefinite
mai² 'here'	LOC	locative
	TMP	temporal
	ALL	allative
	ABL	ablative
	POSS	possessor
	REC	recipient
	ADD	addressee
	BEN	beneficiary
	CAUS	causal undergoer (or causee)
	STD	standard of comparison
	F.OBJ	foregrounded object
	DEF	definite

nai¹ 'this'

	SP.DEF	specific indefinite
	PL	plural
	A.PL	associative plural
	Q	interrogative (question) particle
	BIN.CRD	binary coordination
	DISC	discourse deictic
	COMPL	complement clause
	ADV	adverbial clause
	QT	quotation
	EMPH	emphatic sentence
	CNT	sentence connective
	RECG	recognitional demonstrative

nam⁵ 'be.plenty or numerous'

	CONT	continuous
	COP	copula, linking subject-predicate

uu⁵ 'live or stay'

	IMPF	imperfective

wai¹ 'keep'

	DUR	durative

yau¹ 'finish or already'

	PERF	perfective

Chapter One

Introduction

1.1 Research overview and background

The mainland Southeast Asian language, Tai Khamti[1], is highly endangered and in certain need of documentation. Many disheartened leaders of the Khamti people concede that more and more youth are primarily speaking the regional and national languages of surrounding Myanmar (Burma) and northeast India rather than retaining their own language and cultural heritage. They are gradually losing the connection to what once made them a strong and vibrant people among a sea of peoples in their linguistic area. In light of this loss, this dissertation is intended to serve as the beginning of a grammatical description, but not one that follows a typical format observed in standard reference grammars, with categorical divisions based on major parts of speech or syntactic constructions. Instead, I want to weave a linguistic story that traces three lowly Khamti morphemes, *an³* 'thing', *nai¹* 'this', and *mai²* 'here', over what may have been their historical development and full synchronic distribution throughout the language to arrive at a description of a host of grammatical topics (intrinsic to any reference grammar). These three morphemes grammaticalize in such a prolific manner that each of them can be associated with a distinct network of functions and constructions. In addition, taking the three separate networks of constructions altogether, the amassed constructions looks more like a linguistic *salmagundi* than a carefully partitioned reference grammar. The grammatical constructions that surface with *an³*, *nai¹* and *mai³* as components, including topics such as numeral classifiers, benefactives, definites, deverbal nominalizers, demonstratives, complementizers, locatives, relativizers, and causatives, appear random and disjointed at face value. There is no uniting factor or is there? In this study, I will attempt to show that the three distinct networks of grammaticalized meanings and functions can be given coherence when taking a

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1   Tai Khamti is a northern tier language of SW Tai in the Tai-Kadai language family (Chamberlain 1975: 63; Edmonson and Solnit 1997a: 340, Edmonson 2008: 184; Diller et al. 2008). There are approximately 14,000 speakers dispersed across two regions: Northwest Myanmar (Burma) and the Assam region of Northeast India (Simons et al. 2009).

cognitive linguistic approach to their analysis. More specifically, in developing the Cognitive Grammar (henceforth, CG) framework, Ronald Langacker has posited a cognitive *reference-point* schema that I use to show how *an³*, *nai¹*, and *mai²* function as conceptual specifiers in all of the constructions that they are used in. This reference-point model, as a basic foregrounding/backgrounding mechanism, is seen to be the prime motivation for their prolific distribution, on one hand, and their commonality of function, on the other.

Mainland Southeast Asian languages, Khamti included, commonly take advantage of verbs by conscripting them into service as coverbs. Coverbs are lexical items that are juxtaposed to main verbs and provide semantic, pragmatic, or functional information on the event expressed by main verbs. Coverbs tend to express grammaticalized particulars such as current discourse relevance, realis/irrealis, modality, perfective/imperfective, direction of action, causation, applicative, and realization, etc., in verbal phrase complexes (Enfield 2005: 186). The verb *come*, for example, is often observed as a coverb that indicates a direction towards the speaker of an action asserted by the verb, as in the Thai sentence roughly translated as, 'Watch out you don't make (*me*) angry'.[2] Here, the coverb translated 'come' grammatically indicates that the action of the main verb 'make angry' is directed toward the location of the speaker. The notion of a coverb is well documented in these languages, but the notion of a "conoun" is not. Conouns are much less familiar and in the literature are mostly restricted to body-part nouns that surface as prepositions (Enfield 2005: 186; see also Bisang 1996). Thai examples would include the nouns translated as 'face' and 'back' that also appear as the locative prepositions 'before' and 'behind'.

In this dissertation, I expand on the idea of a conoun by examining three basic lexical items in Khamti, *an³* 'thing', *nai¹* 'this', and *mai²* 'here', demonstrating how each of these lexical words emerge in the language as grammatical morphemes or grams. When multiple nouns are juxtaposed, they can form coreferential relationships in what I call noun-conoun complexes. These complexes are juxtaposed nominals

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2 The Thai example, 'Watch out you don't make (me) angry' comes from Bilmes (1995: 42): *dǐaw ca maa tham hâj kròod* (lit. 'moment IRR come make APPL angry'). The coverb, *maa* 'come', implies the speaker as the clausal object. See also Prang (2010).

that can be represented with the schema, [NOUN][CONOUN]. Just as coverbs signal certain verbal functions, conouns express nominal functional distinctions such as location, possessor, recipient, addressee, definite, etc., all of which will be covered in this study. In addition, I show that *an³*, *nai¹*, and *mai²* operate more generally as central components in cognitive *reference-point* constructions. A reference-point construction pertains to a cognitive processing routine which relates two linguistic elements, such as juxtaposed nominals, in an asymmetrical conceptual relationship. In this relationship, a reference-point entity, R, is first mentally accessed in order to apprehend a target entity, T. The relationship is conceptually asymmetrical in the sense that a target contributes meaning to the overall construction that is understood only in terms of its reference point. In this way, a simple juxtaposition of linguistic items, [NOUN][CONOUN], is re-construed as an embedded reference point-target relationship, [R [T]]. As a reference-point construction, the conoun is construed as T and is embedded within the context of the head noun, which is construed as R. All of the constructions that grammaticalize from the three morphemes, *an³*, *nai¹*, and *mai²*, form reference-point constructions making a reference-point schema a unifying factor.

Within their individual respective reference-point constructions, the components *an³*, *nai¹*, and *mai²* each serve as conceptual *specifiers*. They are specifiers in that they (a) *trigger* the actual reference-point schema, (b) *identify* what the target is, and (c) *point back to* the reference point. The purpose of a target structure is to contribute a piece of meaning to the overall reference of the reference point. In other words, targets are modifiers of reference points. By characterizing the specifiers *an³*, *nai¹*, and *mai²* as integral components of the more general reference-point schema, I will seek to capture a unique underlying motivation unifying a wide range of juxtaposed (nominally-based) constructions. The resulting analysis ends up encompassing an exceptional scope of grammatical topics in Khamti.

When I began fieldwork on the Khamti language in 2005 and after initial stages of language learning, I moved quickly to a strategy of recording, understanding, and even mimicking large amounts of written and spoken discourse. Within these sometimes incomprehensible streams of text, I increasingly ran across

multiple senses of words and culturally-informed chunks of meaning. From a synchronic perspective, the distribution of these words might have appeared as static homonyms that were semantically opaque—indeed, quite reasonably the case for fluent speakers. However, from a more linguistically informed diachronic perspective, the rampant occurrence of these tokens paints a more vivid picture; one couched in well-recognized grammaticalization processes (Bybee and Hopper 2001: 3; Bybee 2010: 214). As a linguist, I have a general awareness of the variability of grammatical structures in differing communication situations. Actual utterances in the context of conversation and story-telling quickly reveal that the variation and nuance of grammatical phenomena are seen as the *real* world of language, as opposed to an elicited *possible* world of language (Croft 2000: 24). Within my corpus of connected text, the words *an³* 'thing', *nai¹* 'this', and *mai²* 'here' appear with an exceptionally high frequency, suggesting a wide range of evolving constructions.[3] In light of certain areal linguistic features discussed in this dissertation, these morphemes can be thought of as emerging in noun-conoun pairings, in a somewhat mirror image to verb-coverb complexes. The very notion of a conoun (or a coverb) entails the idea of an evolution in the language from lexical to more grammatical usages. It seems highly possible, then, that a diachronic perspective would work in collaboration with a synchronic one in order to document the full range of noun-based constructions in Khamti.

Joan Bybee (2010: 166) has emphasized the importance of diachrony in language description when she writes:

> [T]he diachronic dimension is important, not because speakers know the source and history of the forms of their language, but because the diachrony determines a great deal about synchronic distributions and meanings of forms. It is also important as a source of evidence about cognitive categorization, since such categorizations make predictions about possible changes. Any synchronic characterization of meaning must be compatible with both prior and future changes in meaning.

A reference grammar does not necessarily require diachronic explanation *per se*,

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3   I use the term *construction* throughout this dissertation to refer to linguistic units at many levels—morphemes, phrases, clauses, multi-word idioms that are language-specific conventionalized symbolic pairings of sound and meaning (Bergen and Chang 2005: 147). I discuss the symbolic nature of grammar in Section 1.3.

because both the native speaker and language learner are not referencing historical development either unconsciously or consciously, when they speak (Dryer 2006: 213). On the other hand, it seems altogether appropriate to describe languages not as linguistic islands, in and of themselves, but as "time-conscious", dynamic experiences, arising from human behavior in general. There is a continuity of description that is obtained with an historical viewpoint. In this larger context, some degree of context, both diachronic and cognitive, might well be of benefit to standard reference works such as grammars and dictionaries.

The diachronic grammaticalization dimension of language analysis offers reasons for why a certain high-frequency word might appear in different grammatical constructions in the language due to semantic extension from its source lexical form and context.[4] The operative word is *semantic*, which appeals to a linguistic theoretical framework that takes the linguistic symbol—a sound-meaning pairing—as intrinsic to its formulation. The synchronic and diachronic language description that appropriates a symbolic (semantic) foundation attributes the polyfunctional distribution of a word to a motivated network of interrelated *meanings*. These meanings lead to the operation of different functions over time. Such a theoretical framework is CG, which I outline in Section 1.3.

Furthermore, a grammaticalization account can reveal more generalized aspects of the human cognitive system, whereby obscure or grammaticalized meaning ensues from the effects of inferencing. Inference is most readily seen at a more general conceptual level as metaphoric and metonymic processes of grammatical extension (Traugott 1988; Traugott and König 1991). Incorporating a level of description that investigates the dynamic variation of constructions puts Tai Khamti grammar in its proper place, as an evolving aspect of communication systems in general. By investigating cognitive aspects of communication, one can more readily see the system as an aspect of human behavior and cognition. The scope of explanation is much greater than that provided by a synchronic explanation (i.e. a standard descriptive grammar). Thus, a synchronic/diachronic analysis engenders an important value of communicative significance and linguistic holism—something

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4   I use the term *diachronic* in this dissertation as it pertains to posited grammaticalization pathways and not to any historical data.

also worth documenting in minority languages.

Communicative significance includes the idea that basic lexical morphemes , such as 'this', 'here', and 'thing' are foundational building blocks (symbols) for more complex communicative structures (assemblies of symbols). For example, the deictics *nai¹* 'this' and *mai²* 'here', analyzed in this dissertation, serve as verbal pointers. Pointing is a proto-communication strategy that is natural and highly transparent to humans. In gesturing or pointing to something, humans understand it to mean, *look where I am pointing and see what I mean* (Tomasello 2008: 1-2). *An³* 'thing', on the other hand, is a fundamental reference device, a simple symbol to identify any *object* in the world. From this basic design (joint attention and reference), elaborated linguistic constructions are devised in language for the purpose of a more specific and intentional act of *communication*. In other words, rudimentary pieces of language ('this', 'here', 'thing') evolve into more complex composites involving relationships with other linguistic entities (nouns, verbs, phrases, clauses, sentences). An example that I discuss in detail in Chapter 4 is that of the deictic pointer *nai¹* 'this' identifying a clause as a verbal argument in a way similar to English *that* in: *They know that* [*I am Canadian*]*.* In this way, basic morphemes serve to package chunks of language (phrases, clauses, and sentences) and relate them to composite wholes, such as a clause viewed as an argument in a complement construction.

The *linguistic holism* that I refer to reveals how all of the grammatical extensions considered in this dissertation are instances of a more general cognitive reference-point schema. A reference-point configuration imposes a certain conceptualization on a composite structure. In this way, a simple juxtaposed noun-conoun complex allows the meaning of an initial reference *noun* to act as a contextual domain for interpreting an expression pinpointed by a target *conoun*. An intentional relationship between the two components arise in such a way that the composite *whole* is more than the mere sum of its parts. The cognitive reference-point analysis allows all of the emerging individual constructions to be given a *holistic* description.[5]

This dissertation begins to address the urgency of analyzing and describing a

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5   I elaborate on synchrony, diachrony, and cognitive linguistics in Section 1.3.

language that may well be in use by its last generation or two of speakers. A description of this under-documented language will help lay a foundation for the Khamti people to create language materials, such as a dictionary, a pedagogical grammar, and reading material, for use by subsequent generations of speakers and learners. Accordingly, this dissertation analyzes cultural and highly frequent aspects of Khamti grammar by giving a basic synchronic description to a wide range of constructions, some common among languages and some distinctive to Khamti. The research also provides a diachronic analysis, seeking to bring an ordered explanation based on semantic and pragmatic processes. The overall description revolves around well-established grammaticalization patterns and consolidates all of the extensions into distinct sets of constructions centered around three evolving morphemes, *an³*, *nai¹*, and *mai²*. Finally, a cognitive analysis advances a phenomenon that further associates the three groupings of linguistic constructions under a single relational conceptualization. Linguistic analyses with this sort of scope (synchronic, diachronic, and cognitive), take Khamti-specific idiosyncrasies and provide a more complete linguistic narrative, inclusive of other languages and of general cognitive processes, consequently making a minority language (and people) not so minor after all.

1.2 Statement of the problem

This dissertation sets forth an approach to the analysis of *an³*, *nai¹*, and *mai²*, with synchronic, diachronic, and cognitive dimensions. Each of these dimensions are introduced here, with reference to the *mai²* 'here' examples in (1)-(5) below and explained in detail in Chapter 5.

Apart from the shared use of *mai²*, there is seemingly little in common with what might be described as an adverbial deictic in (1), a locative construction in (2), a possessive construction in (3), a dative construction in (4), and an accusative construction in (5). As a matter of fact, these constructions very likely would appear under discrete headings in different sections of any reference grammar. However, a question one might reasonably ask is: What links the usage of *mai²* across this array of constructions (which, for the time being, I gloss as a literal 'here')?[6]

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6   In this introductory chapter, the three target morphemes, *an³*, *nai¹*, and *mai²*, are only given their literal, lexical gloss in the interlinearizations. However, throughout the remainder of the

(1) **_mai²_** _kaw¹_ _maeu²_ _kin³khau²_ _nai²_ _uu⁵_
    here also 2SG dine can IMPF
    'you can also dine here'

(2) [_tsuang⁴_] [**_mai²_**] _Lwin⁵ Lwin⁵_ _yang⁴_ _yau¹_
    school here Lwin Lwin be PERF
    'Lwin Lwin was at school'

(3) [_man⁴_] [**_mai²_**] _heeun⁴_ _suang⁵_ _an³_ _yang⁴_ _uu⁵_
    3SG here house two CLF be IMPF
    'she has two houses'

(4) _kau³_ [_man⁴_] [**_mai²_**] _bap¹_ _haeu²_ _kaw⁵_
    1SG 3SG here book give INT
    'I will give her the book'

(5) _kau³_ [_paa³tsa¹_] [**_mai²_**] _kaw¹_ _han⁵_ _sa⁵sa⁵_ _nam⁵_
    1SG cemetery here then see clearly CONT
    'I then clearly see a cemetery'

The first level of analysis in this dissertation is a synchronic one. Synchronically, the three target morphemes are analyzed as conouns, which are referential grams (grammatical morphemes) that mainly co-occur with nouns in nominal-based constructions in the language (defined further in Section 1.3). With example (1) above, _mai²_ is a lexical deictic functioning adverbially and, thus, is not part of a noun-conoun construction. This, I argue, is its basic sense. However, in (2)-(5), an initial head noun is juxtaposed with _mai²_ (now serving as a postposed conoun) and shown with the bracketed schema [NOUN] [**_mai²_**]. In the constructions in (2)-(5), the conoun serves as a marker for the noun, specifying the semantic relationship the noun takes on in its respective construction. In other words, _mai²_ marks its noun as a location, a possessor, a recipient, and an object, respectively.

The proposed explanation stemming from a diachronic analysis for the use of _mai²_ in these constructions is as follows. The instance of _mai²_ in (1) is that of a general locational adverb semantically expressing a locative relationship between an event and its location of occurrence. The instance of _mai²_ in (2) is also locative, but, in this case, is indicating a referent location that is expressed by a noun in the sentence, _tsuang⁴_ 'school', rather than a location in reference to the speaker, as in its

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dissertation, I will provide a specific gloss that reflects their grammaticalized meaning and function. To aid the reader, two indices—List of Grammaticalized Morphemes with Sources and List of Sources with Grammaticalized Morphemes—are provided in the front of the dissertation.

basic deictic meaning. In this way, *mai²* has developed into a noun locator. In (3), *mai²* can be described as designating a possessor by way of conceptual metaphor so that a non-spatial location, *man⁴* '3SG', is now acting as a possessor in which a possessee, *heeun⁴* 'house(s)', exists. A literal translation 'two houses are at her' hints at this potential metaphorical extension from location to possession. The instance of *mai²* in (4) is that of the marker of a recipient, which also sustains a metaphorical locative inference. The resulting construction is one of the recipient being construed in terms of a locative goal with a literal translation 'I will give the book to her'. And finally, in (5), *mai²* is the marker of the direct object *paa⁵tsa¹* 'cemetery'. The object-marking function is a result of *mai²* placing a degree of *high importance* on the referent from the perspective of the speaker. The diachronic analysis that is developed for *mai²* in this dissertation also involves semantic-pragmatic inference that extends abstractly from a deictic source meaning (Section 5.6.2). The metaphorical processes posited for the brief diachronic analysis here is not to suggest that a metaphorical phenomenon is *necessarily* active synchronically. Speakers might not directly link *book as a mover towards a recipient goal*. It is more the case, as has been suggested in taking a biological evolutionary model for language evolution, that inferencing processes spread throughout the speaker population over considerable time depth innovating grammatical constructions (Croft 2000: 25-30).

All of the constructions analyzed in this dissertation arising from extended uses of *an³*, *nai¹*, and *mai²* fall out diachronically as relational constructions—grammatical material that expresses a relationship within a nominal construction (Svorou 2007: 728-729). This sets the stage for a third level of analysis that offers a cognitive processing perspective and one that first establishes the conouns *an³*, *nai¹*, and *mai²* as lexical sources. Over time, they have extended as sets of grams which serve a specifying function—as *relational* triggers, which identify a target *relation* and point to a reference *relation*. Under a cognitive reference-point analysis, the grams in each extended construction are shown to individually and unambiguously signal one of the two juxtaposed entities as conceptually more prominent than the other within the overall relationship. Taking the data set in (1)-(5) as an example, the sentence in (1) contains an event predication, *maeu⁴ kin³ khau² nai² uu⁵* 'you can also

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dine', and a locational predication, *mai²* 'here'.[7] As a specifier, *mai²* first prompts a relationship between the event of dining and a place where the event unfolds. The specifier, *mai²*, additionally, has a function of identifying what exactly the target predication is (i.e. a location commensurate with the speaker's location) and then pointing to that reference location. In other words, *mai²* 'here', in its basic usage in (1), is a proximal deictic. When *mai²* appears in (2), it invokes a conceived relationship between the existence event, *Lwin⁵ Lwin⁵ yang⁴* 'Lwin Lwin exists', and the place where the event is, *tsuang⁴* 'school'. In this case, instead of the place being located relative to the speaker, *mai²* designates a location identical with the nominal referent *tsuang⁴* 'school'. The locative conoun *mai²*, which is now related to a preceding noun identifies the target, 'Lwin Lwin existing', and points back to the place where she exists, 'school'. In the predicative possessive construction in (3), *mai²* sets up a relationship between the possessor, *man⁴* '3SG', and the possessee, *heeun⁴* 'house(s)', and identifies the 'house' as the target in that relationship and relates the target back to its reference nominal, '3SG'. Likewise, the dative, *man⁴* '3SG', of the ditransitive construction in (4), also exhibits a relationship with the noun, *bap¹* 'book'. In this case, *mai²*, identifies the book as the target which points to its reference, *man⁴*. And in the transitive construction in (5), in which *mai²* is a pragmatic marker of speaker evaluation, i.e. importance, it identifies a high degree of importance in relation to its reference nominal, *paa³tsa¹* 'cemetery'. With the reference-point constructions in (1)-(5), *mai²* is a conceptual specifier that is integral to the network of constructions, as a whole.

CG presents an approach to language analysis that postulates linguistic notions that are adaptations of general cognitive capacities. Chief among these mental capabilities is figure-ground organization that has a linguistic manifestation of prominence (Langacker 2013: 55). In relation to the cognitive analysis in (2)-(5), each of the reference-point constructions utilizing the specifier, *mai²*, is an

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7   I use **predication** in the sense of Langacker (1987: 97) as the semantic portion of any linguistic expression (minimally a morpheme, but also a nominal, clause, or sentence) making up a linguistic symbol (a sound-meaning pairing). My use of predication is not to be confused with Construction Grammar, which considers it only the relational counterpart to a nominal referent (Bergen and Chang 2005: 163).

instantiation of a conceived relationship between two predications. The two predications relate to one another by means of a conceptual asymmetry such that an initial reference entity is first perceived in order to apprehend a target entity. The target then serves to associate new information with its reference point, while the reference point exhibits a context from which to interpret the content of its target.

To summarize, three problems and their solutions stand out from this introductory presentation of data with *mai²*: a set of surface constructions that require a synchronic description, a suspected relationship between the surface constructions based on the reappearing *mai²* which begs further scrutiny as a diachronically related network of constructions, and an analysis that seeks a more general underlying motivation based on shared cognitive abilities and construals. In this way, the multiple grammatical topics synchronically described in this dissertation make contributions to the field of descriptive linguistics by adding data to general linguistic knowledge from a lesser known Tai language. With a grammaticalization analysis, this dissertation supplies fresh evidence for strengthening well-established typological patterns, along with proposing semantic extensions not currently attested in the literature. Finally, this dissertation uses CG to posit an analysis of cognitive reference points as a motivating factor to cover a wide range of relational constructions in a single, and hopefully coherent cognitive description, including individual constructions that have not to date been discussed as reference-point phenomena.

1.3 Theoretical framework and assumptions

1.3.1 Basic Linguistic Theory

Language description and theorizing proceed in stages. Prior to comparing constructions in one language with those in another, one should first try to understand the target language on its own terms. For example, the all-purpose Khamti noun, *an³* 'thing', can be analyzed as a relative clause marker, as shown in (6a), in which it is the nominal head of the modifying clause, itself, *an³ Ii⁵ seu¹ wai¹* 'Ii bought thing'.

(6) a. *haang³taai³* [*paa³tsa¹*] [***an³*** *Ii⁵ seeu¹ wai¹*] *mai² saang⁴khiu⁵ wai¹ uu⁵*
　　 body　　　grave　　 thing Ii buy　DUR　here　bury　　　　DUR　IMPF
　　 '(They) bury the body in the grave that Ii has bought'

 b. *mlaeu⁵ nai⁵* [***an³*-*kaa²*] *mai² tii⁵ kaa⁵ nai¹*
　　 when　Q　 thing-dance　ALL　IRR　go　Q
　　 'when will you go to a/the dance?'

In Chapter 3 of this dissertation, however, the *relativizing* function of *an³* is more readily accounted for as an *appositive* structure within the nominal system of Khamti. The English translation of the relative clause in (6a), 'grave that Ii has bought', should be more literally recognized as appositive, rather than a typical relative clause. The literal translation would be 'grave, the Ii bought thing/one'. This appositive reading comes from the role of the general noun, *an³* 'thing', which acts as a head noun to the embedded ("relative") clause, *Ii⁵ seeu¹ wai¹* 'Ii has bought', to create a second nominal in relation to the head noun of the main clause *paa³tsa¹* 'grave'. The *an³*-nominal clause in (6a) actually mirrors the deverbal nominal, *an³-kaa²* 'dance', in (6b), which takes a verb and re-construes it as a noun. Once a clause (or verb) is construed as a noun (with *an³* as a nominal head), it can function in an appositive relationship with an initial head noun. In this way, in (6a), the relationship that is established between the initial head noun, *paa⁵tsa¹*, and the clausal nominal, *an³ Ii⁵ seeu¹ wai¹* '*one/thing* Ii has bought' becomes a coreferential one. After describing the construction in this way, the researcher can generalize it reasonably well, comparing the construction to other languages. What results is a well-recognized phenomenon—a relative clause construction—but one with a language-specific (and areal) coding strategy; that of de-clausal nominalization.

　　 The basic theoretical approach advocated by Dixon (2010a: 5), then, espouses an appropriate interplay of language-specific description and cross-linguistic comparison. The most important consequence of this basic linguistic approach is that language typology cannot be category-based (pre-ordained linguistic labels imposed on a language, such as *relative clause*) but rather must be substance-based (modifying structures, such as appositives or embedded constructs), because substance is what is universal about language. Moreover, for morphosyntactic comparison, to be substance-based means that it is semantically based (Haspelmath 2007b: 126; see also

Croft 2003). The morpheme *an³* has a semantic characterization of referring to a general object 'thing', which is schematic to any other noun in the language. This lends itself, within the Khamti system, to being a schematizer (in contrast to a relativizer), which allows *an³* to surface as a de-clausal nominal, as evidenced in (6a) above. It is the semantic substance of *an³* that reveals why it appears so readily in other nominally-based functions in the language.[8]

More generally, at the synchronic level of analysis for this study, Tai Khamti features certain mainland Southeast Asian areal properties as an isolating and analytic language. It is SOV in its basic word order and there is widespread pronominal ellipsis that can obscure the S or O participant.[9] Typical of verb-final languages in this region of the world, Khamti offers a rich set of sentence-final particles used to establish epistemic and illocutionary force. These particles signal definiteness, manner of questioning, degree of politeness, evidentiality, irrealis, and so forth. There is no case, number, or gender affixation on nouns and no affixation of tense, aspect, or agreement on verbs. This means that many functional distinctions are signaled by nominals, verbals, or deictic particles that have lexical origins and appear also as coverbs and "conouns" (as introduced in Section 1.1 above and shown in the List of Grammaticalized Morphemes at the beginning of this dissertation). The choice of these three target morphemes, *an³*, *nai¹*, and *mai²*, for this dissertation is motivated by the fact that, along with the verb, *kaa⁵* 'go', they occur as the most frequent tokens in my textual corpus. In the context of naturally occurring connected speech, the three grams together make up three of four most frequent lexical types in my Khamti corpus of 90,100+ words. Together they account for 22% of all items in the corpus. These morphemes primarily occur in constructions related to the nominal structure of the language, making the high occurrence rate all the more significant. The three morphemes are also basic in the sense that they form semantic primes that are used in understanding and defining other words that are not primes (Wierzbicka 1996: 10). Universally, morphemes that express the concepts *thing*, *this*, and *here*, are found in every language (Wierzbicka 1996: 36, 89, and 42, respectively).

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8   In Section 1.3.3 below, I further describe the semantic nature of *an³* using a semantically based theory of grammar, CG.

9   Pronominal ellipsis is no doubt discourse motivated, but it is a phenomenon not directly relevant to this dissertation.

1.3.2 Grammaticalization

A diachronic approach to description does not undermine a synchronic analysis if both levels are credited. A careful synchronic analysis reveals the constructions that are currently active in the language, while a diachronic analysis shows how these constructional arrays are actually layers of linguistic predications that have been built up over time. This dissertation takes the perspective that any maximally adequate documentation of Khamti should include an account of how certain lexical items extend in function in the language. Such a description most necessarily considers proposals surrounding various grammaticalization processes in the literature. The definition of grammaticalization that I generally follow is from Elizabeth Traugott (2001: 1): "Grammaticalization is the change whereby lexical items and *constructions* come in certain linguistic *contexts* to serve grammatical functions or grammatical items develop new grammatical functions [emphasis mine]." In relation to the three target morphemes in this study, I have capitalized on two factors from Trauggot's definition, *constructions* and *contexts*. An^3, nai^1, and mai^2 take on new meaning and function not as single linguistic items, but as components of entirely new constructions. Each morpheme starts off with its own semantic characterization that is essential for its grammatical extension. An^3 asserts a general reference to a thing, nai^1 is a deictic pointer to an object, and mai^2 is a deictic pointer to a location. From this semantic/pragmatic foundation, each of these items extend as new constructions when found in different morphosyntactic contexts in the language. For example, when the general noun, an^3, shows up in a novel syntactic context preceding a verb, it creates a DEVERBAL NOUN construction, as in (6b) above. An^3 is a key player in this new construction based on its basic characterization as a general noun. It imposes a conceptual boundary over a conceptually unbounded event so that the event (expressed by a verb) is construed as a single whole (described further in reference to Figure 1.1 below). Likewise, when the proximal deictic, nai^1 'this'— which as a basic item, points to an object near the speaker—shows up in a new context following a noun, it is recognized as a definite construction (further described in Section 4.3.3). This extension arises because of the original pragmatic pointing

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function of *nai*[1]. As a definite construction, however, it "points to" a nominal that has been previously mentioned in the discourse. As for *mai*[2] 'here' as a basic lexical item, it points to a general location, but when it appears in a context following a noun, it becomes a general location marker for that noun.

In each of these examples, the individual morpheme "constructionalizes" (turns up in a new morphosyntactic arrangement) and "contextualizes" a new meaning or function. In other words, the extension of morphemes across functional boundaries is driven by diverse contexts of language usage (see also Bybee and Dahl 1989: 52). Once a lexical item is distributed in a variety of constructions, grammaticalization can be characterized as the strengthening, or tightening, of internal dependencies within that construction (Haspelmath 2004a: 26-28). Along the grammaticalization dimension, "loose" morphemes are reanalyzed as "tight" markers of constructions and even develop into clitics and affixes, or eventually disappear altogether as zero morphemes in contrastive paradigms (García and van Putte 1989; Bybee 1994). Throughout this dissertation, the assumption is that an evolving grammatical function is seen as an extension of an earlier less grammatical source. Rather than evolving as an individual gram, it finds its function within the particular construction in which it evolves (Heine and Kuteva 2007: 32).[10]

In the 1970s and 80s, when a grammaticalization focus was seeking to reorient a descriptive program, the focal point was on semantic bleaching or reanalysis (the loss of morphological boundaries, phonological reduction, and freezing of syntactic position) as the primary driving process. However, Traugott (1988: 407) showed early on that bleaching and reanalysis more readily depict the latter stages of grammaticalization processes and that semantic and pragmatic factors of inferencing better represent initial stages of linguistic change. Inferencing mostly deals with metaphor and metonymy as meaning change agents, such as spatial-to-temporal readings and as communicating speaker epistemic beliefs (evidentiality) of a proposition or concessiveness and conditionality found in sentence connectives; topics that will be relevant to the present study. Traugott observed that meaning varied in stages from extralinguistic to textual to expressive constructs prior to

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10 In this way, if I happen to speak in such a way as to make it seem like the gram itself is extending in function, I mean it to be co-evolving in a constructional context.

undergoing complete semantic bleaching or reanalysis.

The description and analysis of *an³*, *nai¹*, and *mai²* reveal that these grams are in the earlier stages of grammaticalization reflecting meaning shifts from external communication situations (deictic objects and places) to internal textual indexes (anaphors, complementizers, and connectives) to those reflecting the speaker's attitude to what is communicated (certain adverbials, markers of emphasis, or markers of referent importance).[11] Instances specific to later grammaticalization stages of bleaching or reanalysis (phonological reduction, paradigmatic morphology, or paradigmatic zero marking) are not yet readily seen in Khamti. Because the constructions described in this dissertation reflect initial stages of grammaticalization —that maximize semantic shifts of the target grams from their lexical origins to more functional states—, the end result of the diachronic portion of the analysis is a Khamti-specific semantic network that displays certain grammaticalization pathways. These pathways will be shown to align with typological patterns of grammaticalization known in the literature, as well as with patterns that are particular to Tai Khamti.

1.3.3 Cognitive Grammar

A synchronic/diachronic view of language shows that languages adapt through language use, with its array of constructions at any single point in time being the outcome of grammaticalization processes. These processes are highly semantic if not conceptual in nature. The morphemes, *an³*, *nai¹*, and *mai²*, each grammaticalize based on their intrinsic (nominal and deictic) characterization. Therefore, a grammaticalization account necessarily requires explicit descriptions of meanings and their combinations of meanings (constructional meaning) in order to more accurately reveal the various stages of development. In this regard, a grammatical theory such as CG which views a speaker's linguistic ability as relying on established patterns (chunks) of processing activity, is aptly suited for the task. CG describes these patterns of linguistic processing activity as *units* and attempts to show how units build up over time from language use (Langacker 2011: 79).

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11 These are all topics taken up in this dissertation, based on the grammaticalization of the three target morphemes outlined in this introductory chapter.

In CG, there are three fundamental units that characterize all levels of language analysis, from morpheme to grammatical constructions. There is a phonological unit, a semantic unit, and a symbolic unit. A symbolic unit is simply the pairing together of a sound and meaning unit. This characterization of language at its core—the Saussurean sign with a linguistic form (*signifiant*) and its associated meaning (*signifié*)—builds up from a lexical item to include assemblies of symbolic structures that are found in complex, more grammatical items. All of the theoretical notions of CG (some of which are used in this dissertation) are postulated from this symbolic assumption, which calls for a careful semantic description.

For example, the Khamti CLAUSAL NOMINALIZATION construction discussed in (6a) above arises from the basic meaning of an^3 as a 'thing'. The simplest way to describe the meaning and ensuing function of an^3 is when it occurs as a deverbal nominal with the compound deverbal noun, an^3-kaa^2 'a dance', as discussed above in (6b). Both morphemes in the compound are basic individual symbols with a phonological and a semantic pole. In Figure 1.1 (a), an^3 'thing' is described as a symbolic unit with the phonemic unit, /an˧/, associated with its semantic characterization, a general bounded profiled entity. In Figure 1.1 (b), the verb kaa^2 '(to) dance' is shown with its phonemic pole, /kaa˦/, and semantic pole, an unbounded series of states transpiring through time (arrow). The components in (a) and (b) are basic linguistic symbols that correspond and merge to form a complex symbolic assembly in (c). The composite symbolic assembly in (c) shows the imposition of a boundary (from the characterization of an^3) onto that of the event, kaa^2. The time arrow that signals a sequence of states in (b) is now construed as a single bounded whole in (c). In short, a verb is construed as a noun because of the meaning of the general noun, an^3 to which it is juxtaposed. The composite level of analysis is just as symbolic as the components, shown in (c) with the phonemic unit /an˧ - kaa˦/ associated with its combined semantic description. In Chapter 6, I analyze many of the central constructions described in this dissertation with similar CG diagrams.[12]

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12 However, all ensuing diagrams are restricted to composite structures. This restriction on the diagrams may well oversimplify the analysis of any particular construction. But the basic objective is to present a single overarching motivation for all of the constructions.

(c)　‘(a) dance’

an˧ - kaa˩

(a)　‘thing’　　(b)　　‘(to) dance’

an˧　　　　　*kaa˩*
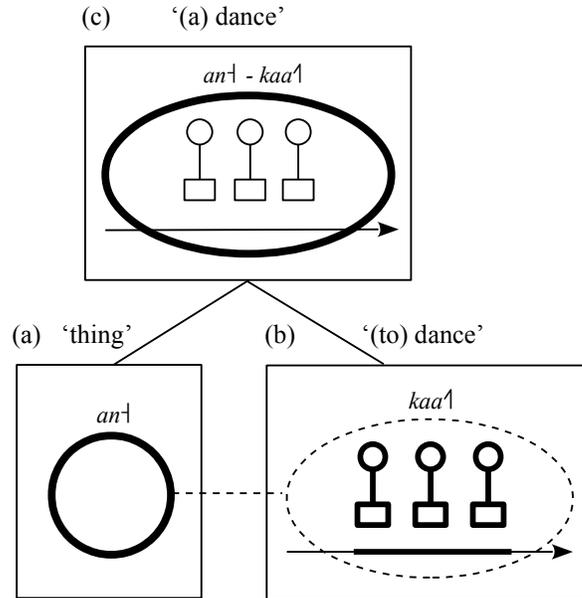
Figure 1.1. Khamti deverbal noun construction, *an³-kaa²* ‘(a) dance’

Any chunk of linguistic knowledge (morpheme, phrase, clause, idiom) is considered to be a construction because it is delineated as a form/meaning pairing, no matter how simple or complex (Bergen and Chang 2005: 147). A semantic analysis is central to a diachronic perspective because the constructions that arise in Khamti do so vis-à-vis semantic/pragmatic processes. This makes a theory such as CG well suited for the analytical approach taken in this dissertation. Synchronic distributions and diachronic explanations for those distributions are most readily analyzed within a theory that takes semantic description as its main focus.[13]

While grammar at all levels of analysis is observed to be merely comprised of assemblies of symbolic units, CG still uses traditional classifications such as morphology, lexicon, and syntax for convenience, but maintains that no rigorous

13 It is interesting to note that there is some neuronal evidence for a symbolic premise to linguistic theory. It is postulated that the primate brain has mirror neurons which mentally mimic actual sensory-motor actions (Bouchard 2010: 43; Gallese 2003). It is further suggested that specific to humans, mirror neurons have evolved two intra-representational systems (IRS), one capturing a percept and the other an associated meaning (Iacobni et al. 2004; Jacob and Jeannerod 2004). These mechanisms presumably set up an "offline" environment (one of mimicry) for the core elements of language to arise, exemplified linguistically as the Sausssurean sign (Bouchard 2010: 43). Once there are signs in the brain, they quickly proliferate and self-organize to arrive at the apparent complexity of language (Hurley 2008: 45).

boundary exists between these divisions. Rather, these linguistic categories follow a gradient-like organization leading to a well-known Langacker-ism, "It's all a matter of degree". This gradience effect in language is expressed with dashed lines in Figure 1.2 in which all of grammar can be diagrammed along two axes—symbolic complexity and schematicity to arrive at a symbolic continuum.
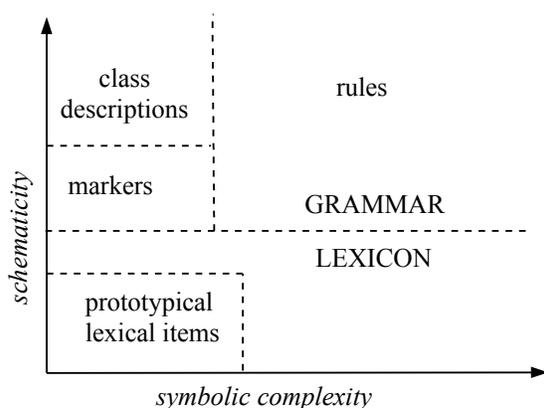
Figure 1.2. The symbolic continuum (Langacker 2013: 21, see also Broccias 2013: 194)

Symbolic structures span out on the X-axis to include more complex assemblies so that lexical items, markers, and class descriptions are understood as increasingly complex relational networks (captured by traditional linguistic rules). Moving up the Y-axis of schematicity, structures are arranged more from semantically detailed lexical items to more abstract morphosyntactic categories or classes. A consequence of this scenario is that all lexical and grammatical elements are meaningful, from the semantically fine-grained and lexical to the more grammatically coarse-grained and functional.

The parts of speech, as envisioned by CG, look like that shown in Figure 1.3. ENTITIES are conceptual elements that are expressed by linguistic predications, which are the semantic component of any linguistic unit. ENTITIES are divided into THINGS and RELATIONSHIPS, which are formal linguistic notions. A THING denotes all types of nouns. Particular to THINGS is that they are conceived as holistic units whether or not the semantic content includes successive states or sequential actions (i.e. the Khamti noun *an³* 'thing' or verb *kaa²* 'dance'). RELATIONSHIPS are antipodal to THINGS and

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profile the interconnections between ENTITIES. RELATIONSHIPS are sub-categorized along a processual parameter. ENTITIES profiling a PROCESS are typically associated with verbs that encode events, while entities that are NON-PROCESSUAL are typically associated with adjectives, adverbs, and adpositions, encoding states.

```
                    ┌──────────────┐
                    │  ENTITIES    │
                    │ predications │
                    └──────────────┘
                    ↙           ↘
          ┌──────────┐    ┌───────────────┐
          │  THINGS  │    │ RELATIONSHIPS │
          │  nouns   │    └───────────────┘
          └──────────┘      ↙           ↘
    ┌──────────────────┐    ┌───────────┐
    │  NON-PROCESSUAL  │    │ PROCESSES │
    │     (stative)    │    │   verbs   │
    │ adjectives/adverbs│   └───────────┘
    └──────────────────┘
```
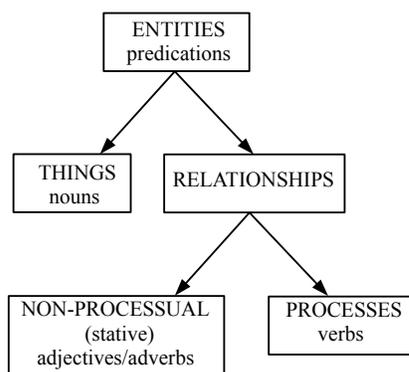
Figure 1.3. Grammatical classes in Cognitive Grammar

This introductory sketch of CG is the basis for the analysis I propose in this dissertation. Subsequent notions of CG will be discussed as they are required in analyzing specific aspects of the data in this dissertation. In essence, language is dynamic because conceptualization is so.

In addition to the description of individual morphemes and constructions discussed above, CG takes a unique approach to language description that entails more general conceptual processes. In this respect, *cognitive* in CG, refers to the fact that, as much as possible, theoretical notions should be developed out of "domain general" processes—those considered to behave in areas of cognition other than just language (Bybee 2010). These language-independent processes include association (connecting mental entities), habituation (enacting structures as routines), schematization (generalizing general notions from specific ones), categorization (using current categories to interpret new ones), foregrounding and backgrounding (tracing a moving object in relation to a more stationary one), and many others (Bybee 2010: 1-2; Broccias 2013: 192; Langacker 2013: 34-35, 58). Language makes use of, and therefore flows out from, these general cognitive capabilities. In this

emergent view, language is *adaptive* and reflects the dynamic nature of evolving constructions (Bybee 2010: 2).

Along these lines of the interaction of general cognition and language, this study further seeks to illustrate how a reference-point schema is a language-specific notion of a more general figure/ground processing routine. It is this schema that motivates the grammaticalization of all of the constructions associated with *an³*, *nai¹*, and *mai²*, showing how they are all related by following a similar pattern of figure/ground organization. Following Langacker (1993) and van Hoek (1997), I use a model of cognitive reference points to describe the morpheme-specific semantic contexts that are used for interpreting each functional extension.

A reference-point construction is one that includes a reference entity and a target entity expressing various degrees of salience pertaining to the construction as a composite. The reference sets up a mental space in the sense of Fauconnier (1985) or what Langacker calls a *dominion* (2013: 84; see also 1991, 1993). The reference point and its dominion establish an immediate linguistic context wherein a target entity is located. A target that is found inside the dominion is therefore construed in relation to that reference point and associates new information with it. In this fashion, a conceptual relationship is formed between a reference point and target and mirrors a linguistic topic/comment structure.

With the reference-point schema, conceptualizers (speakers, hearers, readers, thinkers, and so forth) invoke the new content aligned with a target entity by first bringing another more conceptually focal entity into conscious awareness (Langacker 1993: 5). For example, in the sentence, *Near the book are the keys*, the conceptualizers jointly locate *the keys* by way of first mentally accessing a more prominent or primary referent, *the book*. The reference point's dominion includes a spatial domain of experience which delimits an immediate context for interpreting a target entity. In this way, *the book* is a reference point whose dominion is a spatial location in which to find *the keys*. Another example is the possessive phrase, *the boy's knife*. The conception of *the boy* is a primary referent for identifying a specific instance of *knife* (van Hoek 1997: 53). And *the boy* is a reference point whose dominion is construed as a possessive area in which to specify an instance of *the*

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knife. A reference point, then, makes up the salient linguistic context from which to understand the target in relation to the construction as a whole. This kind of conceptual asymmetry between reference point and target is the single motivation that I propose to unite all linguistic manifestations of *an³*, *nai¹*, and *mai²*.

1.4 Methodology and organization of the study

The grammatical constructions in this dissertation are identified inductively on the basis of a textual corpus. The corpus is composed of transcripts of spontaneous speech and recorded conversations, all of which yield an ample data source with the necessary pragmatic background for understanding the full range of meanings of the three target morphemes as they appear in context. The corpus includes first- and third-person narratives, folktales and legends, fables that end in a moral for teaching the young, documents of exposition (such as how to farm paddy rice), exhortative documents (such as how to be a better moral person within the pillars of Buddhism), and letters written to friends. A secondary corpus of Tai Khamti documents translated from the English by native speakers includes basic public health topics (such as clean water and AIDS prevention), as well as some Bible stories. This secondary source of translated text has been rigorously edited with linguistically naive speakers in order to ensure natural language. The corpus currently encompasses approximately 90,100 words of text. Three fluent speakers of Khamti primarily contributed material to the language corpus and also served as my main language consultants, individually or as a team, although there were other speakers who made more minor contributions. This corpus, along with elicited material such as language lessons, contrasting phrases and clauses, and a variety of paradigmatic tables, formed the foundation of the language description in this dissertation.

I primarily use Fieldworks Language Explorer (FLEx) 7.1.1, the current standard field linguistic software package developed by SIL International (SIL 2011). With FLEx, I can upload Unicode versions of the language corpus in the Tai Khamti script, and with a concordancing feature, specify a context for each token of the target gram. The target morpheme is then aligned with a variety of sentential contexts, which I then categorize according to specific constructions. These categories then

provide the textual basis from which to conduct the linguistic analysis. The interpretation and understanding of each constructional context comes from my facility in the Khamti language, along with extensive and detailed interaction with my language consultants on cultural and linguistic particulars of each text.

The remainder of this dissertation is organized as follows: Chapter 2 provides a background to the Tai Khamti people and language in relation to an ethnographic setting and linguistic family affiliation. The context of this study is shown in relation to previous studies of Khamti and the chapter concludes with a typological section on the central grammatical features of Khamti that inform the more specific description of the nominal system that is the focus of this dissertation. Chapters 3-5 focus on providing a descriptive analysis of *an³*, *nai¹*, and *mai²*, respectively. For each of these data chapters, I first describe from a synchronic perspective all of the surface manifestations of each gram distributed across the wide variety of sentential contexts in which they occur in my corpus. These constructions are then discussed from a typological framework in order to reveal how Khamti is similar to and distinct from other languages. The conclusion of each chapter presents a semantic map that is specific to each grammaticalizing morpheme and is visualized as a semantic/functional network based on grammaticalization pathways observed across languages. In Chapter 6, I show how each of the constructions surrounding the grams *an³*, *nai¹*, and *mai²* can also be analyzed as cognitive reference-point constructions. These separate reference-point analyses point to an underlying cognitive schema that reasonably motivates their grammaticalization as a whole.

Chapter 7 presents conclusions, ties the analysis back to the Khamti speech community, and suggests future lines of investigation.

Chapter Two

The Tai Khamti and their language

2.1 Ethnographic setting

The Tai people, subsuming many subgroupings such as the Tai Khamti, are a vast ethnic group originating from Mongolia and northern China. Any record of the initial origins of the Tai is obscure and mostly based on traditional legends and stories, with some saying the Tai peoples pre-date even the Chinese (Gogoi 1989: 3). The hardship of the semi-desert north drove these early Indo-China tribes southward into central China and eventually to northern Vietnam and a proposed homeland around the ancient capital of Ba Thục in the vicinity of Cao Bang in present day Vietnam (Chamberlain 1975: 60). From this central region, there were several distinct migrations, one to the southwest into Laos and Thailand and a second to the direct west in the Dehong region of Yunnan province, Southwest China. Today, the Tai span a vast region extending from Assam (India) in the west to Kwangsi and Hainan (China) in the east and from interior Yunnan (China) in the north to the southern tip of Thailand. The major concentration of Tai dialects is found in Thailand, Laos, Myanmar (henceforth, Burma), Vietnam, and Yunnan, China, as shown in Figure 2.1.

In Burma, the Tai people migrated from Yunnan, China and are known as *Shan*, which some say is the Burmese rendition of Siam (the old name for the Thai of Thailand). The earliest reports of Shan (Tai) migration into the border areas of Burma occurred around the 6th century and gradually extended along the Shweli river from the Dehong region of Southwest China and settled into what is today Shan State, Burma (Scott and Hardiman 1900: Vol I). The Shan then began to expand within Burma to the south, west, and north in the 12th and 13th centuries (Edmonson 2008: 184). The original Shan migrants who settled in Shan State were called Tai Yai (Big Tai) or Tai Long (Great Tai). The Burmese call them Shan, but the people still refer to themselves as Tai Yai or Long.
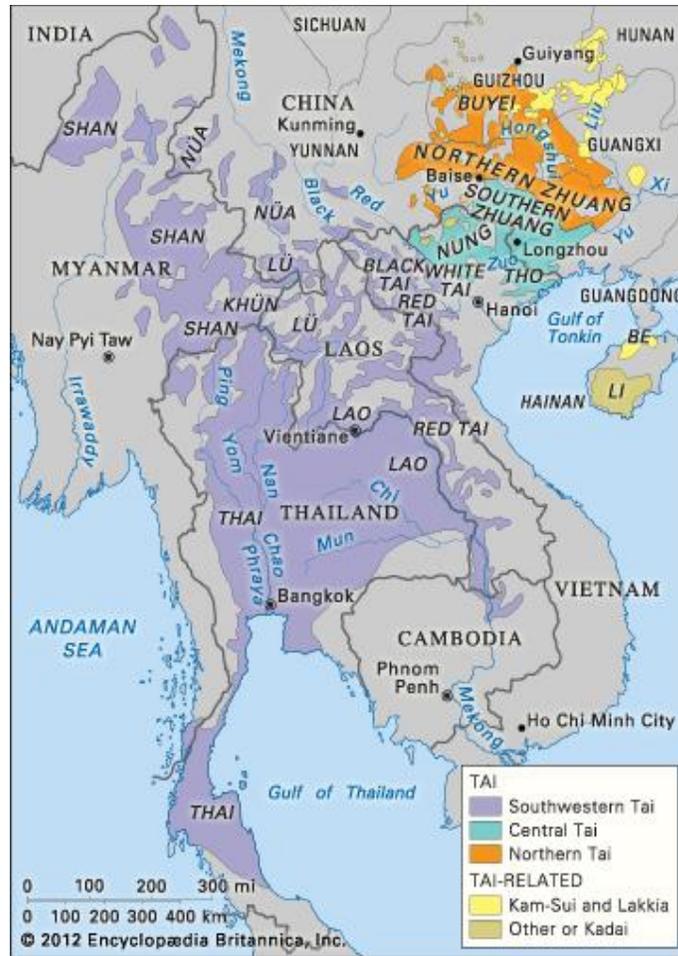
Figure 2.1. Tai languages within Mainland Southeast Asia
(http://www.britannica.com/EBchecked/topic/580547/Tai-languages)

All other subgroupings also refer to themselves as Tai, usually with a restrictive noun or adjective that indicates a location of origin for the subgroup. For example, the Tai Khamti are the subgroup of Shan that migrated north and the name "Kham-ti" is actually two words, *kham* meaning 'gold' and *ti* meaning 'place'. This 'place of gold' has legends associating the subgroup to the northern region of Putao, Burma. The practice of geographical autonyms arises from the historical Shan hereditary system of autonomous districts associated with a local noble or *saopha* 'prince' (Edmonson 2008: 190).

Tai peoples are lowlanders and so all of their migration routes follow major river valleys, as shown in the map in Figure 2.2.
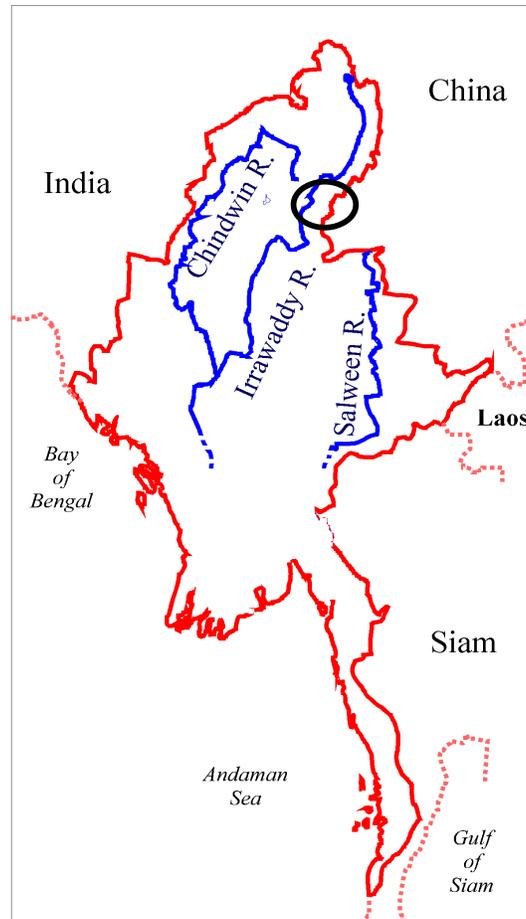
Figure 2.2. The major rivers for Shan (Tai) migration along the Dehong region of Yunnan, China (the circle). (British & Commonwealth Orders of Battle Website http://www.rothwell.force9.co.uk/burmaweb/geography.htm)

The migration passage for the Khamti extends north from the Shweli river (not pictured) along the great Irrawaddy river to the Mogaung area. From there they followed the Malikha river, a tributary of the Irrawaddy, and migrated about 75 kilometers north to Putao, which is considered the heartland of the Khamti in the far north of Burma. The Khamti spread out west into Northeast India along the Brahmaputra river in the regions of Arunachal Pradesh and Assam. A second group of Khamti traveled southwest inside the Burmese border and settled in the Chindwin

river valley, mostly in two areas, Hkamti (the Burmese spelling for Khamti) and Homalin.

Today, the Khamti in India number between 5,000 and 10,000 (Morey 2008: 209) and in Burma approximately 8,000 (Simons, et al 2009). In Putao and NE India, there are self-reports by the Khamti of approximately 20 villages with populations between fifty to several hundred people. In the Chindwin river basin, there are reported to be about 5 villages and in the Mogaung area, the location from where the initial northern migrants were ruled, there are reported to be another 15 villages. Boruah (2001: 41) counts 30 Khamti villages in Arunachal Pradesh and lists 7 more in Assam (see also Morey 2005a: 24). Ethnographic information about the Khamti focuses almost solely on those residing in India with little to no data about those living in Burma (Hattaway 2004: 131). The particulars outlined here are from my own field notes of extensive interaction with Khamti people inhabiting the towns and villages specific to Burma.[14]

Khamti follows a stratification system that ascribes status to people in society stemming from a historical hierarchy of ranks starting with royal lineage from which chiefs and princes ruled. Below this aristocracy were Buddhist religious leaders and monks with their own institutional hierarchy and, finally, the laypeople with varying degrees of wealth, poor beggars, and slaves. Slave status was commonly due to indebtedness or other misfortune. Today, there is no recognized royal family or lineage, although the Khamti themselves can easily trace a lineage if they so desire. Each contemporary town or village is run by a headman with all other people ranked in social status according to wealth, education, or family history. While there are the desperately poor who live and forage in the depleting forests, there are no slaves today.

Ascribed status can shift throughout one's lifetime. For example, one of my language consultants tells a story of when she was in grade school. Her family was of above average status due to family lineage. However, this all changed one night when the family house burned down. From that point on, she was considered poor, shamed,

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14 The two dialect areas of the Khamti living in the two countries are linguistically similar and the broader features of Khamti life are the same for both countries. For ethnographic material specific to India, see Elias (1876), Gurden (1895), Dodd (1923), Gogoi (1989), and Wilaiwan (1998).

and of low status because of karmic law, which states that the calamity occurred due to some evil deed of a past life. After struggling to get an education, she found opportunity to live in larger towns with better education systems, travel to a neighboring country, receive more education, and learn English in the process. Each of these milestones can boost one's status, so that now, when she takes excursions back to her community, she is received with honor, her shame is removed, and her status is much higher.

The Khamti are staunch followers of Theravada Buddhism, heavily influenced by Burmese Buddhism as far back as the initial Khamti (Shan) migration. Buddhism holds sway over everyone. Monks command much respect in the community and laymen will sometimes take a month to leave family and friends to go meditate at a monastery, obtaining merit. Young boys will go into the monkhood for short periods of time throughout their childhood, bringing merit to their mothers. Many teenage boys live at the monastery while receiving a meager education consisting of mostly rudimentary literacy and arithmetic, but mostly it focuses on religious memorization. Although it is less common, women will become nuns, while some laywomen will go off to the monastery for a month at a time in order to meditate.

A Buddhist shrine occupies an important place in each house in the village for the purpose of meditation, which is performed several times a day. A veneer of animistic beliefs overlay Buddhism for the Khamti. Their beliefs include a variety of spirits that dwell in trees, both good and bad—depending on the kind of tree, as well as ghosts. To deal with the spirits, every village has a shaman who is consulted regarding rites of passage or any bad karma arising from interaction with the spirit world. A shaman's mantle is passed down from his father. Ghosts are different than spirits in that they are real people that transform into various forms, both animate and inanimate, in order to "bite" people for the purpose of capturing their soul. Ghosts work at night, but in the day are recognizable as people. For example, my main language consultant has a childhood friend who is well known as a ghost. They still talk to one another occasionally. Every one of my language consultants has at least one personal story of an encounter with ghosts in their lives, as well as many third-

party stories. Several texts in my Khamti corpus pertain to ghosts.

Each village has an elected headman who is the first person of consultation in any civic or political strife, either within the community or from the outside.[15] There is usually a temple and monastery compound in every village and a particular day of the week designated as market day. Market days are usually coordinated with neighboring villages so that people go to all the markets to trade fruit, vegetables, and wares.

The main industry is growing and marketing wet-paddy rice, which follows a tried-and-true planting methodology. The farm has seasonal aspects of work marked by various festivals. However, many Khamti today are without land and so the trading of goods or traveling to outlying jade mines and cities for work is more common. Most people are poor and have a subsistence lifestyle. There are many idle hours in a day and many people are addicted to opium, especially the jobless. Opium addiction is becoming an ever-increasing problem among young people. Literacy rates are low and educational opportunities in the towns are very limited, while in the villages further out from town, non-existent. Some hope for the future lies in grassroots, mother-tongue literacy programs that help children get a start in education in their own language, which allows them an easier transition into learning in the national language, Burmese, in order to attend better national schools in larger towns. A few Khamti are even moving to the cities to further their education.

2.2 Language family and linguistic context

The large-scale linguistic context for the Tai language family is not without controversy. The main argument concerns whether Tai is related to Chinese or to Austronesian (Luo 2008). Tai studies, therefore, includes ongoing debate within Sino-Tibetan research. Under the rubric of Sino-Tibetan, however, the number of shared linguistic items between Tai and Chinese is far greater than that between Tai and any of the Tibeto-Burman languages (ibid.: 23). This is important to note at the outset because Tai Khamti, specifically, is located within a linguistic area that is surrounded

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15 My fieldwork was conducted with residents of these villages in bigger cities, so permission from village headmen was not required. Individual permission from my language consultants is documented with the Human Research Ethics office of the Faculty of Graduate Studies Research (FGSR) at the University of Alberta.

by Tibeto-Burman languages. Later in this dissertation it will be shown that Tai Khamti has adopted certain morphosyntactic features from its Tibeto-Burman neighbors. Breaking down the linguistic setting further, Tai is part of the Tai-Kadai language family, as shown in Figure 2.3 below. While there have been and are different hypotheses, the somewhat tentative, but current consensus is that Tai and Kam-Sui are subgroups of Kam-Tai with the remaining Hlai and Kra subgroups making up the Kadai branches. These languages are really outlier languages that broke off much earlier than Kam-Sui and Tai (Edmonson and Solnit 1997b: 3; Diller 2008: 7).[16] According to Li (1977), Tai itself can be broken into three subgroupings, Northern, Central, and Southwestern. The total number of Tai speakers is over 80 million (Edmonson and Solnit 1997: 1) with the largest group of speakers being the Thai of Thailand with a population of over 50 million.[17] The second largest population of Tai speakers are the Zhuang of China with over 15 million, followed by Burmese Shan with about 3 million.

More recently, the Southwestern subgrouping of Tai has been reconfigured into a northern and southern tier. The term *northern tier* is used to describe those languages that trace their heritage and migration from Dehong, China, into Burma along the Shweli river (Edmonson and Solnit 1997: 340; Edmonson 2008:184). Tai Khamti, then, is a northern tier language of Southwestern Tai in the Tai-Kadai language family, closely identified with Burmese Shan, as shown in Figure 2.3.

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16 For a more thorough background of the related Tai-Kadai subgrouping proposals, readers may consult Edmonson and Solnit (1988, 1997a), Robinson (1994), Thurgood (1994), Luo (1997, 2007), Diller (2000), Ostapirat (2000, 2004), Matisoff (2001), Edmonson (2007), Diller et al. (2008).

17 It is helpful to note that Tai spelled with the aspirated *t* refers to the specific language of Thai (also referred to as Standard or Central Thai) spoken in Thailand and to the many sub-varieties of Thai within her borders such as Northern Thai, Northeastern Thai, or Southern Thai. Tai is also seen with the spelling, Dai.

Tai-Kadai

Kam-Tai   Hlai (Li)   Kra (Geyang)

                               Baoding
                               Tongshi   Gelao
                               Yuanmen   Lachi
                               Heitu   Laha
                                                            Buyang
                                                            En
Kam-Sui   Lakjia   Tai   Qabiao
 Kam   Be
 Sui
 Maonan   Northern   Central   Southwestern
 Mulam   Bouei   S. Zhuang
 Then   N. Zhuang   Nùng
 Mak   Yai   Tày   Northern tier   Southern tier
 Chadong   Saek   ...   **Shan**   Lue (Dai)
 ...   Mène   Lanna (N.   Thai (Central or
                ...   Thai)   Standard)
                                             Dehong   S. Thai
                                             Khamti   Lao
                                             Phake,   Black, White,
                                             Aiton   Red
                                             (Ahom)   Phu
                                             ...   ...

Figure 2.3. The northern tier of Southwestern Tai

2.3 Previous studies on Tai Khamti

There are a number of previous studies on Khamti dating back to the 1700s, most of which use data that were collected from speakers living in Northeast India, whereas this dissertation deals with data collected from speakers in Burma. I discuss each study chronologically, starting from the earliest, gathering much of my information from Stephen Morey's thorough overview of Tai languages spoken in Assam, Northeast India (2002, 2005a).

The earliest source for Khamti is a wordlist by Francis Buchanan (1799: 228-229) that is referenced in Grierson's *Linguistic Survey of India, Vol. 2* (Gogoi 1989: 291). Buchanan compares a list of 50 words from the related languages that he calls Tai-nay (Siamese or Thai), Tai-yai (Burmese Shan), and Tai-loong (Khamti or perhaps Tairong). This Khamti list of words has no marking for phonemic tone,

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vowel length, nor any citation of sources.

Brown (1837) is a source wordlist that compares the five languages: Khamti, Shyán (Burmese Shan), Láos, Siamese, and Ahom. In this study, Brown also fails to mark tone or name his sources. However, twelve years later, Brown's list of Khamti words is included in Robinson's wordlist of 282 words (Robinson 1849: 342-349) in which Brown's words are now marked with tone. Robinson acknowledges that Brown provided him with Khamti words, but Robinson's emphasis on marking phonemic tone makes his study more helpful to current Tai linguists, such as Morey, who analyzes Robinson's tone data for Khamti (2002: 51, 2005b). Gurden (1895) also published a brief ethnology of the Khamti, highlighting their migration and their integration with neighboring languages, like Sinpho, Tairong, and Ahom. Of linguistic interest is Gurden's succinct linguistic comparison between Khamti and the much larger population of Ahom, to which he was claiming a close connection. He selects 32 words at random from a much larger wordlist to compare Khamti and Ahom and finds 18 of those words to be identical. Gurden claims to have used Hodgson's vocabularies, but does not cite this source (Gurden 1895: 161).[18]

While the aforementioned research was largely limited to wordlists, Needham (1894) is the first substantive grammatical study of Khamti grammar as spoken in India. Needham accepts the existence of phonemic tone yet fails to mark it himself. He also fails to distinguish vowel length or some vowel height contrasts, nor does he refer to any sources (Morey 2005a: 39-40). Needham's study of Khamti includes 8 pages on the writing system and script, 72 pages on word classes (nouns, adjectives, pronouns, adjective pronouns, verbs, and adverbs), 5 pages on syntax (including tense/aspect marking and a list of syntactic rules), 8 pages on miscellaneous phrases, 15 pages of text material, and 71 pages of vocabulary (Morey 2000: 56).

Grierson (1904) is the most noted of the earlier researchers as his survey addresses the Tai languages spoken in India. In his research, he provides 9 pages on Khamti grammar and 15 pages on Khamti texts (Grierson 1904: 141-165; see also Gogoi 1989: 263-311; Morey 2005a: 41). Grierson's analysis of the Tai languages is based on a translated text of the *Parable of the Prodigal Son* and a wordlist. Grierson

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18 Morey, on the other hand, does cite Hodgson (1850) as a minor source for wordlists of Tai
languages in India but does not discuss him any further (Morey 2005a: 34).

fails to note his sources of data or the names of language consultants, as was common practice in this era. Furthermore, his glossing of the translated text appears to be based on his global knowledge of the source text alone, rather than on a word-for-word translation (Morey 2005a: 41-42).

Harris (1976) represents the first of more recent linguistic studies on Khamti. His source is a single speaker who was a Buddhist monk living in Delhi at the time. Harris presents a phonetic and phonemic description of the tones, consonants, and vowels of Khamti and concludes with a comparative wordlist for Khamti and Tai Mau, a Chinese Shan dialect that he had published on a few years earlier (Harris 1975). The wordlist consists of about 600 words presented in a very random order.

Wiedert (1977) is another study on Khamti phonology focusing mostly on the vowels. Like Harris (1976), Wiedert posits phonemes along with a phonetic realization. However, according to Morey (2005a: 56), Wiedert does not describe a distinction between the vowels /ɯ/ ~ /ɤ/, which is found in Harris (1976), Chow Khouk Manpong (1993), and Cao Ho Pau (2011).

Wilaiwan (1986) presents a grammatical discussion of basic word order in Khamti, but does not indicate data sources. Her main conclusion is that SOV is the dominant word order for Khamti, which is uniquely distinguished from its Tai SVO origin.[19] I discuss Khamti word order in Sections 2.4.3. One other observation in this study is that Wilaiwan (1986: 178) is the first to describe what she calls a set of object-marking postpositions, but does not discuss their lexical origin, as I do in Section 5.6 with the morpheme *mai²*.[20]

Diller (1992) undertakes a significant study of the Tai languages located in India, due in large part to the inclusion of a 13-page Tai-Aiton text. Diller also outlines a thorough historical background of the Tai in India, with a focus on the dead "ghost" language of the most numerous (Tai)-Ahom people. This study also includes useful comparative syntactic analyses of the three remaining living Tai languages of

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19 This discussion of Khamti word order is also taken up by Morey (2006, 2008: 221) who suggests that Khamti could still be SVO. In Sections 2.4.3 and 5.8, I demonstrate that Khamti (at least the Khamti located in Burma) follows a basic word order of SOV.

20 Morey also calls these Khamti object markers *postpositions* similar to certain goal and benefactive *prepositions* in Phake, but he also makes the disclaimer that he has not been able to investigate Khamti in enough depth (Morey 2005a: 295).

that region (Morey 2005a: 66).

Morey (2005b) provides an analysis of the tone systems of four Tai languages currently found in India: Aiton, Khamti, Khamyang, and Phake. Morey uses the tone description methodology that Gedney established for Tai languages for the purpose of historical reconstruction of Proto-Tai (Gedney 1972). Morey's analysis of Khamti tones confirms Harris' (1976) for Khamti spoken in India.

I have published two studies on Khamti, a text collection of 7 texts with an accompanying vocabulary (Inglis 2006), which is partially included in this dissertation in Appendix B, and a basic description on the nominal structure of Khamti (Inglis 2007). These studies are based on elicitation and texts from fluent speakers living in Burma collected during field trips in 2005-2006.

There are two substantial indigenous works on Khamti that are not accessible in English. Chaw Khouk Manpong (1993) published a two-volume set of primers used in teaching an India-based revised orthography under the Khamti Literature Committee in India. Morey (2005a: 71) says this primer was the first to mark tone in the Khamti orthography or even the orthography of any of the Tai languages of India. A second and completely separate Khamti Literature Committee in Burma has also revised the old Khamti orthography. This revised orthography from the Burma side also marks tone and vowel length, which is represented in the Tai Khamti – Burmese Dictionary (Cao Ho Pau 2011). While there are currently two Khamti orthography revisions operating under separate literature committees representative of the two countries, the differences between the two orthographies are actually minor, dealing with the marking of tone, certain representation of vowels and vowel length, and stylistics. There is some ongoing dialogue between the two main communities of Khamti speakers regarding the development of a single updated orthography and joint literacy efforts.

2.4 Grammatical features of Khamti

This section outlines the basic grammatical features of Tai Khamti relevant to this dissertation. The features are presented in a brief sketch under the basic divisions phonology, morphology, and syntax. The topics presented serve to inform the more

specific analyses presented in subsequent chapters.

Khamti, as part of Tai (or Dai) share the following general characteristics. They all (1) have tone with every syllable and very little tone sandhi, (2) modifiers are post-posed, (3) clause structure is verb medial (although for Khamti alone the more pervasive word order is SOV), and (4) morphemes are largely monosyllabic (Manson 2005: 20; Edmonson and Solnit 1997b: 7-11).

2.4.1 Phonology

The consonant and vowel inventories of Khamti are shown in Tables 2.1 and 2.2. Each of the sounds represented have a correspondence in the Khamti script. This is not to suggest that each sound is actually phonemic, but rather these sounds are the ones represented in the Khamti script. The retroflexed [ɻ] is complementarily distributed with the alveolar flap [ɾ], being exclusively observed morpheme-initially. Yet, both instances of the liquid receive a unique character in the Khamti script. The vowel and diphthong contrasts in Table 2.2 are not evenly distributed across open and closed syllables. For the most part, however, the inventories presented here are phonemic ones.

Table 2.1. Khamti consonant inventory

	LABIAL	ALVEOLAR	ALVEO-PALATAL	VELAR	GLOTTAL
ASPIRATED	p^h	t^h		k^h	
UNASPIRATED	p	t		k	ʔ
FRICATIVE		s			h
AFFRICATE		ts			
NASAL	m	n	n^j	ŋ	
LIQUID		l/r	[ɻ]		
GLIDE	w		j		

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Table 2.2. Khamti vowel and diphthong inventory

		VOWELS				DIPHTHONGS			
		FRONT	MID	BACK					
HIGH	(open)	i iː	ɯ ɯː	u uː	ia	aɯ	iu	ua	ue
	(close)	e eː		o oː	ai	aːi	au	aːu	
MID		ɛ	ə	ɔ	iau	uai			
LOW			a aː						

The tone inventory in Khamti is shown in Table 2.3. Each syllable bears a single tone. There are four contour tones, three falling and one rising, along with a single level tone. These are represented with a relative frequency scale of 1 to 5 (with 1 being low), as shown in the middle column in Table 2.3. The number assigned to each tone in the data in this dissertation is arbitrary, but hopefully not cumbersome for the reader. In this way, the morpheme *an³* is shown with the tone 3 and represents a mid-fall tone. *Nai¹* is marked with tone 1 (low-fall) and *mai²* is marked with tone 2 (mid-rise).

Table 2.3. Khamti tone inventory

TONE	RELATIVE FREQUENCY 1 (low) to 5 (high)	ARBITRARY TONE NUMBER ASSIGNMENT
low-fall	21	σ¹
mid-rise	23	σ²
mid-fall	32	σ³
high-fall	52	σ⁴
high-level	55	σ⁵

The high-level tone 5 is to be considered the default tone in Khamti. The term *default* is used on a token frequency basis only, not in a formal phonological sense. In a basic wordlist of 108 words comprised of 131 morphemes (Inglis 2005), the high level tone occurs 63 times making up 48% of the total. The other four tones together make up 52% of the total tokens. I discuss the *default* tone as a phonological aspect of grammaticalization with the gram *nai¹* in an interrogative construction in Section 4.3.6.

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2.4.2 Morphology (nouns, classifiers, pronouns, predicate adjectives, verbs)

Nouns

Proper nouns are the names of people, places, and special prefixes to names. Some people have morphemes as prefixes to their names, especially if they are of high status in society. The proper prefix is gender-specific and can later be used as a pronoun (a free-standing morpheme) in subsequent discourse. The prefix for 'Miss' is expressed as *naang⁴* and for a younger, unmarried man, *tsaai³* is used. For older and usually married men, the specific morpheme *tsau²* 'lord' is used more generally as a prefix similar to a respectful 'Mr.', while for older married women, *tsuai¹* 'Mrs.' is used.

Sons and daughters are each assigned a unique prefix that positions them in the birth order (for up to twenty-six children). These prefixes are commonly used by family and friends in the village as informal names with context determining who is referenced. In Table 2.4, I show only the first three, because some of the data examples in this dissertation list these prefixes as proper names.

Table 2.4. Representative Khamti birth-order prefixes

BIRTH ORDER	MALE	FEMALE
first	*Aai²*	*Yee²*
second	*Njii³*	*Ii⁵*
third	*Saam*	*Aam³*

Tai languages, for the most part, have minimal morphology. *Compounding*, however, is found in abundance as a word formation pattern. Table 2.5 shows some examples observed in the corpus. A compound noun is formed with an initial noun head followed by a series of nouns and verbs (and prepositions).

Table 2.5. Representative Khamti compound nouns

GLOSS	COMPOUND	CONSTITUENT GLOSS
'thief'	*phuu²+laak¹*	person + steals
'overpass'	*taang⁴+khoo⁵ +kaai⁵+kan²neeu⁵*	road+bridge+connect+above
'underpass'	*taang⁴+lam¹+nin³ pai³ naeu⁴ nin³*	road+dive+ground+move+into+ground
'shoppers'	*phuu²+seu¹*	person+buys
'citizen'	*kuun⁴+meeung⁴*	person+nation
'pickup truck'	*kaa⁴ +luung⁵*	vehicle+big
'motorcycle'	*kaa⁴ +uan⁵*	vehicle+small

Classifiers

Each noun belongs to a subgroup or class of nouns and potentially forms a *numeral-classifier* construction, which is very common in Southeast Asian languages. Tai languages, especially, are replete with rich numeral-classifier constructions. Standard Thai, for example, has well over fifty classifiers (Inglis 2003). While they are labeled numeral-classifier, classifiers also form similar nominal-modifying constructions such as indefinite-classifier, noun-classifier, and predicate adjective-classifier constructions. I detail the classifier constructions as they relate specifically to the morpheme *an³* in Section 3.3.

The classifier, itself, groups a set of nouns based primarily on some semantic feature or group of features, such as flat-thing, globular-thing, pointed-thing, and so forth. Some examples of Khamti classifiers and their semantic characteristics are shown in Table 2.6. Near the bottom of Table 2.6 are the nouns *maan²* 'village' and *khaam⁴* 'language', which are found as both the head noun and classifier. I refer to this special situation—in which the noun and classifier are the same form—as a repeater classifier (for Thai see Inglis 2003: 236). A repeater classifier construction represents a limiting case in which the classifier is specific only to the one noun.

Table 2.6. Representative Khamti classifiers

NOUN	GLOSS	CLASSIFIER	GLOSS (semantic feature)
hoo⁵kham⁴	king	*paa⁴*	royal
pying⁴	woman	*koo¹*	human
kuun⁴	people	*koo¹*	human
tsang¹	elephant	*too³*	animal (legged)
phun⁴	log	*luun²*	small long
khau⁵pha¹	corn	*khuan¹*	cylindrical
naa⁴	field	*paa²*	expanse
tuun²mai¹	tree	*tuun²*	tree-like
phak⁵	curry	*phan⁴*	kind/type
kaa⁴	bus	*lam⁴*	vehicle
mak⁵muang⁵	mango	*luk¹*	globular
waai⁵	rattan.string	*phuut⁵*	roll
maan²	village	*maan²*	village (repeater classifier)
khaam⁴	language	*khaam⁴*	language (repeater classifier)
paang³	hole	*paang³*	hole (repeater classifier)
tiang⁴liik⁵	grate	*an³*	thing

Examples of repeater classifier constructions are shown in (7) and (8) with the classifiers *khaam⁴* for language and *maan²* for village.[21]

(7) *khaam⁴   saam⁵   **khaam⁴** piin⁵   tan²   uu⁵*
  language three CLF   able.to speak IMPF
  '(I) am able to speak three languages'

(8) *meeu³nan¹ maan² Phaang⁵khai⁵ nsii⁵   **maan²** tai⁴ **maan²** luung⁵ **maan²** leeung³*
  long.ago village Phangkhai   name CLF Tai CLF be.big CLF INDEF
  yang⁴ uu⁵
  be   IMPF
  'A long time ago, there was a large Tai village called Phangkhai'

In (8), each modifier, *Phaang⁵khai⁵ nsii⁵* 'named Phangkhai', *tai⁴* 'Tai', and *luung⁵* 'be.big' features an individual instance of the classifier, *maan²*, while in (9), the two modifiers, *nguu⁴* 'snake' and *kau³* 'be.old' are are consecutively strung together without their own individual classifier, but rather a single classifier, *paang³*.

(9) *tuun² Mnang⁵ mai² paang³ nguu⁴ kau⁵ **paang³** leeung³ kaw¹ yang⁴ uu⁵*
  tree Manang LOC hole snake be.old CLF INDEF also be IMPF
  'There is an old snake hole at the Manang tree'

---

21 In my corpus, I also have *khaam⁴* 'language' taking the classifier *phan⁵* 'kind'.

A general classifier *an³* is used with some nouns, such as *tiang⁴liik⁵* 'grate' in Table 2.6. This is the all-purpose classifier and, I argue, has grammaticalized from the all-purpose noun *an³* 'thing' (see Chapter 3).

Nouns are pluralized with the bi-morphemic *nai¹khau⁵*. *Nai¹* in the plural compound is the grammaticalized demonstrative 'this' and *khau⁵* is the third plural morpheme which grammaticalizes to indicate plurality (Section 4.3.5). While the marking of plurality is optional for Khamti, the increased frequency of marking plurality, in general, is striking compared to other Tai languages.

Pronouns

Khamti has a *personal pronoun* system that exploits a complicated social network of relationships and kinship. The basic system is shown in Table 2.7. The pronouns are generally categorized according to the features singular, dual and plural. Within the first person dual and plural division, there is a further division based on inclusivity/exclusivity.

Table 2.7. Khamti personal pronoun system

	SG	DU		PL	
		INCL	EXCL	INCL	EXCL
1	*kau³*	*haa⁴*	*haang⁴kheeu⁵*	*hau⁴*	*tuu³*
	'I'	'me and you'	'me and him/her'	'we all'	'we (not you)'
2	*maeu⁴*	*suang⁵kheeu⁵*		*suu⁵*	
	'you'	'you two'		'you all'	
3	*man⁴*	*suang⁵khaa⁵*		*khau⁵*	
	'he/she/it'	'they two'		'they'	

There are no pronominal forms differentiating grammatical relations, so subject and object personal pronouns are distinguished on other factors such as syntactic position and context. A *reflexive* morpheme, *phuu²tsau²* (often reduced to *p-tsau²*), is juxtaposed to the right of a personal pronoun to form a reflexive. The personal pronouns in Table 2.7 also function with the same form as personal possessive pronouns when modifying a head noun.

Demonstrative pronouns are argued to be a separate and basic lexical category in all languages (Diessel 1999: 1, 2006: 264). In Khamti, they form a three-way division based on proximity to the speaker or hearer. The plural demonstrative

pronouns feature the plural morpheme *khau⁵*, discussed above. The demonstrative pronouns are shown Table 2.8 and described in detail in Chapter 4, since they all involve compounds with *an³* 'thing'.

Table 2.8. Khamti demonstrative pronouns

	SG	PL
NEAR SPEAKER	*an³-nai¹* thing-this lit. 'this thing/one near me' 'this'	*an³-nai¹ khau⁵* thing-this PL lit. 'these things/ones near me' 'these'
NEAR HEARER	*a-maeu⁴-nai¹* thing-2SG-this lit. 'this thing/one near you' 'that'	*amaeu⁴ nai¹ khau⁵* thing-2SG-this PL lit. 'these things/ones near you' 'those'
AWAY FROM SPEAKER AND HEARER	*an³-pun²-nai¹* thing-afar-this lit. 'this thing/one away from us' 'that over there'	*an³-pun²-nai¹ khau⁵* thing-afar-this PL lit. 'these things/ones away from us' 'those over there'

Predicate Adjectives

Adjectives pattern as verbs in Khamti. Evidence for this is shown by comparing an intransitive clause with a stative clause. An intransitive clause links a clausal subject with a predicate (subject complement) and uses the sentence-final imperfective marker *uu⁵*, as shown in (10). Likewise, a stative clause links a clausal subject with a predicate adjective and uses the same imperfective marker, *uu⁵*.

(10)   *nam¹*   *mai²*   *tsang¹*   *nai¹*   *maa⁴* ***uu⁵***
       water   LOC   elephant   DEF   come   IMPF
       'the elephant comes to the water'

(11)   *tsang¹*   *nai¹*   *uan⁵*   ***uu⁵***
       elephant   DEF   be.little   IMPF
       'the elephant is little'

Representative Khamti predicate adjectives are shown in Table 2.9 following adjectival categories set out by Dixon (1982).

Table 2.9. Representative Khamti predicate adjectives

PROPERTIES	*khiang⁴*	*waan⁵*	*naau⁵*
	'be.hard'	'be.sweet'	'be.cold'
DIMENSIONS	*yaeu⁵*	*naa²*	*maip⁵*
	'be.big'	'be.thick'	'be.flat'
AGES	*maeu⁵*	*num⁵*	*kau⁵*
	'be.new'	'be.young'	'be.old' (for objects)
VALUES	*nii³*	*kiin³nii³*	*sian²*
	'be.good'	'be.delicious'	'be.pretty'
COLORS	*niang³*	*nam³*	*khiau⁵*
	'be.red'	'be.black'	'be.green'
HUMAN PROPENSITIES	*khaan¹*	*aai³*	*am⁵*
	'be.lazy'	'be.shy'	'be.intelligent'
SPEED	*kian⁵*	*khaan⁴*	
	'be.fast'	'be.slow'	

Stative verbs, such as those in Table 2.9, can function as the predicate complement in copular clauses with sentence-final *uu⁵*, but not as the nominal complement in equative clauses with the sentence-final *nam⁵*, as observed in (12) and (13).

(12) *man⁴ tsau² yaa¹ tsau²   maan² nai¹ **nam⁵***
      3SG   lord TOP headman village DEF EQU
      'He [polite] is the village headman [lit. lord]'

(13) **tsang¹   nai¹   uan⁵   **nam⁵***
      elephant DEF be.little EQU
      'the elephant is little'

As observed in (14), an adjective can only function as the second constituent in an equative clause when it is nominalized by the noun *an³* 'thing' (see Section 3.7).

(14) *kau³ yaa¹ **an³**   khian⁴ yaeu⁵ nam⁵*
      1SG TOP one   most   be.big EQU
      'I am the biggest [oldest] one'

    As nominal modifiers, adjectives occur in two forms, as a plain predicate adjective, as shown in (15), and as a nominal adjective, as in (16). The adjectival verb *khaan¹* 'be.lazy' in (16) is compounded with the noun *an³* 'thing', resulting in a (deverbal) nominal construction (see Section 3.2).

(15) *bap¹ [kau⁵] nai¹*
      book be.old DEF
      lit 'the being old book'
      'the old book'

(16) *Aai⁴ [**an³** khaan¹] nai¹*
      Aai one be.lazy DEF
      lit. 'Aai [first-born son]: the one being lazy'
      'the **lazy** Aai [first-born son]'

The nominal adjective construction in (16) expresses a pragmatic emphatic effect that arises from the appositional usage of the all-purpose noun *an³* (see Section 3.6.2). Among the adjectival dimensions listed in Table 2.9, the color predicates seem to function as nominal adjectives when modifying nouns.[22]

Verbs

Along with stative verbs (predicate adjectives) mentioned above, there is a large class of active verbs. Common to Tai generally, Khamti exhibits a **coverb** system in which certain verbal morphemes grammaticalize as verbal markers that co-occur with the verb. The verb-coverb complexes are also known as serial verb constructions.

There are three coverb grams that express the general aspectual categories, imperfective, perfective, and continuous. Tense is generally inferred in Khamti from these three aspectual particles. The imperfective is used for situations that are conceptually unbounded, as existing continuously or repetitively through the course of time. The simple present tense is also indicated with the basic imperfective sentence-final particle *uu⁵*, which is used as the tense/aspect in narrative to carry the storyline. The *simple present* is shown in (17) and the *habitual* is shown in (18). The sentence-final imperfective *uu⁵* has grammaticalized from lexical 'live/stay'.

(17) *ngai⁴sii⁵ tang⁴ puu⁵   yaa⁵   man⁴ khau⁵ uu⁵ **uu⁵***
      and.so with grandfather grandmother 3SG PL live IMPF
      'and so he lives with his grandfather and grandmother'

(18) *kuu³ pat¹ wiing⁴ mai² kaa⁵ **uu⁵***
      each week city LOC go IMPF
      'each week, (he) goes to the city'

---

22 This dissertation does not explore this anomaly with color predicates.

The sentence-final *yau¹* 'PERF' has grammaticalized from the lexical verb 'finish/already' and has two readings. In (19), one finds the *simple past* reading and in (20), the *present perfect*.

(19) *mangaa⁴ kau³ kat⁵   mai² kaa⁵ **yau¹***
      yesterday 1SG   market LOC go   PERF
      'I went to market yesterday'

(20) *heeun⁴ mai² theung⁵ **yau¹***
      house LOC   arrive   PERF
      '(we) have now arrived at the house'

The *progressive* aspect is marked with a postverbal progressive marker (*kan³*)*suu⁵*. In some cases, the full *kan³suu⁵* appears, as in (21), and in other instances only *suu⁵* surfaces, as in (22). Both occurrences give a progressive reading. The progressive marker co-occurs with the sentence-final *continuous* marker *nam⁵*. *Nam⁵* grammaticalizes from the lexical morpheme 'be.plenty/numerous'.

(21) *man⁴ hiit⁵ **kan³suu⁵ nam⁵***
      3SG   do   PROG   CONT
      'he is doing it'

(22) *khau⁵ aan⁵ bap¹   **suu⁵   nam⁵***
      3PL   read book   PROG CONT
      lit. 'they are book reading'
      'they are reading a book'

The example in (23) illustrates a *future* reading by using the irrealis mood marker *tii⁵*, along with the sentence-final continuous, *nam⁵*. The irrealis signals other modalities such as a *potentiality* reading, as in (24), and an *inchoative* (inceptive) reading, as in (25).

(23) *mhuk¹   hau³   **tii⁵** hiin⁴ **nam⁵***
      tomorrow 1PL.INCL IRR study CONT
      'we two will study tomorrow'

(24) *waan⁵phai⁴ tuu³   **tii⁵** muat⁵   **yau¹***
      torches   1PL.EXCL IRR extinguish PERF
      'our torches might go out'

(25) *meung⁴   man⁴ tsau² **tii⁵** tang² tee⁵ yau¹*
      kingdom 3SG   lord   IRR establish PERF
      'his [polite] kingdom is about to be established already'

There are four postverbal grams that extend in function from their lexical origins to participate in serial verb constructions in Khamti. In (26), postverbal *maa⁴* 'come' indicates a *recent* (past) time and, in (27), postverbal *kaa⁵* 'go' indicates a *distant* (past) time.[23] These spatial verbs, with their deictic source meanings (movement towards and away from the speaker), allow for a deictic temporal reading aligned with the time of speaking (near and away from speaking time). They also appear in postverbal position in reduced form *m* and *k*.

(26) *tai⁴koo¹ man⁴ taai³ **maa⁴** yau¹*
     friend 3SG die RCNT PERF
     lit. 'his friend came to die'
     'his friend died [recently]'

(27) *tai⁴koo¹ man⁴ taai³ **kaa⁵** yau¹*
     friend 3SG die DIST PERF
     lit. 'his friend went (and) died'
     'his friend died [a long time ago]'

A *durative* is expressed by the coverb *wai¹* 'keep' when it follows the main verb. Durativity refers to a situation that is conceived to persist for a period of time (Comrie 1976: 41). Durativity, which is expressed by *wai¹*, is a minor aspect and still requires an imperfective *uu⁵* or a perfective *yau¹* to signal an actual finite event, as shown in (28) and (29).

(28) *uaa⁴ kaa⁵ yau¹ lik⁵ tsaa¹ maeu⁴ tiam² **wai¹ uu⁵***
     dad go already letter for 2SG write DUR IMPF
     lit. Dad left already (but) keeps writing a letter for you'
     'Dad left already (but) writes a letter for you'

(29) *suang⁵ haang³ tuak⁵ **wai¹ yau¹***
     two picture take DUR PERF
     '(we) took two pictures (and currently have them)'

The durative is also observed with future events, as shown in (30) with a sentence-final particle *kaw⁵* expressing intent.

(30) *sii⁵ muang⁵ mai² maa⁴ ta¹ kau³ khau² tang² **wai¹** kaw⁵*
     four o'clock LOC come OPT 1SG rice cook DUR INT
     'Come at 4 o'clock (and) I will cook a meal [during that time]'

---

23   The notion of *past* time probably comes from the final-particle, *yau¹*, as *maa⁴* and *kaa⁵* can also be used as distance marker for future time.

The lexical verb *haeu²* 'give' seems to have evolved into an applicative marker—a well documented grammatical pathway (Heine and Kuteva 2002: 149ff). This is shown in Khamti with (31) in which *haeu²* cross-references a beneficiary, which is marked with *mai²*. In Chapter 5, I analyze applicatives as they relate to the grammaticalized conoun *mai²*.

(31)   *man⁴ piⁱ⁵nuang¹ mai² tang² phak⁵ **haeu²** uu⁵*
        3SG   sibling   BEN   cook curry APPL IMPF
        'she cooks curry for (her) siblings'

Modality and evidentiality are also encoded in Khamti with a large set of sentence-final particles. In irrealis predications, these *final* particles replace imperfective, perfective, and continuous sentence-final particles (cf. a *medial* irrealis, *tii⁵*, in (23)-(25) above). Two examples are provided with a sentence-final optative marker *ta¹*. In (32), the optative expresses an *imperative* and in (33) it expresses a *hortative*, along with a preverbal hortative marker *haeu²*. The example in (33) shows the optative with a preceding *k-*. This is grammaticalized from *kaa⁵* 'go' and expresses action away from speaker, along with an initial hortative coverb *haeu²* that stems from the lexical meaning 'give'.

(32)   *khau²muun⁴ nai²mau⁵tsaeu³kii⁴ khau² kaa⁵ seeu¹ ta¹*
        bread   or   rice go buy OPT
        '(just) go buy bread or rice'

(33)   ***haeu²** nai²   kaa⁵ **nii³nii³** **k-ta¹***
        HORT get.to go nicely   AND-OPT
        'may (you) go/travel safely'

In Khamti, negation marking takes three forms. The first two are instances of *verbal negation* because the negative markers, either *mau⁵* or *inn³*, shown in (34) and (35), are preposed to the verb and negate the action expressed. The third form, shown in (36), utilizes a compound negative marker *inn³tsaeu³* 'not right/true'. This compound arises from the literal word for heart, *tsaeu³* (which is used extensively to metaphorically create many emotion expressions in Khamti).

(34)   *kuun⁴ nai¹khau⁵ **mau⁵** tuang⁴mat¹ maa⁴*
        people PL   NEG recognize   PRF
        'people have not recognized (her)'

(35) *man⁴ mai² khaa⁵ nkaw¹* **inn³ khaa⁵**
  3SG F.OBJ find even.though NEG find
  'even though you look for her, you don't find (her)'

(36) *puai⁴ yaa¹ tsiang⁵mai⁵ mai²* **inn³-tsaeu³**
  party TOP Chiangmai LOC NEG-right
  'the party is not in Chiangmai'

In this third negative construction, in (36), the negative compound *inn³-tsaeu³* 'not-right/true/heart' is positioned sentence-finally and primarily appears with locative and copular sentences. In all three types of negation, the negative marker takes the place of the many possible sentence-final aspect markers and, like these, could be considered grounding predications in the sense of Langacker (2002: 8).

2.4.3 Syntax

Nominal structure

Nominal phrase structure is head-initial in Khamti, which can then be followed by either noun or predicate adjective modifiers. The final constituent in any nominal is the determiner, with the ordering of indefinite, definite, and plural. This structure is partly illustrated in (37) with a possessor noun, a predicate adjective, a definite, and a final plural marker.[24] If there is a numeral-classifier construct, it follows any modifiers and precedes the final determiner, as shown in (38).

(37) *luk¹ koo¹ an³ yaeu⁵ nai¹ khau⁵*
  child man ADJ be.big DEF PL
  'the man's grown children'

(38) *pii⁵ man⁴ kat⁵* **suang⁵ koo¹** *nai¹ khau⁵*
  older.sibling 3SG smart two CLF DEF PL
  'her two smart older siblings'

Noun modification using a relative clause is shown in (39) with the indirect object being relativized. In Khamti, a wide variety of grammatical relations can be "relativized", such as S, DO, IO, and a variety of obliques.[25] The nominal-final determiner (if there is one) is shown in (40) following a relative clause.

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24 The predicate adjective, *an³ yaeu⁵* 'big one', in (37) is nominalized (cf. Section 3.6.2) and the definite and plural will be analyzed as a compound DEFINITE-PLURAL construction (cf. 4.3.5).

25 I use the term *relativized* loosely because I am not taking a derivational approach to the analysis of Khamti constructions. Furthermore, relative clauses in Khamti are merely juxtaposed nominals in an appositional relationship (cf. Sections 1.3.1 and 3.6.3).

(39)   *koo¹*   [*an³ man⁴ khaai⁵ maa⁵ tsaa¹*]
       man   REL 3SG sell   horse for
       'the man for whom (he) sold the horse'

(40)   *kuun⁴* [*an³ la⁵khaa⁵ nai¹ mai²   khaeu³ au³taai³ nai¹ khau⁵*]
       person REL child   DEF F.OBJ want   kill   DEF PL
       'the people who want to kill the child'

Clause structure

Khamti exhibits a basic SOV word order as generally demonstrated with the data in this dissertation. Because nominal ellipsis is common in connected discourse—the S and O arguments (or both) often being elided—the full word order is not always evident. When S and O arguments are both expressed, the O argument sometimes occurs first.[26] An (S)OV example is provided in (41).

(41)   [***haang⁵ ngoo⁴ too³   leeung³***] *tiap⁵*   *sii⁵*   *tsii⁵*   *kin³ yau¹*
       tail   cow   CLF   INDEF   lop.off CONJ roast eat   PERF
       '(he) lopped off a cow's tail and roasted (it) to eat'

There are also examples, although much less frequent in the corpus, showing an SVO word order. Two examples are shown in (42) and (43). When the object occurs after the verb it commonly signals a backgrounded object construction.

(42)   *kuu³*   *meeu¹ kuu³ meeu¹ kaa⁵ k*   *khaa⁵*   [***paa³***] *nam⁵*
       each   day   each day   go   HAB look.for fish   CONT
       'each and every day (he) would go fishing' [lit. 'look for fish'—VO]

(43)   *wan⁴ leeung³ heeun⁴ pmii⁴*   *mai²*   *khau² maa⁴ sii⁵*   *yuan⁴* [***an³-kin³***] *uu⁵*
       day   one   house rich.man ALL   enter come CONJ ask.for NOM-eat   IMPF
       'one day, (he) entered a rich man's house and asked for food'

In Khamti, a backgrounded object construction, such as *khaa⁵ paa³* 'look for fish' in (42) and *yuan⁴ an³kiin³* 'ask for food' in (43), most often expresses a non-referential object, which is usually indefinite and non-specific. These VO phrases are not about the effect of an action on any particular referent, but about a type of action in general, that of fishing or begging. When the event is one of a generalized activity, it is more

---

26 A sentence with a fronted O argument most likely signals a discourse-level phenomenon. I can easily elicit the same sentence with either SOV or OSV word order. In such cases, language consultants say both sentences are grammatical and generally mean the same thing. A full discourse analysis is outside the general scope of this dissertation.

likely to be encoded as VO, whereas when the event includes a specific entity, it is more likely to be encoded as a preverbal OV.[27]

An SOV word order is unusual for Tai languages, which are expressly considered SVO. An SOV structure for Khamti is no doubt due to language contact with Tibeto-Burman languages, which are SOV. This point is discussed in detail in Section 5.8 as it pertains specifically to a preverbal clausal object that receives a particular kind of marking with *mai²*.

Simple sentence types include the comparative in (44), locational existence in (45), and the possessive in (46).

(44) *pying⁴ nai¹-khau⁵ ptsai⁴ nai¹-khau⁵ mai² am⁴   saa⁴   uu⁵*
      girl   DEF-PL   boy   DEF-PL   STD be.intelligent more.than IMPF
      'girls are more intelligent than boys'

(45) *him⁴   heeun⁴ mai² nguu⁴ yang⁴ uu⁵*
      beside house LOC snake be   IMPF
      'there is a snake beside the house'

(46) *man⁴ mai²   khiau⁵   kau³ yang⁴ uu⁵*
      3SG   POSS   machete   1SG be   IMPF
      lit. 'my machete is at him'
      'he has my machete'

Aspects of these clauses, such as the predicative possessive construction employing an existence schema—as observed in the literal translation in (46)—are analyzed in subsequent chapters because they critically involve one of the three target morphemes considered here; *mai²*.

Complex sentence types include the interrogative, coordinating, and subordinating constructions. The interrogative construction is shown in (47) and is comprised of two grammaticalized instances of *nai¹* or a set of bookended *nai*'s: [*nai⁵...nai¹*], which I explain in Section 4.3.6.

(47) *phaeu⁵ mai² nai⁵ maeu⁴ pap¹ haeu² nai¹*
      who   REC Q   2SG   book give Q
      'who did you give the book to'

---

27 It is not necessary that a backgrounded object be non-referential, but it is probably necessary that a non-referential object be backgrounded.

A coordinating construction uses an all-purpose conjunction *sii⁵*, which is approximately equivalent to 'then' or 'and', in order to link events expressed by two independent clauses. This conjunction is shown in (48) with a *sequential* reading, in (49) with a *contrastive* reading, and in (50) with a *reasoning* reading.[28]

(48) *paa³sa²njee¹ yaeu⁵ amaeu⁴ uak⁵maa⁴ **sii⁵** meu⁴ man⁴ kap¹ yau¹*
     eel   big   that   come.out CONJ hand 3SG bite PERF
     'that big eel came out and bit his hand'

(49) *kuang⁵ khau² kan²nuak¹ mai² naai³sang⁵ laang¹ **sii⁵** paa² kan²naeu⁴ mai² yaa¹*
     bowl rice   outside   LOC   only   clean CONJ side inside   LOC TOP

     hang² uu⁵
     dirty IMPF
     'the rice bowl is only clean on the outside, but on the inside, (it is dirty)'

(50) *phuun⁵ tuuk⁵ **sii⁵** tuu³ uu⁵ heeun⁴ uu⁵*
     rain   fall   CONJ 1PL.EXCL stay house IMPF
     'it rained so we stayed in the house'

Subordination includes relative, complement, and adverbial clauses. The relative clause, shown in (51), uses the morpheme *an³* 'thing' as a relative marker. The details of this analysis are found in Section 3.6.3, where I show the lexical noun extending in function as a relative marker.

(51) *la⁵khaa⁵ **an³** kat⁵ mai² nang⁵ kan³ iau⁵ kan³ uu⁵*
     children REL market LOC sit   together shout RCPR IMPF
     'children who are sitting together in the market shout at each other'

Complement and adverbial clauses are primarily preposed in the Khamti sentence. Complement and adverbial clauses incorporate the morpheme *nai¹* 'this' as a critical component. *Nai¹* is used as a complement marker in (52) and an adverbial marker in (53). These clauses are further discussed in Chapter 4 as grammaticalized constructions.

(52) *khau⁵ hiat¹tuang¹ **nai¹** peeun³ tuang⁴ uu⁵*
     3PL   fast   COMPL others know IMPF
     'others know that they are fasting'

---

28 A *weak* reasoning reading can be signaled by the conjunction *sii⁵*. A *strong* causal reason reading can be indicated with the compound conjunction *nai¹sii⁵*, described in Section 4.7.3.

(53) *meeu³ neeun³ saam⁵ phuun⁵ tuuk⁵ **nai¹** paan³ leeung³ pheeun⁵ wai¹ uu¹*
     time   month three rain   fall TMP interval one   plow   DUR IMPF
     'when the third month rains come, plow (the field) for a first time.

All three subordinating constructions (relative, complement, and adverbial clauses), along with many other constructions associated with the grammaticalization of *an³*, *nai¹*, and *mai²*, are analyzed further in the chapters that follow.

Chapter Three

The general noun *an³* 'thing'

3.1 Theoretical preliminaries to the description of *an³*

Every language has three basic lexical categories—*nouns*, *verbs*, and as Diessel
(1999: 1, 2006: 264) argues, *demonstratives* (see also Dixon 2003: 61, 2010b: 224;
Dryer 2007c: 162; Tomasello 2008: 232). Non-basic categories often emerge from
these basic ones—adjectives from verbs or nouns, adverbs and TAM-markers from
verbs, prepositions from body-part nouns or verbs, and, as will be developed in this
dissertation, other functional categories from nouns and demonstratives. Chapters 3,
4, and 5 form part of an in-depth grammatical description of Tai Khamti that focuses
on grammatical aspects relevant to the nominal structure of the language (Section
1.3). I seek to demonstrate that a general noun and two demonstratives
grammaticalize into conouns, which are referential grams that signal an assortment of
grammatical functions in many nominal constructions. These constructions are
instances of a general template, [NOUN][CONOUN], in which two entities are
juxtaposed (see Section 1.1). This chapter analyzes *an³* as an all-purpose noun
meaning 'thing' that extends in function to include the marking of various classic
constructions within the nominal structure of Khamti, including genitival, numeral-
classifier, indefinite, adjectival, and relative clause constructions. Prior to the
description of *an³* as presented in this chapter, I first consider central characteristics
of the category *noun*, which help determine why *an³* behaves as it does as an integral
component in a variety of other (mainly appositional) constructions.

   One of the most central characteristics of nouns is that they encode entities
that fall along a temporal axis in our human experience and are perceived as being
relatively time stable. Contrast this characterization with verbs, which prototypically
denote events or actions that express rapid changes in states through time. The basic
noun in any language typically depicts an entity that is spatially bounded and stable
across time (Frawley 1992: 65). The temporal scale within the noun category is
somewhat relative as, for example, the English noun *motion* refers to an entity that is
perhaps less stable in time than that conveyed by the noun *house*. However, both

motion and *house* are entities that are more temporally fixed than an event or action that a verb portrays as a sequence of states changing through time. Nouns, on the other hand, are constant over time, which enables them to be perceived as atemporal and thus individuated with delimited boundaries in the domains of time and space (Frawley 1992: 66).

Another central feature of nouns—closely related to time-stability—is that they maintain a cognitive cohesion or conceptual continuity. For example, certain nouns are made up of discontinuous parts, such as vintage English examples from Langacker (1991: 17), *archipelago* (intermittent islands recognized as stretching from a coast) and *constellation* (intermittent stars forming a recognizable coherent shape). These kinds of nouns are perceived as a whole with delimited boundaries despite physical discontinuities. Because many nouns are semantically complex in this way, a definition of noun that reflects a conceptual stability necessarily needs to be a bit abstract and in CG this amounts to a basic conceptual content with a particular portrayal of that content. The term *domain* is used to refer to semantic content in a uniform way, while *construal* is used to designate individual facets of that content in alternative ways (Langacker 2013: 44-45). CG, then, defines a noun in general conceptual terms as designating or construing a *thing*, while a thing is further clarified as "a grouping in some domain" (ibid.: 105). Though this is a highly abstract definition, it has significant linguistic consequences when analyzing Khamti *an³* 'thing', as will be demonstrated later in this chapter. A noun, therefore, invokes a set or matrix of cognitive domains of human experience as the contextual foundation for its meaning. Aspects of construal (specificity, focusing, prominence, perspective)[29] arise from general cognitive principles of *figure/ground alignment*. This means that a conceptual pattern is perceived as a heightened feature in relief to a general conceptual backdrop. Linguistically, the notion of *profile* refers to a pattern (or figure) that is imposed on a *base*, which refers to a general conceptual backdrop (or ground). A base is a selection of background content taken from a particular domain (ibid.: 66). The profile and base together make up a linguistic meaning. English examples are shown in Figure 3.1 in which the profile (bold) designates the meanings

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29 Langacker (2013) articulates these aspects of construal in a concise and coherent fashion. I will explain certain of these features as they arise for specific parts of the analysis in this dissertation.

FRIDAY, HANDLE, and RIM respective to each base.
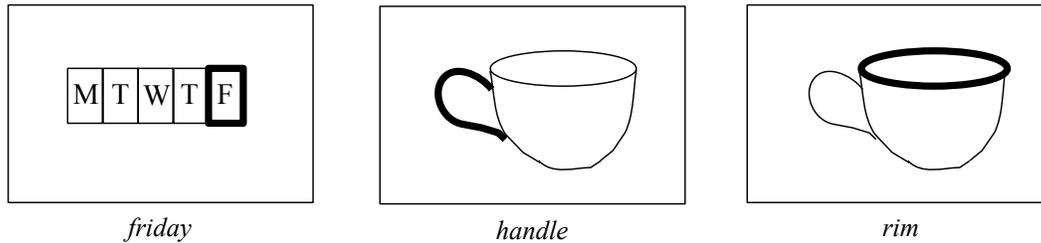
Figure 3.1. The English items *friday*, *handle*, and *rim* (from Van Hoek 1997:17)

As previously mentioned, a thing is "a *grouping* in some domain". Langacker (2013: 105) broadly defines grouping as conceptual inter-connectivity,[30] or as Frawley (1992: 67) states, a set of conceptual points that are continuously perceived along a given parameter. For example, the set of points that make up our conception of FRIDAY in Figure 3.1, are arranged along a domain parameter of culturally devised time segmentation. The word *handle* in Figure 3.1 has two senses depending upon which region and experiential domain it predominantly corresponds with in a given interpretation. Handle may refer to the physical object, as pictured in Figure 3.1, which is a set of conceptual points along a physical surface region. Handle may also refer to a moniker, in the expression *What's your handle?*, referencing the name of a particular person talking on a two-way radio. In the sense of a radio handle, the noun corresponds to a set of points along a parameter of radio nomenclature.[31]

The set of points that compose each region of a noun are delimited by conceptual boundaries, which make up an individual noun *type* specification (Langacker 2013: 56), like the one shown in Figure 3.2. A type specification is basically a noun category. Despite its simplicity, the description of *an³* in Figure 3.2 is paramount for understanding how *an³* becomes a multifunctional component in nominal constructions due to its conception as a thing.

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30 Earlier renditions of CG used the term **region** rather than *grouping* (Langacker 1987, in Section 5.2) to capture the idea of a set of interconnected entities.

31 I presume that radio nomenclature captures the idea of a literal *handle* as a metaphor for "grabbing" the attention of someone by their "handle" or radio nickname, or something to this effect. In this case, a complex process of blending of domains takes place (Fauconnier and Turner 2002), although I will not elaborate further in this dissertation.

TYPE

DOMAIN

an³
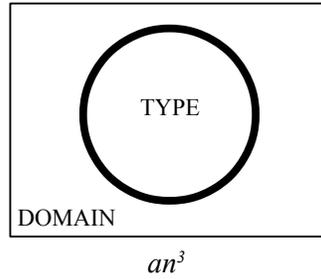
Figure 3.2. The semantic characterization of *an³* as a general thing

Figure 3.2 shows that the essence of a general noun construed as a thing is that of a conventionally recognized entity type that is perceived with boundaries (profiled circle) arranged along parameters (not depicted) arising from some domain of human experience (here, left unspecified). The domains range from simple primitive domains (space, time) to complex and derived ones where spatio-temporal dimensions overlap (sound, color, calendrical cycle, and so forth). *An³* 'thing' can be characterized as a maximally general grouping, which expresses an entity that is relatively atemporal, construed as an individual item, and fixed in general figure/ground (profile/base) asymmetries in cognitive processing routines. It is this characterization that lends itself to an insightful description of *an³* for all of its usages in Khamti.

Next, a requisite facet of nominal structure from a cognitive perspective is its two-fold organization designed for the purpose of communication. In CG, a nominal has two levels of depiction, *type* and *instance* (Langacker 2013: 134). A type specification of nominal organization, illustrated in Figure 3.2, represents a semantic characterization. At this level, meaning is construed with varying degrees of specificity. Using the example of *cup* above, its type specification can vary in amount of semantic detail from CUP > BIG CUP > BIG BLUE CUP > BIG BLUE CUP THAT TOMMY BROKE, and so forth. In this case, the level of semantic specificity can be extended by adjectives and relative clauses. However, when an English speaker intends to use *cup* in a particular expression, it requires a level of organization where a type specification is grounded in the communication situation by being located in a *domain of instantiation* (ibid.: 132-136). This is shown in Figure 3.3 in which the

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lexical type description above is fixed to an actual communication situation (with speaker, hearer and the surrounding context). When a type is *instantiated* or fixed into the domain of instantiation in this way, it is considered a full nominal or NP.
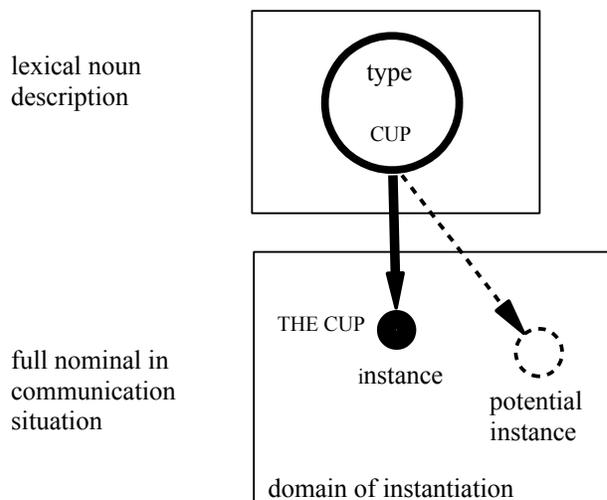
Figure 3.3. Determiners as noun type instantiators (adapted from Langacker 2009: 86)

In English, the sentence *The big blue cup that Tommy broke is in the garbage* is grammatical, while the sentence **Big blue cup that Tommy broke is in the garbage* is ungrammatical. The difference between the two sentences lies at the instantiation level of nominal organization. For CG, the difference between an instance and a type is that an instance occupies a particular location in a domain of instantiation and is thus is considered grounded. In the grammatical sentence above, the English determiner *the* serves to "locate" an instance of the type CUP in the domain of instantiation, thus *grounding* the nominal in the communication situation so that speaker and hearer can jointly identify it. Joint attention cannot be accomplished without an actual instantiation (see Section 4.1 for details on joint attention). Moreover, if a noun type is fixed to two different locations in the communication situation they are conceptualized as two different instances of the same type (Langacker 2013: 134). An example would be *The big blue cup that Tommy broke yesterday and the big blue cup that Tommy broke today are in the garbage*. The instance of *cup* in the first clause is distinct from the instance in the second clause

because they are anchored at different locations in the domain of instantiation. The type level of conception, however, is schematic for all instances located in a given communication situation. An understanding of the two-fold conceptual structure of a nominal, outlined in CG, will become apparent in the analysis of *an³* presented in the remainder of this chapter.

3.2 The lexical all-purpose noun *an³*

An³ is a basic lexical word that is highly frequent in the language. *An³* is basic in that its meaning is maximally schematic (though having a concrete sense) and cognitively irreducible as an experience in the two general domains of space and time. Morphemes that have a general meaning, such as 'thing', are recognized as ones that have multifunctional extension potential within a wide variety of linguistic contexts (DeLancey 1993: 3). *An³* 'thing' is also semantically basic in the sense that it forms a semantic prime that is used in understanding and defining other words that are not primes (Wierzbicka 1996: 10). Furthermore, nouns like Khamti *an³* universally express a concept, 'thing', typically found in every language (ibid.: 42).

Pertaining to frequency of occurrence, there are 3,653 tokens of *an³* in my corpus of 90,100+ words. This makes up 4% of the overall corpus. In an isolating language such as Khamti, this kind of percentage is suggestive of a high degree of heterosemy—or polyfunctional polysemy (Lichtenberk 1991: 476; Rice and Kabata 2007: 452). The frequency of *an³* is due to its grammaticalizing into a variety of conoun functions in many nominal constructions.

As a basic morpheme, *an³* appears in three lexical contexts: as a simple noun, an indefinite pronominal, and a deverbal noun. The first context, as shown in (54), is as a plain noun in which *an³* specifies a general thing and takes the definite determiner *nai¹*. In (55), *an³* takes the definite plural compound marker *nai¹-khau⁵*. And in (56), it includes a modifier *tseeun⁴leeung³ laak⁵* 'little bit special' without any determiner.

(54) *heeun⁴ kau³ mai²   uu⁵ sii⁵ **an³** kau³ tsaeu¹ nai¹   hiit⁵ mlaa⁴ nai⁵*
       house 1SG LOC   live CONJ thing 1SG ask   DEF   do   REQ   Q
       'why don't you live at my house and do the thing I ask?'

(55) ***an***^{3} *tuk*^{5}*mee*^{4} *nai*^{1}*-khau*^{5} *mee*^{4} *uu*^{5}
thing   fix   DEF-PL   repair   IMPF
'repair the things to be fixed'

(56) *amaeu*^{4}*mai*^{2} ***an***^{3} *tseeun*^{4}*leeung*^{3} *laak*^{5} *kan*^{3} *yang*^{4} *uu*^{5}
there   thing   little.bit   special   share   be   IMPF
'there, a little bit of a special thing is shared'

An^3 appears in a second usage context involving what is still arguably a lexical use of *an*^{3}, which is observed when it functions as an indefinite pronoun with a meaning of 'any-one, any-thing, any-where', etc. An example is shown in (57) with the respective meanings 'anything' and 'anywhere'.

(57) ***an***^{3} *maeu*^{4} *kheeu*^{3} *hiit*^{5} *nai*^{1} *hiit*^{5} *sii*^{5} ***an***^{3} *kheeu*^{3} *kaa*^{5} *nai*^{1} *kaa*^{5} *uu*^{5}
thing   2SG   want   do   this   do   CONJ   where   want   go   this   go   IMPF
lit. 'do this thing you want to do and go to this thing you want to go to'
'do anything you want to do and go anywhere you want to go'

Across languages, the usual case for free-choice indefinites with meanings such as 'anything, anywhere' are in a derived or compounded construction. Examples of a derived construction is with the noun *thing* or an interrogative *where*, along with the indefinite *any* in English, or in Hausa when *wani* 'someone' and *àbù* 'thing' become *wani àbù* 'something' (Newman 2000: 153-154; see also Heine and Kuteva 2002: 295-296). Khamti uses *an*^{3} in what Haspelmath (2011) calls a generic noun-based indefinite. The indefinite free-choice readings 'anything' and 'anywhere' come from the clausal context with the general noun *an*^{3}, in the context of the demonstrative pronoun *nai*^{1} 'this' (see Section 4.2). In the discourse context that gave rise to (54), the pronominal reading of *an*^{3}...*nai*^{1} is indefinite because its referent is not previously mentioned.

An^3 also occurs as a deverbal nominal marker, [NOM], in which it functions as an initial head followed by a verb [*an*^{3} +VERB]. At its most basic lexical sense, *an*^{3} is a maximally schematic noun and, to that end, plays a critical function in the language as a nominalizing element. There are many languages in the linguistic area that extensively employ nominalization as a strategy for a variety of constructions (Matisoff 1972; Yap et al. 2011), an important point to which I return later in this chapter. In the meantime, some representative examples of the Khamti deverbal

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nominal construction are shown in Table 3.1. The *an³* "nominalizer" is very productive and speakers often coin new deverbal constructions on the spot with this morpheme.

Table 3.1. Representative Khamti deverbal nominals

VERB		COMPOUNDS		
kin³	'eat'	*an³ + kin³*	'food'	lit. 'eat-thing'
kaa²	'dance'	*an³ + kaa²*	'dance'	lit. 'dance-thing'
tii⁵tuang²tii⁵tam²	'collide'	*an³ + tii⁵tuang²tii⁵tam²*	'collision'	lit. 'collide-thing'
taai³	'die'	*an³ + taai³*	'death'	lit. 'die-thing'
phit¹	'err'	*an³ + phit¹*	'error'	lit. 'err-thing'
yum⁵yam³	'believe'	*an³ + yum⁵yam³*	'belief'	lit. 'believe-thing'
hak¹	'love'	*an³ + hak¹*	'love'	lit. 'love-thing'

When *an³* precedes a verb, it functions as a nominal head with the corresponding event by re-conceptualizing that event as an (abstract) entity. Understanding the Khamti deverbal nominal compound as a common mental processing routine involves the linguistic notions of *sequential scanning* and *summary scanning* (Langacker 2013: 111). Sequential scanning relates to the viewing of successive states of an event through time (as individual single frames in a movie reel), whereas summary scanning concerns viewing these same successive states as a single whole or gestalt (as a snapshot). Langacker (1991: 24) semantically defines deverbal nominalization (his episodic nominalization) as a difference between sequential and summary scanning. The all-purpose noun *an³* (taken from Figure 3.2 above) is shown in Figure 3.4 (a) with its profile (a maximal boundary) that is schematic for a thing. The verb *kaa²* in (b), on the other hand, profiles successive scenes through time like a movie clip. The time arrow and individual states of the verb are profiled to indicate viewing them over the passage of time. The viewing scope of the verb is backgrounded (signified by the dashed oval) and corresponds to the profile of the noun *an³*. The composite construction in (c) depicts the overall contribution of *an³* in the compound construction. *An³* construes the scope of the verb (the temporal successive states) as a single whole and imposes summary scanning on the entire verbal conception.
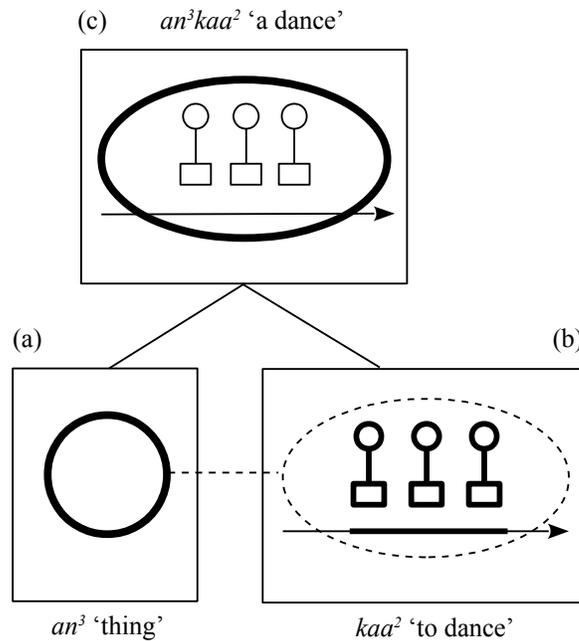
Figure 3.4. Khamti deverbal nominalization (adapted from Langacker 1991:24)

In Khamti deverbal nominal constructions, the general noun *an³* initiates a mental process that takes an accompanying event (conceptualized normally as consecutive states through time) and re-conceptualizes the sequence as a unitary grouping. This conceptual grouping capacity is referred to as *reification* and the composite deverbal nominal in Figure 3.4(c) can be considered a reified event (Langacker 2013: 95, 105). Once the event expression has been compressed and reified, the profile (designation) shifts from a relationship to a thing; that is, a verb to a noun. An expression's meaning, then, is a combination of semantic content (i.e. to dance) and a particular conceptual construal of that content (i.e. a dance).

Deverbal nominals (being reified events), then, are seen in constructions co-occurring with determiners, as in (58) and (59) with the definite *nai¹*.[32] The example in (58) shows the deverbal nominalization of an action verb (a reified process or event), *kaa²* 'dance', while in (59), the nominalization is associated with an adjectival predicate (a reified verbal state) *sian²* 'be.beautiful'.

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32 The question in (58) takes a high-tone *nai⁵* immediately following the interrogative *mlaeu⁵* 'when'. This interrogative construction is analyzed in Section 4.3.6.

(58) *mlaeu⁵ nai⁵* [***an³-kaa²***] *mai² tii⁵ kaa⁵ nai¹*
    when Q   NOM-dance ALL IRR go Q
    'when will you go to a/the dance?'

(59) *niat⁵neeut⁵ maa⁴ kii⁴ tuun² hiu⁵ kaa⁵ sii⁵ muak⁵ huung⁵ ngai⁴*
    sun   come when tree wither AND CONJ flower blossom and

    [***an³-sian²***]   *nai¹ kaw¹ haai⁵naai⁵ kaa⁵ uu⁵*
    NOM-be.beautiful DEF also disappear AND IMPF

    'when the sun comes, the plant withers away and the flower blossom and also the beauty disappear.'

Deverbal nominals (reified events) can also be pluralized, as with *an³kiin³* 'food', in (60), and can take nominal modification, as in (61), with the nominalization *an³tii⁵tuang²tii⁵tam²* 'collision' being modified with *kheeun³nii³ koo³ luung⁵* 'horrible'.

(60) *kau³ mai² yaa¹* [***an³-kin³***] *an³ kau³ thuk⁵tsaeu³* ***nai¹-khau⁵*** *seeu¹ haeu² uu⁵*
    1SG F.OBJ TOP NOM-eat REL 1SG like   DEF-PL buy APPL IMPF
    'as for me, (he) buys (me) foods that I like'

(61) *khau⁵* [***an³-tii⁵tuang²tii⁵tam²***] *an³-kheeun³nii³ koo³ luung⁵ mai² han⁵ uu⁵*
    3PL NOM-collide   one-worthy   fear much F.OBJ see IMPF
    lit. 'they see a collision: a very worthy-of-fear one'
    'they see a very horrible collision'

      The Khamti deverbal nominal construction, which uses the general noun *an³* as a nominal head, is what I call a case of THING-*based reification*. As I am using the term, THING-based reification is a conceptual process specific to Khamti (and possibly to the linguistic area) that takes a verbal event and reifies it as an atemporal, fixed, and profiled individual entity (noun), precisely because the head is a schematic noun.[33] In this view, the *an³* deverbal nominal is a reifying process and *an³*, itself, is a "reify-er". This function of *an³* in Khamti concurs with what Langacker (2013: 120) describes as a two-step process for nominalization: reification and a shift in profile from an event to a thing. THING-based reification reflects both a fixed (lexical) and productive word formation process in Khamti and extends to conoun grammatical constructions analyzed in the following sections.

      Describing the deverbal nominal constructions exemplified in Table 3.1 from an ongoing diachronic perspective, the all-purpose noun *an³* (as a general noun)

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33 The terms *nominalization* and *reification* should not be mistaken as derivational processes, but rather should be understood as the result of conceptual processes with the assembly of meaning components in specific constructions.

shows up in a new syntactic position before a verb and acts as a maximally schematic nominal head. *An³* becomes a reifier in this position with a verb and it re-construes an event or relation as a *thing*. *An³* takes the temporal conception of verbs and imposes on them a noun-like atemporal and bounded conception. Scott DeLancey, a Tibeto-Burman areal linguist, has commented that nominalizers do reflect older abstract nouns (1993: 15). The first perceptible stage of grammaticalization occurs, then, when a lexical item (*an³*+VERB) begins to "decategorialize" (cf. Heine et al. 1991) and loses morphosyntactic behaviors characteristic of its original category (DeLancey 1993: 3). The deverbal nominalizing function of *an³* (a reification capability) is a critical one for ongoing grammaticalization found in other *an³* constructions. While the end result of the deverbal nominal construction is a (lexical) compound noun, the constructions described next concern a set of (grammatical) conoun extensions arising from the reifying function found in deverbal *an³*.

3.3 *An³* as conoun in a numeral classifier construction [CLF]

Just as *an³* can be the head of a deverbal noun compound, it also can surface as a conoun that is the head of a set of numeral classifier constructions. In mainland Southeast Asian languages, classifiers serve a dual function. Lexically, they classify nouns into subgroups based on some salient semantic feature and, grammatically, they provide a means of enumerating nouns that they subcategorize (Section 2.4.2). These two roles of classifiers are well documented (Haas 1942; Jones 1970; Allan 1977; Placzek 1978; Conklin 1981; Hundius and Kölver 1983; Denny 1986; Matsumoto 1993; Inglis 2003). From a cognitive processing perspective, the classifier first makes subgroupings of (i.e. classifies) noun types based on a certain semantic feature. Second, the classifier anchors the noun type to a specific location in the communication situation, making an instance of the noun type for the purpose of counting them (Langacker 1991: 85; Inglis 2003: 223).[34]

      While Khamti has many classifiers that subcategorize primarily concrete nouns based on shape, animacy, and constituency (FLAT, GLOBULAR, CYLINDRICAL, ANIMAL, PERSON, MONK, and so forth), *an³* functions as a general all-purpose

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34 Type and instance are introduced and discussed in Section 3.1.

classifier. An all-purpose classifier is used for generic nouns or when a speaker does not know the appropriate classifier to use. This could be the case for someone not familiar with the classification of a sub-area of knowledge, such as a classifier for a drive shaft in the field of auto mechanics. The conversation in (62A-B) shows *an³* being used as a general classifier for *tiang⁴liik⁵* '(metal) grate'.

(62) A.   *maeu⁴ mai²*   [*tiang⁴liik⁵*] *kii⁵*   ***an³***   *nai⁵ yang⁴ nai¹*
           2SG   POSS   grate   how.many CLF Q   be   Q
           lit. 'a grate, how many things-instances are at you?'
           'how many grates do you have?'

     B.   [***an³***   *leeung³*] *yang⁴ uu⁵*
           CLF   one   be   IMPF
           Lit. 'one thing-instance is (at me)'
           '(I) have one'

The classifier *an³* functions here in a manner similar to its role as a reifier in deverbal nominalizations. In (62B), *an³* turns a numeral *leeung³* 'one' into a nominal numeral compound 'one thing'. However, unlike deverbal nouns, *an³* as a classifier has extended as a conoun with the noun *tiang⁴liik⁵* 'grate' and coreferences it from the question in (62A). As previously mentioned, classifiers have the additional role of *instantiating* noun types in a way appropriate for the communication situation by enumerating the instances. Instantiation is not to be confused with reification. As I use the terms, they are different processes. In (62B), reification takes a numeral relation (the quantifier *leeung³*) and conceptualizes it as a nominal thing (noun). Instantiation—specific to grammatical classifiers, but not to lexical deverbal nouns— is a separate process that grounds the noun type *tiang⁴liik⁵* 'grate' in the domain of instantiation so that its instance can be counted (*leeung³* 'one').[35]

     Reification is a summation process that groups a set of interconnected entities into a single holistic type conception, while instantiation is a grounding process that locates a specific type conception within the communication situation (Langacker 2013: 111, 134). The instantiating function of classifiers is seen in the fact that numerals hardly ever directly enumerate a noun type but, instead, must first attach themselves to an instantiator (classifier). So, phrases like *tiang⁴liik⁵ leeung³* 'one

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35 For the analysis of Standard Thai numeral-classifiers as instantiators, see Inglis (2003).

grate' are not very common, while *tiang⁴liik⁵ an³ leeung³* 'grate: one instance' are the expectation. In other words, *an³* is deployed (as are other classifiers) to create a periphrastic quantifier construction alongside the head noun. This makes the classifier a grammaticalized conoun with the head noun. This is not the same as a deverbal noun, because the deverbal noun is a (complex) lexical noun, in and of itself, with no reference to another noun. The classifier construction, on the other hand, necessitates a coreferential noun. In this way, the function of a lexical deverbal *an³* has extended to reifying numerals for the purpose of counting co-occcurring head nouns. Reifying *an³* appears in different contexts as an instantiating conoun *an³*. Conoun constructions follow a general template with an initial noun juxtaposed to a second noun, [NOUN] [CONOUN]. The specific Khamti examples presented in the description of conoun constructions will include bracketing that signals this juxtaposition.

When *an³* serves to count one instance of a given noun type, it is seen in a head-initial position, [*an³* + one] as in (62B). I call this the SG CLASSIFIER construction with a template, [N$_i$][CLF$_i$+one]. However, when counting two or more instances in Khamti, the classifier shifts to a head-final position, as shown in (63). In relation to Khamti, I call this numeral-classifier construction the PL CLASSIFIER construction with a template [N$_i$][NUM+CLF$_i$], and the numeral refers to two or more. I explain the distinction between the two classifier constructions from a grammaticalization perspective in Section 3.8.

(63)   *Yee²* [*tiang⁴liik⁵*] [*suang⁵ **an³***]   *mai²*   *han⁵*   *uu⁵*
        Yee   grate   two   CLF   F.OBJ   see   IMPF
        lit. 'Yee sees a grate, two things-instances'
        'Yee sees two grates'

The numeral and classifier form a close-knit composite assembly. The numeral classifier phrase along with the head noun make up a full numeral-classifier construction. The classifier is coreferential with the head noun. Examples of the Khamti (PL) CLASSIFIER construction with classifiers other than *an³* are shown in (64) and (65), with the classifier for animals, *too³*, and the classifier for humans, *koo¹*, respectively.

(64) khau⁵ [tsaang¹] [saam⁵ **too³**] mai² thoo⁴ uu⁵
    3PL elephant three CLF-ANIMAL F.OBJ wash IMPF
    lit. 'they wash elephant, three animal-instances'
    'they wash three elephants'

(65) maeu⁴ mai² [pii⁵tsaai⁴ uak⁵uak⁵] [sip⁵suang⁵ **koo¹**] yang⁴ uu⁵
    2SG POSS elder.brother outside twelve CLF-HUMAN be IMPF
    lit. 'elder brother, 12 human-instances are at you'
    'you have 12 outside elder brothers'

In certain discourse contexts, the numeral classifier phrase can stand on its own without the head noun when it is anaphoric to it, as shown with *haa⁵ koo¹*, 'five CLF' from speaker B in (66).

(66) A. maeu⁴ mai² [pii⁵nuan¹] kii⁵ koo¹ **nai⁵** yang⁴ nai¹
    2SG POSS sibling how.many CLF-HUMAN Q be Q
    lit. 'siblings, how many human-instances are at you?'
    'how many siblings do you have?'

   B. [haa⁵ **koo¹**] yang⁴ uu⁵
    five CLF be IMPF
    lit. 'five human-instances are (at me)'
    '(I) have five'

An³ likely has extended in grammatical function either from or in tandem with its role in the deverbal nominal construction to that of the numeral-classifier construction. I claim that this extension is reasonable due to the reifying or "thing-making" property of *an³* when used as a deverbal nominal head. Recall that *an³* functions in a deverbal nominal construction to reify a relation as a thing (the relation *kaa²* 'to dance' becoming a thing 'dance', shown in Table 3.1 and example (58) above). With the numeral-classifier grouping, [*an³* NUMERAL], *an³* works in a similar fashion by becoming the head or *thing* for the numeral. The numeral-classifier *construction*, however, requires a preceding head noun, [NOUN][*an³* NUMERAL]. The emergence of *an³* as a general classifier initiates, I argue, the first stage of grammaticalization into a conoun-innovating function—one that is coreferential with a noun. The classifier stage of the extension of *an³*, in which it changes from a general noun to a numeral-classifier construction, is indicative of other nominal juxtapositions which also become coreferential in Khamti.[36]

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36 It might be the case that the numeral-classifier, *an³*, concerns a different grammaticalization
    pathway from the deverbal *an³* or that the constructions co-evolved. However, as I argue here, a

3.4 *An³* as conoun in an indefinite determiner construction [CLF]

Generally speaking, indefinite determiner constructions, feature an indefinite determiner accompanied by a noun. Indefiniteness is roughly defined as marking that signifies that some entity is not known (or non-referential) by the speech act participants in the communication situation. Many languages use the numeral 'one' as an indefinite article (Givón 1981; Dryer 2011). Some examples include Amharic (Leslau 1966: 154), Lahu (Matisoff 1973: 87), and Romanian (Mallinson 1986: 107). Khamti also shows evidence for an indefinite determiner construction that uses the numeral 'one', along with *an³* as a conoun that signals a juxtaposed noun as indefinite.

The INDEFINITE DETERMINER construction in Khamti mirrors the SG CLASSIFIER construction used for counting one instance of a noun. The indefinite determiner construction is comprised of a head noun along with an indefinite-classifier phrase [N$_i$][CLF$_I$+INDEF]. The indefinite construction can take any of the classifiers in the language (not just *an³*) and, like all classifier constructions, the classifier cross-references with the noun type based on the semantic feature specific to the classifier. The indefinite determiner construction primarily introduces new or unknown participants to a story. In example (67), the indefinite conoun *koo¹ leeung³* 'CLF INDEF' introduces a new participant at the beginning of the narrative and in (68) a new participant is introduced near the conclusion of the same narrative. Both (67) and (68) show the INDEFINITE DETERMINER construction with the classifier *koo¹* used for humans.

(67) *meeu³nan¹*   *Aai²*   *Mak⁵khuum⁵*   *nnai¹*   [*kuun⁴maau⁵*]   [***koo¹***   *leeung³*]
long.time.ago   First.son   Makkhum   named   bachelor   CLF   INDEF

    yang⁴   *uu⁵*
    be   IMPF

lit. 'a long time ago there is a human-instance of bachelor named Aai Makkhum'
'a long time ago there is a bachelor named Aai Makkhum'

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    deverbal noun seems to be more basic than a numeral classifier construction. Deverbal nouns can function as head nouns in their own right whereas, numeral-classifier groupings cannot.

(68) | *maan²* | *mai²* | *theeung⁵* | *kaa⁵* | *kii⁴* | *heeun⁴* | *leeung³* | *mai²* | [*psaau⁵*]
village | ALL | reach | AND | when | house | INDEF | LOC | girl

[**koo¹** *leeung³*] *too⁴huk⁵* *mai²* *han⁵* *uu⁵*
CLF | INDEF | weave | F.OBJ | see | IMPF

lit. '... he saw a human-instance of girl weaving at a house'
'and when he reached the village, he saw a girl weaving at one house'

The general classifier *an³* is also used in the INDEFINITE DETERMINER construction to signal a maximally general indefinite noun, as in (69).

(69) *meeu³nan¹* *nuai⁴* *mai²* [*heeun⁴* *uan⁵* *ta⁵ki⁵*] [**an³** *leeung³*] *yang⁴* *uu⁵*
long.time.ago | mountain | LOC | house | small | tiny | CLF | INDEF | be | IMPF

lit. 'a long time ago there is a thing-instance of small tiny house on the mountain'
'a long time ago there is a small tiny house on the mountain'

As with the SG CLASSIFIER construction, the classifier in the INDEFINITE DETERMINER construction grammaticalizes as a reifying conoun that co-occurs with the head noun. The function of the classifier is to turn a noun type into an indefinite instance, given the communicative situation.

Joan Bybee (2010: 177) states that a final stage of grammaticalization is indicated when a target gram is realized as zero and thus absent altogether in the construction. This might be the case for the general classifier *an³* in the indefinite determiner construction. In (68) above, the indefinite nominal *heeun⁴ leeung³* 'a house' lacks the expected classifier *an³*. There are a few other examples of the classifier-less indefinite determiner construction in my corpus. This suggests that the grammaticalization of *an³* as a conoun in indefinite constructions might be maximally bleached and occasionally reducing phonologically to zero.

3.5 *An³* as conoun in a demonstrative possessive construction [DEM.POSS]

An³ is also observed as a conoun in what I am calling a DEMONSTRATIVE POSSESSIVE construction. In this construction, *an³* and an accompanying personal pronoun (see Table 2.9 in Section 2.4.2) are coreferential with a preceding nominal. This demonstrative possessive construction follows the structure of basic genitival constructions, which can be used to express a possessive relationship between two nouns—a head possessed noun which gets modified and a dependent possessor noun

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which is a head modifier. Because Khamti word order is head-initial, a basic genitival construction features an initial head noun juxtaposed with a modifier noun, with no other morphological indication of being a genitive: *kai⁵ maeu⁴* 'your chicken, *kai⁵ Lwin³* 'Lwin's chicken', and *kai⁵ tsau²naa⁴* 'farmer's chicken'. Khamti personal pronouns and their personal possessive counterparts take the same form (Table 2.4.2). They are interpreted as personal possessives only when juxtaposed to a preceding noun. The personal possessive can also appear as a *demonstrative* possessive pronoun when headed by *an³*. In this case, they are demonstrative because they point to either an entity in the speech situation (deictic) or another nominal in the text. The examples in my corpus that manifest the demonstrative possessive construction are all instances of a variety of equative clauses. In these equative examples, the demonstrative possessive is the second and modifying nominal to a preceding head noun. A possessive equative construction follows general genitival juxtaposition, as shown in (70) with the demonstrative possessive construction *an³-maeu⁴* 'yours'.

(70) [*kai⁵*   *nai¹*]   [***an³-maeu⁴***]   *naa²*
       chicken   this   DEM.POSS-2SG   DUB
       'lit. this chicken is you-one, eh'
       'this chicken is yours, eh?'

The demonstrative *an³-maeu⁴* in (70) is a compound pronoun composed of *an³* and the 2SG personal pronoun *maeu⁴*. Effectively, when *an³* is added to a personal pronoun, it functions as a demonstrative pronoun with a possessive reading; in this case, 'yours' (lit. 'you-one/your one'). Moreover, in this reading, *an³* is a conoun making the personal possessive pronoun referential with an initial noun in the clause.

Examples of demonstrative possessive constructions with (1SG *kau³* and 2PL *suu⁵*) from my corpus are shown in (71)-(72). The equative sentence-final particle *nam⁵* is used in these examples because a personal possessive pronoun is nominal and is a descriptive feature (and in this case, a possessive feature) of the initial subject nominal (see example (11) in Section 2.4.2 and Section 3.7 on equative clauses). In (71), the possessive compound *an³-kau³* 'mine' is coreferential with the subject noun *an³ poo⁵ kau³ mai² yang⁴ nai¹ tang⁴meeung⁴* 'all the things my father has'. In (72) *an³-suu⁵* 'yours (PL)' coreferences the noun *an³ poo⁵ kau³ mai² yang⁴ nai¹ tang⁴meeung⁴*

'all the things I have'.

(71) [*an³ poo⁵ kau³ mai² yang⁴ nai¹ tang⁴meeung⁴*] [***an³-kau³***] *nam⁵*
      thing father 1SG POSS be DEF all DEM.POSS-1SG EQU
      lit. 'all the things at my father are me-ones'
      'all things my father has are mine'

(72) [*an³ kau³ mai² yang⁴ nai¹ tang⁴meeung⁴*] [***an³-suu⁵***] *nam⁵*
      thing 1SG POSS be DEF all DEM.POSS-2PL EQU
      lit. 'all the things at me are you (PL)-ones'
      'all the things I have are yours (PL)'

    Three additional equative clause examples using a demonstrative possessive conoun come from elicited sentences in my field notes showing a three-way contrast in emphasis and certainty. The 1PL.EXCL demonstrative possessive is shown in a plain equative clause in (73) and the 2DU possessive is shown in an emphatic equative clause in (74). The plain equative clause asserts no particular emphasis on any nominal referent. With the emphatic equative clause in (74), however, the particle *nam⁵* appears now as a non-final emphatic marker of the subject *an³-nai¹* 'this-one'. An approximate translation is 'It is this (not the other) that is yours (DU).'

(73) [*an³-nai¹*] [***an³-tuu³***] *nam⁵*
      one-this DEM.POSS-1PL.EXL EQU
      lit. 'this one is we (EXCL)-ones'
      'this is ours (EXCL)'

(74) [*an³-nai¹ nam⁵*] [***an³-suang⁵kheeu⁵***]
      one-this EMPH DEM.POSS-2DU
      lit. 'this one is you (DU)-ones'
      'this (not the other) is yours (DU)'

The third contrast is shown in (75) and asserts a degree of certainty on the possessor encoded as the 3SG personal possessive in this equative construction. The assertion of certainty is achieved with the final particle *saa⁴* 'CERT' and gives an approximate translation, 'This is hers, for sure'. With the final particle *saa⁴*, the assertion of certainty is placed on the modifying (possessive) nominal. Equative constructions with *an³* and the sentence-final *nam⁵* are discussed further in Section 3.7.

(75) [*an³-nai¹*] [***an³-man⁴***] *saa⁴*
      one-this DEM.POSS-3SG CERT
      lit. 'this one (for sure) is she-one'
      'this is hers, for sure'

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In the equative clauses in (71)-(75), the initial subject nominal and the possessive phrase are juxtaposed [NOUN][*an³*+PRONOUN] to form a DEMONSTRATIVE POSSESSIVE construction. In this construction, the possessive compound [*an³*+PRONOUN] acts as a conoun. I analyze *an³*, specifically, as extending in function from operating as a reifier in lexical deverbal nominal constructions to one making reference to either a *de re* referent in the speech situation, as in (70) above, or to a *de dicto* full nominal in the clause, as in (71) and (72) above. Because personal pronouns are already (pro)nominal, the reifying function of *an³* in the demonstrative possessive construction imposes instead an overall deictic-like construal (either *de re* or *de dicto* "pointing" function) on the personal pronoun. This cascading construal arises as an inference on the juxtaposed arrangement of noun and a *an³*-headed personal pronoun.[37]

The evolution of the DEMONSTRATIVE POSSESSIVE construction shows that grammaticalization is best considered as a continuum of dynamic development, rather than one of discrete steps. While both deverbal nominalization and personal possessive constructions take the well-entrenched genitival structure of juxtaposition and use *an³* as a nominal head, the deverbal nominal construction does not actually change lexical categories, but remains a noun. The demonstrative possessive conoun, however, changes from a pronominal to a demonstrative function (see Section 2.4.2 for demonstratives as a basic and unique lexical category).

3.6 *An³* as conoun in attributive constructions

3.6.1 Introduction

Linguists often distinguish three types of attributive functions—genitives, adjectives, and relative clauses. English encodes these three functions in sentences like *John's apple*, *red apple*, *apple that John bought* (Gil 2011). All three English examples have *apple* as the head of the construction. In the genitival *John's apple,* the head is final and a possessive *'s* clitic attaches to the attribution element. In the adjectival expression *red apple*, the head is final and is merely juxtaposed with its attribution. In

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37 I discuss the pointing functions of demonstratives in detail in Chapters 4 and 5 when describing and analyzing the demonstrative *nai¹* and the locational deictic *mai²*.

the relative clause *apple that John bought*, the head is initial and the postposed attribution clause is (optionally) marked with *that*. However, not every language expresses these three functions in separate constructions like English. Some languages encode two of these functions, or all three, in a single construction. Khamti encodes the basic genitive with juxtaposition, as mentioned previously in Section 3.5 with examples like *kai⁵ lwin³* 'chicken Lwin's'. In this section, I show that Khamti encodes genitives, adjectives, and relative clauses the same way. While the genitive juxtaposes two bare nouns, the adjectival and clausal attributive constructions first become *an³*-nominals, which are then postposed in similar noun-noun fashion.

Other languages that use a single construction for adjectival and relativized functions to the exclusion of a basic genitival function include Tagalog and Thai (Gil 2011). I describe Khamti adjectival expressions in Section 3.6.2 and relative clauses in 3.6.3 and show how they are alike in using *an³* as a stand-in attributive head.

3.6.2 Predicate adjective nominal with an³ [ADJ]
Khamti predicate adjective constructions are expressed in two ways— as a simple predicate adjective such as *waan⁵* 'be.sweet' (see Table 2.9 in Section 2.4.2) and here as a nominalized or reified compound, *an³ waan⁵* 'sweet one', which includes a predicate adjective along with *an³* as a nominal head. Here, I gloss *an³* as 'ADJ' to highlight its role of nominalizing predicate adjectives. The PREDICATE ADJECTIVE NOMINAL construction consists of an initial head noun that is juxtaposed to compound nominal that includes *an³* and a stative verb, [NOUN][*an³*+V$_{STATE}$]. An adjectival construction without *an³* is simply a noun juxtaposed to a stative verb and can be considered more generic (discussed later). Examples of Khamti adjectival constructions that use *an³* as a nominal head with the predicate adjective are shown in (76)-(79) for typical adjectival categories listed in Dixon (1982).[38] In these constructions, *an³* 'ADJ' functions as a *relativizer* or simply a nominal marker.

(76) *tuun²mai¹* *an³kaa³tseu³* [*mak⁵*] [**an³** *nii³*]   *mau⁵* *piin³*   *nai¹-khau⁵* *mai²*
      tree   whatever   fruit   ADJ   be.good   NEG   produce   DEF-PL   F.OBJ

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38 A list of Khamti examples using Dixon's adjectival categories is shown in Table 2.9 in Section 2.4.2.

> *luk¹   ngau² mai²   tii⁵   ham²   muut⁵ muut⁵ nam⁵*
> from   root   ABL   IRR   dig.up completely   CONT
>
> '(they) will completely dig up from the roots whatever trees are not producing good fruit (lit. 'fruit, good-ones')'

(77) *kau³ [luk¹   kau³] [an³   yaeu⁵] mai²   tii⁵   haeu² nam⁵*
  1SG   child 1SG   ADJ   be.big   REC   IRR   give   CONT
  'I will give to (you) my oldest child (lit. 'my child, (the) old one')'

(78) *man⁴ luk¹   tiak¹ phatsau² mai²   [ratanaa⁵] [an³   kau⁵   tameung⁴] [an³*
  1SG   from   box   self   ABL   jewelry   ADJ   be.old   both   ADJ

  maeu⁵   tameung⁴] au³   uak⁵   nai²   uu⁵
  be.new   both   take   out   can   IMPF

  'she can take out both (the) old and new jewelry (lit. 'jewelry, (the) old ones, (the) new ones) from her own jewelry box'

(79) *tin³tin³ meu⁴meu⁴ phuk⁵ sii⁵   [tii³] [an³   nam³]   sing⁵   tik¹tik¹ mai²   kaa⁵*
  feet   hands   bind   CONJ   place   ADJ   be.black be.dark very   ALL   go

  khuat⁵   laa⁴
  discard   IMP

  'bind (his) feet and hands and throw (him) in a very dark black place (lit. 'very dark place, a black one')'

With these examples of the predicate adjective nominal construction, *an³* functions as a reifier which, as with the deverbal nominal, places a nominal boundary around the predicative adjective. This is a reification process whereby a (stative) relationship is construed, by means of summary scanning, imposed by *an³* referring to a thing. In this way, the resulting construction is a predicative adjective nominal and mirrors the SG CLASSIFIER and INDEFINITE CLASSIFIER constructions. The predicate adjective nominal compound is a conoun that modifies a co-occurring noun because the component *an³* is coreferential with the noun.

The adjectival examples in (76)-(79) above demonstrate a compound attributive construction that features a predicate adjective with a juxtaposed *an³* nominal head in conjunction with a full lexical noun. In contrast, a simple predicate adjective construction is comprised of just a head noun and a bare stative verb (predicate adjective), [NOUN][V_STATE]. Examples of a simple predicate adjective construction are provided with the adjectivals *kau³* 'be.old' and *maeu⁵* 'be.new' in (80), *niang³* 'be.red' in (81), *nii³* 'be.good' in (82), and *waan⁵* 'be.sweet' and *khum¹* 'be.bitter' in (83).

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(80) *phaeu⁵ kaw¹* [*kheeung³*] [**kau⁵**] *mai² kau³ au³* [*man²*] [**maeu⁵**] *inn³ phung⁵*
who then clothes be.old F.OBJ 1SG take cloth be.new NEG patch
lit. 'clothes (that) are old' / 'cloth (that) is new'
'nobody takes old clothes to patch with new cloth'

(81) *khau⁵ yaa¹ man⁴ mai² seeu⁵luan²khuat⁵ sii⁵* [*phaa²*] [**niang³**] *haeu² uu⁵*
3PL TOP 3SG F.OBJ disrobe CONJ blanket be.red give IMPF
lit. 'blanket (that) is red'
'they disrobed her and gave (her) a red blanket'

(82) [*kuun⁴*] [**nii³**] *yaa¹ naeu⁴ tsaeu³ mai²* [*an³*] [**nii³**] *naai³ khaeu³tsaeu³ nai¹*
person be.good TOP inside heart LOC thing be.good only think EMPH
lit. 'person (that) is good' / 'thing (that) is good'
'a good person thinks only good things in (their) heart'

(83) *luk¹ moo⁵ an³ leeung³ mai² naai²* [*nam¹*] [**waan⁵**] *n-khaa⁵* [*nam¹*] [**khum¹**]
from spring CLF INDEF ABL just water be.sweet CNT.DU water be.bitter

inn³ heeum³ phuut¹ uak⁵
NEG together bubble.up out

lit. 'water (that) is sweet' / 'water (that) is bitter'
'sweet water and bitter water do not just bubble up together from a spring'

A central difference between the two types of adjectival constructions (compound and simple) is one of reification. Just like with the deverbal nominal construction and classifier constructions (i.e. with *an³* functioning to make a single gestalt or summary scan of a relational entity), so it is with *an³* in an adjectival nominal construction. In the attributive conoun, [*an³*+V$_{STATE}$], examples like those in (76)-(79) show *an³* as establishing a reified adjectival relation that modifies nouns (including *mak⁵* 'fruit', *luk¹* 'child', *ratanaa⁵* 'jewelry', and *tii³* 'place'). Reifying the attribution expressed by the stative verb yields the pragmatic effect of emphasizing that particular modifying attribute. The emphasis is better shown with the literal translations: 'fruit, a good one', 'child, the big one', 'jewelry, old ones/new ones', and 'place, a very dark black one'. However, in (80)-(83), attributes with bare stative verbs merely assert the trait of a given entity without reifying it, therefore, having no emphatic effect on the attribute.

An³ extends in grammatical function from its role in the deverbal nominal construction to that of a predicate adjective nominal marker. The process is the familiar conceptual reification feature of *an³* in which a relational predication (either a verb or stative verb) is re-conceptualized as a thing. In these constructions, *an³* is a "nominalizer" in the conceptual sense of reifying an occurrence of the relation. But

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unlike the lexical deverbal nominal construction which results in a lexical noun, the predicate adjective nominal construction results in a conoun that modifies a co-occurring noun—the *an³* component being semantically schematic with the noun. *An³* is also *reifies* full clauses, which I describe next.

3.6.3 Clausal nominal with an³ [REL]

Thus far, *an³* is described as a nominal head [NOM] for deverbal nominalization and a nominal head [ADJ] for predicate adjective constructions that turn into nominal adjective constructions. It turns out that the language also deploys *an³* as creating a conoun in constructions that nominalize a full clause in order to modify its head noun. These constructions function as relative clauses with *an³* [REL], in effect, serving as the "relativizer". In these constructions, REL stands for a *de-clausal* nominal marker. Khamti relative clause constructions are encoded in two ways—as a compound construction with *an³* as the head of the clausal expression and as a simple relative clause (a subordinate clause without *an³* that is juxtaposed to a head noun). *An³*-headed clausal constructions consist of a head noun juxtaposed to a nominalized clause, [NOUN][*an³*+CLAUSE].

The clausal nominal construction with *an³* is a canonical relative clause expression (i.e., a restrictive relative clause) and involves two entities—a head noun and an embedded subordinate clause. The subordinate clause has its own predicate and core arguments and serves to modify the head noun in a fashion similar to an adjectival construction—by restricting the referent of the head noun (Dixon 2010a: 23, 2010b: 314). Often, languages display certain morphological criteria to signal an embedded clause such as nonfinite verb forms (infinitives, gerunds, etc). However, not all languages show the same structures and this limits the applicability of using morphosyntactic criteria in cross-linguistic comparison (Cristofaro 2003:1). Furthermore, because the method used in this dissertation for language description includes a diachronic dimension of analysis in which *an³* develops as a multifunctional gram, a more functionally based definition of subordination is helpful.

CG outlines subordination as a facet of conceptual construal using the notion *profile* defined in Section 3.1. Subordinate constructions, such as relative clause expressions, involve two states of affairs (henceforth, SoA) expressed by two separate events, a main event and a dependent event. The dependent event is construed in the context of the main event and it must take on the profile construal of the main event (2003: 2). For example, the sentence *The carpenter* [*who builds luxurious houses*] *made a big profit* profiles the main event of making a profit, not the subordinate event of building luxurious houses. The main SoA is that the carpenter made a big profit, while the dependent SoA specifies that it is not just any carpenter that made a big profit, but one who more specifically builds luxurious houses. With this definition of subordination, the head noun *carpenter* identifies a general entity type and the restrictive SoA serves to narrow that type down to a more specific example of the noun. In relation to relative clause subordination, the dependent SoA provides some additional delimiting information about a participant of the main SoA by indicating some other event/relation of which that participant is a part (Cristofaro 2003: 195).

Languages use different strategies in marking the relative relation. While English uses several different relative pronouns such as *who* in the example sentence above, Khamti uses a single relative marker, *an^3*, whose function is roughly equivalent to the English pronoun *that* in (84)-(86). In (84), *an^3* is the head of a nominal clause *$an^3 kau^3 thuk^5tsaeu^3$* 'thing I like'. The nominal clause functions as a conoun which, in this case, just happens to modify a coreferential (deverbal) noun, *an^3kiin^3* 'food'. In (85), the conoun, *$an^3 Ii^5 seeu^1 wai^1$* 'thing that Ii has bought', modifies the head noun *paa^5tsa^1* 'grave' and in (86), the conoun, *$an^3 man^4 tsau^2 tsaeu^2 tuai^5 muap^5$* 'thing that he himself broke by striking', modifies the noun *$sik^1 moo^2$* 'pot shard'.[39] In these examples, the relative clausal relationship is signaled by the juxtaposition of a head noun and its conoun.

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39 The reflexive morpheme *$tsau^2$* in (86) acts as an INTENSIFIER (see König and Siemund (2001) for discussion about a reflexive being used functionally as an intensifier).

(84) *kau³ mai²   yaa¹   [an³-kin³]   [**an³** kau³ thuk⁵tsaeu³ nai¹-khau⁵] seeu¹ haeu² uu⁵*
     1SG F.OBJ TOP NOM-eat REL 1SG like DEF-PL buy APPL IMPF
     lit. 'as for me, (he) buys (me) foods, the ones I like'
     'as for me, (he) buys (me) foods that I like'

(85) *haang³taai³ [paa⁵tsa¹] [**an³** Ii⁵ seeu¹ wai¹] mai² saang⁴khiu⁵ wai¹ uu⁵*
     dead.body grave REL Ii buy DUR LOC bury DUR IMPF
     lit. (They) bury the body in the grave, the one Ii has bought'
     '(They) had bury the body in the grave that Ee has bought'

(86) *huang¹taai³uu⁵ nai¹ mai² man⁴ [sik¹ moo²] [**an³** man⁴ tsau² tuai⁵*
     screech.sound DEF LOC 3SG shard pot REL 3SG self strike

     muap⁵] nai¹
     break EMPH

     lit. 'at the screech, he picked up a pot shard, the one he himself broke by striking'
     'at the screech, he picked up a pot shard that he himself broke by striking'

Because the subordinate clause uses *an³* as a *co-nominal* head or conoun, *an³* is coreferential with the head noun juxtaposed to it, being an abstract instance of that noun. The coreference relationship between conoun and its noun is indicated in the the literal translations of (84)-(86). *An³* is not translated as 'thing' (as in the deverbal nominalization), but rather as 'one', which implies a schematic coreference situation. In other words, with full clauses, *an³* also acts as a reifier which summarizes a clausal relation as an (event) thing. The resulting nominalized clause is coreferential with the head noun.

     I include from my corpus examples that would be translated in English as different relative pronouns, as *who* in (87), *when* in (88), and *where* in (89). These readings of an English relative pronoun that is specific as to person, time, or place of its head noun are subsumed under the single, generic *an³* marker in Khamti. *An³*, in fact, is not a relative pronoun, but a schematic noun and bears a coreferential relationship to the noun based on schematicity. The schematic relationship between noun and conoun is a crucial point that I discuss in Section 3.8 below.

(87) *[kuun⁴] [**an³** puai⁴ hiit⁵] nai¹-khau⁵ kaw¹ tsiit⁵tsoo³tsiit⁵tsat¹ nang⁵ man⁴*
     person REL festival make DEF-PL also precisely just 3SG

     n-kan³ waa³ taai³ n-sii⁵ yum⁵ uu⁵
     this-RCPR must die DIR-QT believe IMPF

     lit. 'people, the festival-making ones'
     'the people who make the festival also believe that, just like him, (his) spirit must die'

(88) [*yaam⁴*] [***an³*** *naau⁵* *amaeu⁴* *uak⁵* *maa⁴*] *nai¹* *tsiap⁵tsiap⁵tsee⁴tsee⁴* *uu⁵*
    time REL star that out come DEF probe IMPF
    lit. 'the time, the one (when) stars come out'
    'he probes (them for) the time when those stars come out'

(89) *man⁴* *kaw¹* *luung⁴* *ngai⁴sii⁵* *ngau²* *tuun²* *mai¹* *mai²* *hak¹* *nai¹-khau⁵* *khut⁵*
    3SG also descend and.then base tree LOC root DEF-PL dig.up

    ngai⁴sii⁵ [*tii³*] [***an³*** *kuun⁴* *nai¹-khau⁵* *uu⁵* *mai²* *kaa⁵* *uu⁵*
    and.then place REL person DEF-PL live ALL go IMPF

    lit. 'the place, the one people live at'
    'he then descends and then digs up the roots at the base of the tree and then goes to the place where people live'

The example in (90) shows the head noun *taang⁴* 'road' immediately modified by the adjective *luung⁵* 'be.big', followed then by the subordinate conoun (clause). The subordinate clause contains its own subject, *peeun³ pkaa⁵* 'other traders', and verb, *pai³ mai⁵* 'pass freely by'.

(90) *pa¹* *kaa⁵* *sii⁵* [*taang⁴* *luung⁵*] [***an³*** *peeun³* *pkaa¹* *khau⁵*
    carry.on.back AND CONJ road big REL other trader PL

    pai³ *mai⁵*] *theung⁵* *kii⁴* *him⁴* *mai²* *au³* *nuan⁴* *wai¹* *sii⁵*
    move.freely pass.by reach when beside LOC take sleep DUR CONJ

    phaa² *huum⁵* *haeu²* *yau¹*
    blanket cover APPL PERF

    lit. 'the big road, the one traders freely pass by on'
    'he carried it away and when (he) reached the big road where other traders pass by freely, beside (the road) (he) took (the body), as if sleeping, and covered a blanket over (it)'

The examples in (91) and (92) keep vague any detail, such as case, made explicit by the English relative pronouns *whom* and *whose*. In (91), *an³* cross-references the object of the main clause, *luk¹ kau³* 'my child', while in (92), it identifies the possessee of the head noun referent, *taa³* 'sight' (lit. 'eye'). These readings are also vague in Khamti, as the literal translations imply.

(91) *koo¹* *nai¹* *yaa¹* [*luk¹* *kau³*] [***an³*** *kau³* *haak¹* *huam⁵nang⁵tsaeu³* *luung⁵*] *nam⁵*
    person this TOP child 1SG REL 1SG love adore much EQU
    lit. 'this person, the one I love very adoringly'
    'this person is my child whom I love very adoringly'

(92) *waai⁴amaeu⁴* *kuun⁴* *nai¹-khau⁵* *yaa¹* [*phuu²*] [***an³*** *taa³* *maa⁴*] *mai²* *huang¹* *uu⁵*
    after.that person DEF-PL TOP one REL eye come F.OBJ bring IMPF
    lit. 'the one, the one whose sight returned'
    'after that, people bring the one whose sight returned'

Khamti also has a simple relative clause construction that does not include *an^3*. Instead, the initial head noun is simply juxtaposed with a bare relative clause. This is shown in (93) with the head noun, *kuun^4 koo^1 leeung^3* 'a person', and the relative clause, *heeu^4 mai^2 khii^5* 'riding a boat', and in (94), with the head noun, *psauu^5 koo^1 leeung^3* 'a girl', and the relative clause, *too^{4}huk^5* 'weave'.

(93) *ngai^4-nai^1-mai^2*   *suung^5*   *nuu^3*   *pun^2*   *nuu^3*   *mai^2*   *kii^4*   *yaa^1*
    and-this-LOC   only   look way.over.there   look   here   when   TOP

    tee^{1}tee^{1}seung^{5}waa^3 [*kuun^4* [*koo^1* *leeung^3*] [*heeu^4* *mai^2* *khii^5*] *sii*...
    really   person CLF   INDEF   boat   F.OBJ ride   CONJ

    'and at this, as for only looking way over there and here, really for a person riding a boat and...'

(94) *maan^2*   *mai^2*   *theeung^5*   *kaa^5*   *kii^4*   *heeun^4*   *leeung^3*   *mai^2*   [*psaau^5*   *koo^1*   *leeung^3*]
    village ALL   reach   AND   when house   INDEF   LOC   girl   CLF   INDEF

    [*too^{4}huk^5*]   *mai^2*   *han^5*   *uu^5*
    weave   F.OBJ   see   IMPF

    'and when he reached the village he saw a girl weaving at a house'

The two relative clause constructions—ones with *an^3* 'REL', in (84)-(92) and the plain ones without *an^3*, in (93) and (94)—are similar in structure to the two adjectival constructions analyzed in Section 3.6.2. Like the adjectival constructions, the difference between the two relative clause constructions is one of reification. However, unlike the predicate adjective nominal construction, the reification process in the clausal construction with *an^3* does not seem to lead to a pragmatic emphasis on the conoun modifier. Instead, clausal nominalizations (ones with *an^3*) are the most common and widely distributed of the two relative constructions. By contrast, the plain relative relation, as exemplified in (93), *kuun^4 koo^1 leeung^3 heeu^4 mai^2 khii^5* 'a person riding a boat', and in (94), *psaau^5 koo^1 leeung^3 too^{4}huk^5* 'a girl weaving', are much more restricted in their distribution (than their plain adjectival counterparts), as they show up in grammatical contexts where head nouns are indefinite and unspecified. The examples in (93) and (94) are marked with the indefinite construction [CLF+one]. Because the relative attributions follow a distribution where the plain relative clause primarily occurs with explicit indefinite marking, I analyze the two relative clause constructions as following a grammaticalization pathway from

an³-headed to zero. This process is an example of semantic bleaching and is developed in more detail in my summary in Section 3.8.

The analysis of *an³* thus far shows an array of constructions from a lexical general noun to a lexical deverbal nominal to conoun constructions that signal numerals, indefinites, demonstrative possessives, adjectivals, and clauses. This variety of constructions arises from the basic meaning of *an³* as an abstract thing. The conceptual boundaries of *an³* re-construe relational notions as reified relations, in other words, as nominalizations.

These nominal constructions pattern as noun-conoun pairs and suggest a unique and prolific use of a more general *appositive* relationship. I discuss this appositive relationship in the summary of this chapter (Section 3.8). Moreover, I show how the *an³* constructions are one of three sets—the other two being sets of constructions involving *nai¹* and *mai²*—which follow a single cognitive reference point schema, discussed at length in Chapter 6. Before summarizing the broader patterns of *an³* grammaticalization as it relates to an appositive relationship, I first describe *an³* constructions in equative clauses functioning as nominal predicates and highlight their coreferential function.

3.7 The role of *an³* in equative constructions

An equative clause is one which describes a feature of its subject and contains a nominal subject complement. In Khamti, when an *an³*-nominal construction is the nominal complement in an equative clause, it becomes the conoun of the subject nominal in the construction. In this way, a Khamti equative construction also includes a coreferential function with *an³* as its central component.

The equative clause in Khamti concerns two juxtaposed nominals with one of several sentence-final equative particles (see Sections 2.4.2 and 3.5). A basic equative clause is shown in (95) with the subject nominal *man⁴* 'he' and a nominal complement, *tsau² maan²* 'village headman' (a plain nominal).

(95) *man⁴ tsau² yaa¹ tsau²   maan² nai¹ nam⁵*
       3SG   POL TOP headman village DEF EQU
       'He [polite] is the village headman [lit. lord]'

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The coreferential function of *an³* nominal constructions is seen in equative clauses which take a *nominal complement* that uses *an³* as a nominal head. Examples of nominal complements marked by *an³* are shown in (96) with the nominalized color adjectives *an³-niang³* 'red one' and *an³-khau²* 'white one' and in (97) with the adjective *an³ mau⁵ tsaeu³* 'the not-right one'. In (98), the nominal complement is the nominalized clause *an³ phit⁵ sin⁵* 'a precept-breaking one'.

(96) *nam¹neeut⁵   man⁴   muak¹yaa²nam¹tee²sang⁵   mai²   thumm²   kaa⁵   sii⁵*
blood   3SG   rhododendron   F.OBJ   flood   AND   CONJ

*luk¹kaa⁵amaeu⁴   muak¹yaa²nam¹tee²sang⁵   piin³   [**an³**-niang³]   kaa⁵   yau¹*
from.that   rhododendron   become   one-be.red   AND   now

*wan¹.   meeu³sang⁵koo⁵   yaa¹   peeung³tsau²   [**an³**-khau²]   nam⁵*
RPRT   beginning   TOP   original   one-be.white   EQU

'Its blood completely flooded the rhododendron and from that, it is said, the rhododendron now becomes red (lit. 'a red one'). In the beginning, the original is white (lit. 'a white one').'

(97) *nang⁵   nai¹   [**an³**   mau⁵   tsaeu³]   nam⁵*
girl   DEF   one   NEG   right   EQU
lit. 'the girl is the not-right one'
'the girl is not right (mentally aware)'

(98) *amaeu⁴   [**an³**   phit⁵   sin⁵]   nam⁵*
that   one   break   precept   EQU
lit. 'that is a precept-breaking one'
'that is to break a precept'

The nominalized clause in (98), *an³ phit⁵ sin⁵* 'a precept-breaking one', has an infinitival reading in the free translation. An infinitival reading is in keeping with both a Khamti VO word order, which specifies a non-referential action (Section 5.8) and the nature of *an³* as a conceptual reifier. When a VO non-referential action is reified, it results in a relation which is construed in summary fashion. This is precisely the conceptual analysis of infinitives, which impose a weaker form of summary scanning than found on a full (reified) nominal (Langacker 2013: 119).

In (99), the nominalized predicate adjective, *an³ khian⁴ kin³nii³* 'most delicious one', is seen as the nominal complement and is coreferential with the subject *paa³sa²njee¹* 'eel', as expected. However, in (100), the nominal complement *an³ khian⁴ yaeu⁵* 'the oldest one' is coreferential with a topic (rather than subject), which is previously encoded by a proposition in the discourse. It references the

specific set of three children belonging to the speaker's mother.

(99) *paa³sa²njee¹ nai¹   naeu⁴   paa³ mai²* [***an³** khian⁴   kin³nii³*] *nam⁵*
       eel   DEF   among   fish LOC   one   most   delicious   EQU
       'the eel, of all fish, is the most delicious one'

(100) *kau³ yaa¹* [***an³** khian⁴   yaeu⁵*] *nam⁵*
       1SG   TOP   one   most   big   EQU
       'I am the oldest one'

In (100), the *an³* nominalized predicate adjective *an³ khian⁴ yaeu⁵* 'most big one' is part of an equative construction that references a topic within the larger discourse. According to Lambrecht (1994: 74), a proposition acquires the status of a discourse referent, a functional equivalent to a nominal entity, once it is assumed by a speaker to be known to the addressee and thus is part of the *discourse register*. The discourse register is that set of representations which a speaker and hearer may be assumed to share in a given discourse. These examples serve to illustrate the coreferential nature of the *an³* conoun in equative constructions and merely reinforce that the reification of a relation has happened.

I conclude this chapter by providing a semantic map that illustrates the array of constructions that pertain to *an³*. Furthermore, with this semantic map, I propose a linear interpretation using grammaticalization pathways pertinent to these Khamti *an³* constructions, which highlight the appositional context.

3.8 A summary of the functions of *an³*

The constructions analyzed in this chapter are summarized in Table 3.2. In these constructions, a semantically specific head noun corresponds with a conoun that is headed by the semantically general noun *an³* 'thing'. This establishes an appositional relationship which allows the *an³* conoun to function as a modifier of the head noun. In Table 3.2, I try to show the various appositional relationships with the literal meaning of some central examples that have been analyzed in this chapter.

Table 3.2. A summary of an^3 constructions

CONSTRUCTION	NOUN	CONOUN	LITERAL MEANING	EX. #
DEVERBAL NOMINALIZATION [NOM]	$an^3\text{-}kaa^2$	NA	to.dance-thing (a dance)	(58)
SG CLASSIFIER [CLF]	$tian^4liik^5$	$an^3\,leeung^3$	grate, a single one (one grate)	(62B)
INDEFINITE CLASSIFIER [CLF]	$heeun^4$	$an^3\,leeung^3$	house, INDEF one (a house)	(69)
DEMONSTRATIVE POSSESSIVE [DEM.POSS]	kai^5	$an^3\,maeu^4$	chicken, you one (chicken is yours)	(70)
PREDICATE ADJECTIVE NOMINAL [ADJ]	mak^5	$an^3\,nii^3$	fruit, a good one (good fruit)	(76)
CLAUSAL NOMINAL [REL]	an^3kin^3	$an^3\,kau^3\,thuk^5tsaeu^3$	foods, the ones I like (foods that I like)	(84)

With the constructions in Table 3.2, an^3 is analyzed as being identical, though schematic, to its head noun and it is this schematic arrangement that makes the an^3 conoun appositional and therefore anaphoric with the head noun.[40]

This chapter has presented a detailed synchronic analysis, along with a few diachronic speculations along the way. In what follows, I propose a schema for the semantic development of an^3 by viewing it with a semantic map, which is given in Figure 3.5 below. Semantic maps have more recently been employed in linguistics to outline a typological array of linguistic units with multiple functions (Anderson 1982, 1986). The functional terrain that is displayed in a map has an assumption of semantic relatedness across the functions at the cross-linguistic level, making the configurations in the map supposedly universal (Haspelmath 2003: 213). The map is useful for charting individual languages and making typological hypotheses for ongoing language documentation, as Rice and Kabata (2007) have convincingly accomplished for cohort usages of ALLATIVES (that is, ALLATIVE syncretisms).

The language-specific semantic arrays that show up from a cross-linguistic description of high-density functions lead to expectations of diachronic change (Haspelmath 2003: 230). From a synchronic perspective, contiguity of two constructions on a map can potentially be reinterpreted as an evolutionary

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40 An appositional (anaphoric) structure is a crucial feature of an^3 having an underlying cognitive reference-point schema in Section 6.4.

development—the functional node following one or more previous nodes semantically presupposes its previous contiguous function (Narrog and Van Der Auwera 2001: 323). Furthermore, directional arrows reflect the generally accepted unidirectionality hypothesis of grammaticalization, which moves from lexical to less lexical (grammatical) constructions (Givón 1971; Lehmann 1995[1982]: 16). The array can also reflect a radial category of family resemblances, in which a given node functions as source for several related extensions (Lakoff 1987).

I posit the map in Figure 3.5 as a starting point from which to chart cross-linguistic patterns of multifunctional marking pertaining to certain nominalized constructions. The arrows describe individual grammaticalization pathways taken by *an³* in the course of its development from a lexical item to a gram *family*. The dotted vertical line in Figure 3.5 divides the lexical (non-coreferential) constructions on the left from the grammaticalized (coreferential) constructions on the right. The grammaticalized constructions are conouns, which contain *an³* as a conoun head and form an appositive relationship with a given head noun, [NOUN][*an³*+...]. Moreover, the conceptual reifying function of *an³* arises from the deverbal nominal construction in which *an³* reifies a verb *relation* as a noun *thing*. It seems that this initial stage of grammaticalization is important, because it then motivates *an³* to extend as a gram to nominalize conoun constructions, illustrated on the right side of the dotted vertical line.

LEXICAL ┊ FUNCTIONAL

PL CLASSIFIER

SG CLASSIFIER ⟶ INDEFINITE DETERMINER

NOUN
an³
thing
⟶ DEVERBAL
NOMINAL

⟶ DEMONSTRATIVE POSSESSIVE

INDEFINITE PRONOUN
anything, anywhere

PREDICATE ADJECTIVE
NOMINAL ⟶ SIMPLE PREDICATE
ADJECTIVE

CLAUSAL NOMINAL ⟶ SIMPLE RELATIVE
CLAUSE
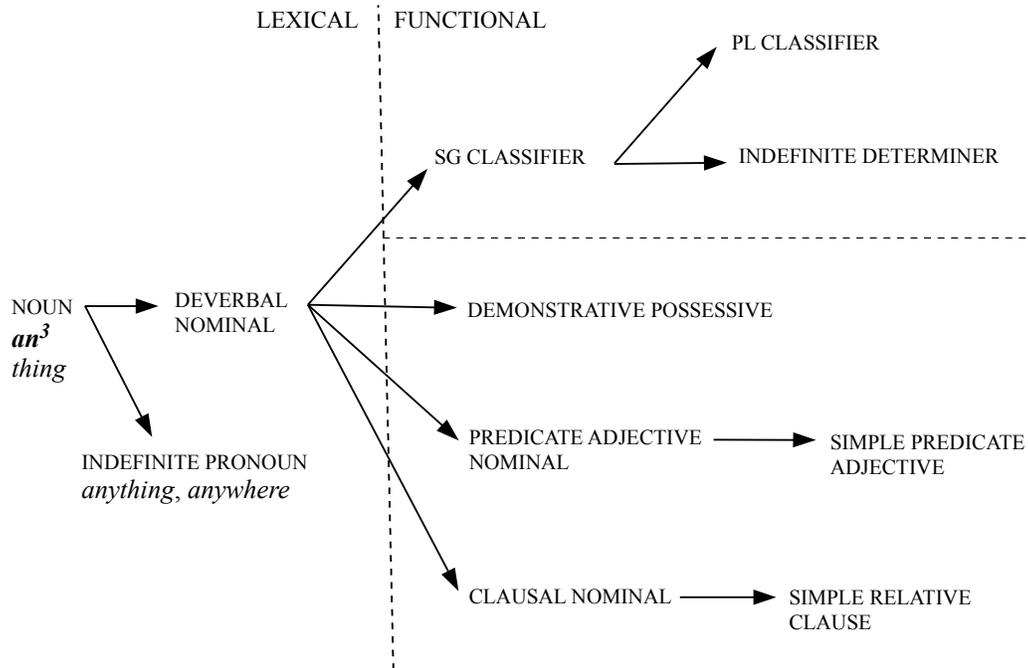
Figure 3.5. Semantic map proposed for the functional extensions of *an³* 'thing'

The left side of the line describes three lexical nouns—*an³* 'thing' as a basic
and general noun, as a simple indefinite pronoun, and as a deverbal noun. The general
noun *an³* extends in function to become both the indefinite pronoun and an all-
purpose deverbal noun marker, [NOM]. The noun-to-indefinite pronoun extension is
known as a generic-noun-based indefinite (Haspelmath 1997b: 27, 2011), while a
nominalizer function commonly reflects an older abstract noun (DeLancey 1993: 15).

Next, *an³* as a nominalizer acts conceptually as a reifier which, I propose, is
likely the immediate source that extends to the attributive nominal constructions on
the right side of the dotted vertical line. The reifying role of *an³* that is first
characterized in the deverbal nominal construction is the evolutionary driving force
behind a multifunctional *an³* demonstrated with the constructions on the right.[41]

The dotted horizontal line in Figure 3.5 separates the three classifier-based

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41 The deverbal nominal construction [NOM] appears to be a first step in extension to grammatical
    conoun constructions because a deverbal noun is lexical and conoun constructions are more
    functional. Even though I have described it in this fashion, it does not necessarily rule out that all
    of these constructions could have co-evolved with minimal time-depth between extensions.

constructions (SG, PL, INDEFINITE)—which employ *any* classifier—from the three nominal constructions below the line, which only utilize *an³*. To go from a more general pattern (any classifier) to a more restricted one (only *an³*) suggests a functional extension from classifier constructions to more specialized nominalized constructions.

Moreover, with the extension leading from the lexical DEVERBAL NOMINAL construction to the three classifier constructions at the top of the figure, I suggest that the initial diachronic change extends first to the SG CLASSIFIER construction and from there to the INDEFINITE DETERMINER and PL CLASSIFIER constructions. This seems to be a logical extension because both the deverbal noun and the singular classifier constructions are head-initial. With the PL CLASSIFIER construction, the classifier syntactically repositions itself to be head-final. This reordering of elements in a new construction is indicative of grammaticalization processes (Traugott 2001: 1). The INDEFINITE DETERMINER seems to also extend from the SG CLASSIFIER because, while both constructions are head-initial, the inference of indefiniteness in all liklihood stems from the numeral 'one' (Givón 1981; Dryer 2011).

The remaining *an³* constructions that are below the horizontal line exclusively employ *an³* as a nominal head. In this chapter, I described the DEMONSTRATIVE POSSESSIVE construction as an extension of *an³* in which *an³* is seen not as a reifier *per se*, but as a textual deictic pointer to a full nominal in the clause (the head noun). I suggested that this construal came about as an inference based on the juxtaposition between head noun and conoun (*an³* plus a personal pronoun). The head noun "belongs to", in a general possessive sense, the referent of the personal pronoun.

The extension of 'thing' to that of a possessive is attested in Heine and Kuteva (2002: 296), who cite Matisoff (1991: 391) for Standard Thai and Khmer possessives. However, with the Thai example provided by Matisoff, the word *khɔ̌ɔŋ* is glossed as 'things'. Having learned Thai myself, I have always glossed *khɔ̌ɔŋ* as 'belongings'. Thai has a different word for 'thing' (*an³*, a cognate with Khamti). If glossed as 'belongings' the meaning is inherently possessive, which would convincingly give rise to a possessive usage. This makes the Khamti *an³* a much better example of possessive grammaticalization from 'thing' because there is no

inherent possessive reading with *an³*. This is more in line with the Khmer example also cited by Heine and Kuteva (ibid.). With the Khmer example, one sentence they cite uses the word *rəbɒh* 'thing', which co-occurs with the demonstrative *nuh* 'that thing', while a second sentence has *rəbɒh* co-occurring with the first person singular personal pronoun glossed 'of mine'. Heine and Kuteva (ibid.: 297), however, do qualify these two attestations, saying more research is required.

The PREDICATE ADJECTIVE NOMINAL and CLAUSAL NOMINAL constructions also follow from the deverbal noun (as *an³*-initial conouns). These two constructions may lead further to extensions of predicate adjectives and relative clauses without a nominal head, as illustrated on the far right in Figure 3.5. However, it is not for certain if the simple constructions actually arise from the nominal ones. This is an area for further research and remains outside of the current scope of this chapter, which was to describe the wide array of *an³* constructions.

One final observation is that the appositional *an³* constructions that Khamti exhibits are not found in other Tai languages, but are quite common in Tibeto-Burman languages (Matisoff 1972; Kölver 1977; Herring 1991; Genetti 1992; Ebert 1994; Noonan 1997, 2008; Bickel 1999; DeLancey 1999, 2002, 2011; O'Rourke 2000; Lahoussois 2002, 2003; Chalise 2005; Regmi 2005; LaPolla 2006; Watters 2008; Grunow-Hårsta 2011).[42] Because the linguistic area in which (Tai) Khamti finds itself is largely Tibeto-Burman (separate from Tai, see Section 2.2), it seems likely that Khamti has adapted its nominalizing strategy from a different language family altogether; its immediate Tibeto-Burman neighbors.[43]

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42 This research is also cited in Genetti (2011b: 164).
43 In the conclusion in Chapter 7, I relate several (Tai) Khamti-specific linguistic features (SOV word order, object-marking, and appositional nominal constructions) as occurring in Khamti due to language contact with Tibeto-Burman.

Chapter Four

The proximal demonstrative *nai^1* 'this'

4.1 Introduction

The next two data chapters center around spatial deictics—the demonstrative, *nai^1* 'this', described in this current chapter and the locational deictic, *mai^2* 'here', accounted for in Chapter 5. Taken together, all three data chapters (3, 4, and 5) account for a large portion of the nominal structure of Khamti due to the extensive grammaticalization of all three target morphemes in conoun constructions. In this chapter, I make the case for *nai^1* acting as a conoun in its many constructional extensions.

Broadly speaking, deixis is the way an expression is fixed to some crucial and common point in the speech context in a way understood by both speaker and hearer. Deictic expressions are associated with three diverse morphosyntactic categories— *spatial* (e.g. *this/that* and *here/there*), *temporal* (e.g. *now/then*), and *personal* (e.g. *I, you*)[44]—based where and when a person in a given context is speaking (Anderson and Keenan 1985; Frawley 1992: 274). Typologically, demonstratives are productive sources for a vast amount of material entering into grammaticalization processes (Diessel 1999, 2006, 2012), hence, the focus of Chapter 4 on the demonstrative *nai^1* 'this' and of Chapter 5 on the demonstrative (spatial deictic) *mai^2* 'here'.[45]

There are two semantic features specific to spatial deictics, a deictic center and some approximate and directed distance from that center (Gerner 2009: 46). The deictic center links to one of the speech act participants and, depending on a given deictic used in an utterance, the deictic center can shift within the speech act. An example of deictic shift in English with the pronouns *me/you* is seen in the contrastive pair of sentences *The book is near **me*** versus *The book is near **you***, which

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44 Included in spatial deixis are motion verbs such as *come/go* signaling direction and movement relative to speaker/hearer location (Frawley 1992: 278).

45 Diessel (1999: 2) uses the term *demonstrative* more broadly to subsume locational or spatial deictics, but he does not provide an explicit reason for doing this. I presume it is that spatial deictics are also demonstrative in pointing out entities and, thus, pattern similarly as grammaticalizing morphemes. In this dissertation, I will use the term *demonstrative* in the specific sense of *this* (for Khamti *nai^1*) and the term *spatial deictic* for *here* (for Khamti *mai^2*), in order to maintain a helpful distinction between the two. It is assumed, however, that these are both demonstrative in Diessel's sense of the term.

positions either the speaker or hearer as the deictic center, with respect to the predicate *be near*. The deictic center, therefore, shifts with the choice of pronoun. Once a deictic center is established in an utterance, there usually is an aspect of distance assumed in regards to that center. A language can utilize one of two types of spatial correlations, distance-oriented and person-oriented. When relative distance implies a single deictic center (speaker) and distance is measured as proximal, medial, or distal to that one center, the system is *distance-oriented* or, following Gerner (2009: 46), speaker-oriented. When measurement implies more than one center (juxtaposing both simultaneously in the speech situation) and is estimated as proximal to speaker, proximal to hearer, or distal to speaker and hearer, the system is considered *person-oriented* (Anderson and Keenan 1985: 282-284; Diessel 1999: 39). As will be shown in this chapter, Khamti employs a person-oriented system that signals three locations—proximal to the speaker's location, proximal to the hearer's location, or distal to both the speaker's and the hearer's location.

Spatial deictics can generally be characterized in languages as drawing the hearer's attention to something in the perceptual space of the speaker and hearer (Dryer 2007c:162). The notion of "hearer's attention" has been more carefully delineated by Diessel (2006) as coordinating *joint attention* with both the speaker and hearer. Joint attention underlies one of the most primal functions of communication and plays a crucial role in grammaticalization (Diessel 2006: 464; Tomasello 2008; Diessel 2012; Christy 2013).

In general cognition, joint attention involves three components: an actor, an addressee, and an object of reference. An actor "points to" an object of reference on which the addressee focuses. Pointing can include eye gaze, physical gesture as with a finger or lips, and language. A successful speech act entails both actor and addressee attending to the same object. Moreover, joint attention requires that both actor and addressee recognize that they are attending to the same thing (cf. Bruner 1983; Carpenter et al. 1998; Dunham and Moore 1995; Eilan 2005; Tomasello 1995, 1998, 1999, as cited in Diessel 2006: 466). Language recruits deictics as "acoustic pointers" (Brugmann 1904; as cited in Diessel 2012: 41), perhaps along with physical gesture, in order to negotiate a common reference object from the outside speech

situation. Deictic pointing involves verbally locating a "reference frame" in the context that is relative to the speaker and hearer where they can search for and jointly attend to a particular referent (Diessel 2012: 42). Establishing joint attention is a fundamental aspect of communication and deictics are unique and often ubiquitous linguistic devices selected for this purpose.

Joint attention arises in a very early stage in child development. What starts out as an infant's unsuccessful attempt to grasp an object eventually gets reinterpreted by the infant—for example, when the mother comes to the child's aid—as a reaction not from the object but from another person. There is a transformation from (re)action to sign once the child becomes aware that *the other person is aware of* the associated goal of a pointing act. There is a meeting of the minds when both are attending to the same third element, the object of grasping (Christy 2013: 200-203). This meeting of the minds is joint attention, along with a jointly recognized *shared intentionality*. Once these elements are developed in the child, the basis of cooperation, in general, and language acquisition, in particular, is established (Tomasello 2008: 72). It is not surprising, then, that deictics may be the most primal communicative acts in the vocal modality—used quite early in child development—and linguistic items that start out redundant with a pointing gesture (ibid.: 233). These verbal joint-attention devices end up grammaticalizing as pointers to or markers of more complex linguistic items (phrases, clauses, sentences) for the same basic reason—cooperative, interactive communication.

In addition, context and conceptualization interact in this grammaticalization process (Christy 2013: 210). Heine illustrates this interaction in stages: as a source meaning that is contextually unrestrained, as inferences towards new meaning in a specific context, as a new context that is incompatible with the source meaning (which backgrounds the source meaning), and as the conventionalization of a target meaning with no ties to the source context (Heine 2002: 86). Demonstratives (and locational deictics), therefore, figure prominently in basic cooperation, linguistic development, and, ultimately, in extensive grammaticalization. In terms of conceptualization and cognitive processing, demonstratives can instantiate a noun type in a domain of instantiation, turning a noun into a grounded nominal (see

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Section 3.1, Figure 3.3).[46] The conceptual characterization of noun instantiation will become more apparent when describing certain extensions of the Khamti demonstrative *nai[1]* 'this' later in this chapter.

Universally, deictic expressions like the Khamti demonstrative, *nai[1]*, convey a fundamental concept that is found in every language (Wierzbicka 1996: 89; Tomasello 2008: 232). Demonstratives are also considered semantically basic in the sense that they constitute a semantic prime that is used in understanding and defining other words that are not primes (Wierzbicka 1996: 10). Moreover, demonstratives are generally so old that their roots are etymologically unanalyzable, they are among the earliest words that children acquire, and they are closely tied to a particular pointing gesture (Diessel 2006: 465). In Khamti, *nai[1]* is a highly frequent morpheme. There are 7,730 tokens of *nai[1]* in my corpus of 90,100+ words. In short, *nai[1]* makes up 8.5% of all the lexical items in the corpus. The high occurrence rate is symptomatic of the fact that *nai[1]* has also grammaticalized in conoun constructions. In this chapter, I start with a semantic analysis of the demonstrative *nai[1]* which forms the basis of an array of constructions that are suggested to be related along the lines of several grammaticalization pathways.

4.2 Basic *nai[1]* and the pronominal demonstrative

(Pronominal) Demonstratives can stand alone as independent arguments in a clause and can function both deictically and contrastively. Deictically, demonstratives serve as joint-attention devices, which point to a location in the situational context in which to search out a target referent object as the focus of attention for a given communication between the speaker and hearer. As such, demonstratives can be accompanied by a pointing gesture. Linguistically speaking, demonstratives can contrast paradigmatically based on some semantic feature, commonly one of proximity to speech-act participants (Himmelmann 1996: 210; Diessel 1999: 118). Khamti pronominal demonstratives exhibit a tripartite spatial contrast that is person-oriented, expressed in Khamti alternatively as near Speaker, near Hearer, or away from Speaker/Hearer. This three-way contrast has *nai[1]* showing up in all three

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46   I discuss instantiation with an example of the English definite *the* in Figure 3.3 of Section 3.1. In this chapter, demonstratives *this* and *that* also function as instantiators in similar fashion.

compound demonstratives as the deictic root.[47] Each of the demonstratives in the following sets of examples are tripartite compounds consisting of a deictic root (*nai^1*), a deictic-center component (*ø, maeu^4*, and *pun^2*), and the nominal *a(n^3)*. The single root *nai^1* is the deictic pointer, perhaps similar in meaning to the English, *Look!*, whose purpose is to draw attention to an area in which to search for a particular referent (see Diessel 2012: 43 and Christy 2013: 214 for similar scenarios). The basic demonstrative paradigm for Khamti is shown in (101)-(103).

(101) *an^3-**nai^1***   *ksang^5*   *nai^5*
       thing-this   what   Q
       'what's this (near me)?'

(102) *a-maeu^4-**nai^1***   *ksang^5*   *nai^5*
       thing-2SG-this   what   Q
       'what's that (near you)?'

(103) *an^3-pun^2-**nai^1***   *ksang^5*   *nai^5*
       thing-afar-this   what   Q
       'what's that (away from me and you)?'

The demonstrative paradigm also includes plural demonstratives with the plural morpheme, *khau^5*.[48] The plural demonstrative counterparts of (101)-(103) are shown in (104)-(106).

(104) *an^3-**nai^1***   *khau^5*   *ksang^5*   *nai^5*
       thing-this   PL   what   Q
       'what're these (near me)?'

(105) *a-maeu^4-**nai^1***   *khau^5*   *ksang^5*   *nai^5*
       thing-2SG-this   PL   what   Q
       'what're those (near you)?'

(106) *an^3-pun^2-**nai^1***   *khau^5*   *ksang^5*   *nai^5*
       thing-afar-this   PL   what   Q
       'what're those (away from me and you)?'

The three-way deictic contrast is also maintained with possessive interrogatives, as shown in (107)-(109), in which an object in the situational context is the intended referent of a question pertaining to personal possession. Plural examples of personal

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47   Diessel (1999: 30-31) discusses deictic roots in languages such as Mandarin Chinese, Yagua, and Barasano.
48   Actually, the plural morpheme is also realized as *nai^{1}khau^5*, which is a compound made up of the morphemes *nai^1-khau^5* 'DEF-3PL'. The use of *nai^1* in the plural compound is derived from the demonstrative *nai^1* and described further in Section 4.3.5, below.

possession are not provided, but they pattern the same as the plurals in (104)-(106).

(107) ***an³-nai¹***   *khuang²*   *phaeu⁵*   *nai⁵*
       thing-this   belong.to   who   Q
       'whose's this (near me)?'

(108) ***a-maeu⁴-nai¹***   *khuang²*   *phaeu⁵*   *nai⁵*
       thing-2SG-this   belong.to   who   Q
       'whose's that (near you)?'

(109) ***an³-pun²-nai¹***   *khuang²*   *phaeu⁵*   *nai⁵*
       thing-afar-this   belong.to   who   Q
       'whose's that (away from me and you)?'

All of these examples in (101)-(109) denote an entity in the surrounding situation, they can be accompanied by a pointing gesture, and they convey implicitly a contrast based on a proximity relationship to the speech-act participants.

        Furthermore, the second component in these demonstrative compounds involve one of three deictic-center markers, ø, *maeu⁴*, or *pun²*. These markers identify the actual search area, which is situated in regards to three possible center configurations—the speaker, the hearer, or both. The nominal head, *a(n³)*, turns the demonstrative into a (pro)nominal, in keeping with *an³*'s nature as a nominal creator (see Section 3.2). With the speaker-oriented demonstrative, *an³-nai¹*, the deictic particle *nai¹* points to a location proximal to the speaker by default (zero). In this way, the hearer-oriented demonstrative, *a-maeu⁴-nai¹*, has the deictic root *nai¹* pointing to a location that is proximal to the hearer, being signaled by *maeu⁴* '2SG'. A literal translation for the Khamti hearer-oriented demonstrative pronoun *a-maeu⁴-nai¹* is 'this your one' (lit. 'thing-you-this')—providing etymological evidence that the meaning of the hearer-oriented deictic is in reference to the hearer's location and not the speaker's.[49] With the distal demonstrative, *an³-pun²-nai¹*, the root *nai¹* points to a search area, just as with the speaker-oriented and hearer-oriented demonstratives, while the distance approximation is in relation to *both* the speaker and the hearer and indicated by *pun²* 'over there away from you and me'. The distal marker, *pun²*, is actually rare in the corpus and it is the speaker/hearer demonstrative pair that is more often used as a dual, rather than tripartite, contrast in the demonstrative system. It is

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49 A few of my not-so-linguistically naive language consultants also explained that the meaning of
    amaeu⁴nai¹ is 'that near hearer' when discussing the data in the corpus.

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the dual contrast (proximal to the speaker/proximal to hearer) that actually gets extended to other pragmatic functions (described later in this chapter).[50]

The pronominal demonstratives are all compounds with *an³*, which is the familiar general noun that nominalizes many other constructions (described in Chapter 3). The nominalizing function of *an³* is also at work with the demonstratives as a nominal anchor for the pronominal usage, with *nai¹* functioning as a deictic root (Diessel 1999: 30). A similar nominal-anchor holds for pronominal demonstratives in other languages, such as Nùng, as cited in Diessel (ibid.: 72) and shown in (110). In Nùng, a Tai language, a demonstrative determiner, *té*, co-occurs with a nominal classifier, *tú*.

(110)   Nùng (Saul and Freiberger Wilson 1980: 6)

    [*tú*   *té*]   *non*   *cá*   *mu'un*
    CLF   that   sleep   all   night
    'that one slept all night'

In the case of the Tai Khamti speaker-oriented pronominal demonstrative, *an³-nai¹,* and the distal, *an³-pun²-nai¹*, *an³* is realized in full (at least orthographically), while with the hearer demonstrative, *a-maeu⁴-nai¹*, *a-* represents a reduction of *an³*, and is what Diessel calls a defective noun. Diessel (ibid.: 20) cites Korean, shown in (111), as a language that uses a defective noun, *il-* , along with a demonstrative determiner, *ce*, for a pronominal usage. For Korean, pronominal demonstratives must always use a noun constituent as a (pro)nominal anchor.[51]

(111)   Korean (Sohn 1994: 295)

    [*ce*   *il-ul*]   *nwu-ka*   *mak-keyss-ni*
    that   thing-ACC   who-NOM   block-will-Q
    'who would be able to block that?'

Demonstratives are primarily known for establishing joint attention with non-linguistic entities in the speech situation, focusing attention on objects in the outside world. This is an *exophoric* usage of the demonstrative. However, demonstratives are

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50 While Diessel (1999: 118) states that it is more common for distals (as opposed to proximals) to grammaticalize, this point is actually moot for Khamti, because it is the deictic root *nai¹* (which is present in all three demonstratives) that ends up grammaticalizing for Khamti.
51 This is also the case for Dene Sųłiné, an Athapaskan language (Sally Rice, personal communication).

also commonly used to identify linguistic entities within the discourse. This is an *endophoric* usage of the demonstrative and it encompasses several pragmatic usages to be developed later (Diessel 1999: 6, following Halliday and Hasan 1976: 57-76).[52]

Both the basic gesture as a physical pointer, such as pointing an index finger, and the basic usage of *nai^1* as a verbal pointer are exophoric modes of a deictic signal that serve to jointly locate an object relative to a deictic center in the speech situation (Diessel 1999: 94, 2006: 470). The exophoric use of *nai^1* is shown in (112) in which its use as the acoustic pointer in the full pronoun *an^3-nai^1* 'this one' can be accompanied by a gesture by the speaker. The preceding exclamatory phrase *heeu^4 mai^2 liam^4 laa^4* 'oh here, look,' reinforces an exophoric reading because *mai^2* is also functioning here as the exophoric locative deictic 'here' and the speaker is asking the hearer to look at something in the shared speech space (in this instance, a location).

(112) *heeu^4 mai^2 liam^4 laa^4 an^3-**nai^1** tii^3 an^3 wai^1 haang^3 man^4 tsaeu^2 nam^5*
     oh here look OPT thing-this place REL keep corpse 3SG POL EQU
     'oh here, look, this (lit. 'this one') is the place where they keep his corpse'

In (113), the speaker is holding a picture that he is referencing and, so is able to identify it by presenting it in his hand (a form of gesture) and uttering *an^3-nai^1* 'this thing (near me or in my hand)'.

(113) *an^3-**nai^1** yaa^1 haang^3 meung^4 luung^5 nam^5*
     thing-this TOP picture city big EQU
     'this (lit. 'this one') is a picture of a big city'

The exophoric use of the compound demonstrative pronominal *a-maeu^4-nai^1* is also found in the corpus. However, in natural text, *nai^1* is often implied when using the hearer demonstrative, as shown in (114). The objects that the speaker is referring to are near the hearer and a pointing gesture can accompany the verbal pointer, *a-maeu^4*.

52 This exophoric/endophoric distinction is also referred to as *de re* (in the domain of reality or external situation) and *de dicto* (in the domain of speech and text) (Frajzyngier 1991: 220).

(114) **a-maeu⁴**   khau⁵ tang⁴meeung⁴   maeu⁴ mai² haeu² kuat⁵
       thing-2SG   PL   all   2SG   BEN   give   PUR
       'I will give you all of those (lit. 'things near you')'

In the Khamti pronominal demonstrative paradigm presented in this section, *nai¹* is the sole deictic component serving to verbally point to the communicative context. Contextual search locations are delineated by additional contrastive components (ø, *maeu⁴*, and *pun²*) in each pronominal compound. These components signal distance proximities to the deictic center. A deictic component does the verbal pointing within that reference frame, achieving joint attention and a shared intentionality about a given referent. It has been argued that there may have been a time in the early stages of language evolution when all demonstratives were merely deictic particles, in the sense that they were irreducible morphemes with no semantic (distance/person/time) features, but merely pointers to the communicative context (Brugmann and Delbrück 1911: 311, cited in Diessel 2012: 43). The single morpheme, *nai¹*, functions as that deictic root and, for Khamti, it is the basic, irreducible deictic root that functionally extends as a reference marker in other constructions.

4.3 *Nai¹* as conoun in adnominal constructions

An adnominal function is one in which the demonstrative modifies a co-occurring noun. Many of the world's languages use the same demonstrative form to express both pronominal and adnominal functions (Diessel 1999: 59, 2013). This is the case for Khamti and its (*an³*)*nai¹* demonstrative. In this section, I analyze *nai¹* as a conoun that is anaphoric to a head noun, in similar fashion to the appositional usages which I described in the grammaticalization patterns associated with the general noun, *an³*, in Chapter 3. Specifically, I describe *nai¹* as an exophoric adnominal, which extends to several endophoric (in text) *functions*, including the marking discourse participants, a definite determiner marker, a plural noun marker, and an interrogative marker.

4.3.1 Nai¹ *as an exophoric adnominal demonstrative*
While a demonstrative pronoun is an independent nominal functioning freely as a verbal argument, an adnominal demonstrative is syntactically restricted to a co-

occurring noun, which, in Khamti, follows the head noun, [NOUN an^3-nai^1]. Pragmatically, an adnominal can have an exophoric or endophoric use. When an adnominal demonstrative is exophoric, its co-occurring noun is commensurate with an object that is located in the surrounding context of speech, that can be accompanied by a gesture, and is usually a first mention in the discourse. On the other hand, when an adnominal demonstrative is endophoric, the co-occurring noun is coreferential with a previously mentioned noun in the discourse (discussed below).

The adnominal uses of the speaker-based demonstrative utilize the full pronominal form, an^3-nai^1 'this one'. In other uses (discussed later), just the deictic root, nai^1, is found. Adnominal uses form a complex noun, [NOUN an^3-nai^1 $khau^5$] that identifies the speaker's location as the location in which to look for the actual object referenced by the noun. In (115), the full pronominal an^3-nai^1 is used in reference to the nouns hin^5 'stone' and $heeun^4sing^5$ 'building'. Moreover, a preceding exclamatory phrase, $tsaeu^2$ ooi^4 $liam^4$ 'oh, sir, look', reinforces an exophoric reading on the adnominal because the speaker is asking for the attention of the hearer towards objects in the outside context that are near himself.

(115) $tsau^2$ ooi^4 $liam^4$ tii^5khaa^2 ta^4 [hin^5 **an^3-nai^1** $khau^5$] [$heeun^4sing^5$ **an^3-nai^1** $khau^5$]
    sir oh look POL   OPT stone thing-this PL   building   thing-this PL

    $yaeu^5luun^5am^4luung^5$ tii^5khaa^2 $njiaa^4$
    stunning   POL   Q

    'oh sir, look! aren't these stones, these buildings stunning?'

The discourse centered around the expression of (116), below, is one in which the speaker is defending himself before a tribunal. The referent $meeung^4$ $taang^5$ an^3-nai^1 $khau^5$ 'these other cities' is mentioned for the first time here in (116). The speaker could very well be gesturing to a list of cities in his hand or pointing to a map in front of him.

(116) [$meeung^4$ $taang^4$ **an^3-nai^1** $khau^5$] $khaa^2$ kaa^5 sii^5 $khau^5$ mai^2 nik^1sak^1
    city   other   thing-this PL   POL go CONJ 3SG   F.OBJ mistreat

    maa^4 tii^5khaa^2 uu^5
    PRF POL   IMPF

    'I (polite) go off and have mistreated them even in these other cities'

The hearer-oriented and distal demonstratives can also be observed as exophoric adnominals. Like the hearer-oriented pronominal in (114) above, the hearer-oriented adnominal, *a-maeu⁴*, often drops the deictic particle *nai¹* from the end of the compound when found in natural text, as shown in (117). *A-maeu⁴* in this example refers to a book that is in the speech context located near the hearer.

(117) *man⁴ bap¹ **a-maeu⁴** phat⁵ yau¹   kaa⁵*
       3SG   book   thing-2SG   read   already   Q
       'did he read that book already, or not?'

In (118), the distal adnominal *pun²* 'that' indicates that *paa²* 'side' is away from both the speaker and hearer. The hortative, *pai¹ hau⁴* 'let us', shows that the side of the pond referred to by the speaker is a location in the speech context that is some distance from both the speaker and hearer and its use is probably accompanied by a gesture.

(118) *pai¹   hau⁴   kaa⁵ phak¹   nuang⁵   paa²   **pun²** kuat⁵*
       CHORT   1PL.INCL   go   other   pond   side   that   PUR
       'let's go to that other side of the pond'

The demonstrative pronominal *an³-nai¹* (cf. Section 4.2) and the exophoric adnominal *an³-nai¹* are not functionally the same, though very close. While they both exhibit the same morphological form and take *an³* as a nominalizing head, in the *pronominal* function, *an³* acts as a nominal head of a deictic root similar to its function as a nominal head of a deverbal nominalization (see Section 3.2). The result of the compound is a lexical item, a demonstrative pronoun. However, with an *adnominal* function, *an³* acts anaphorically with a head noun. The demonstrative pronominal, then, is an independent, syntactically free argument of the verb, while the exophoric adnominal is an anaphoric conoun with a co-occurring noun. Many languages employ the same form with little evidence that they belong to different categories. For Khamti, the exophoric adnominal demonstrative is an independent pronoun that is adjoined to the head noun in some kind of relational structure, as is the case in other languages (Diessel 1999: 61; see also Hale 1983; Heath 1986; Baker 1996). The slight functional difference demonstrated between the Khamti pronominal

and adnominal usages is that of conoun. In this way, the ever so gradual extension from a pronominal to exophoric adnominal mirrors the beginning of a similar grammaticalization process from a nominalized verb to a wide variety of appositional constructions (see Section 3.8). Once an anaphoric relationship surfaces in the initial stages of grammaticalization processes, the potential for other extensions flourishes.

4.3.2 Nai[1] as an anaphoric adnominal demonstrative conoun

An exophoric adnominal demonstrative encodes its co-occurring noun as a referent in the context of the speech situation relative to a deictic center, whereas an endophoric adnominal indicates that its co-occurring noun "points to" a coreferential nominal in previous sentences of a given discourse. In this way, an endophoric adnominal is a conoun that encodes its co-occurring noun as an anaphor.

Many languages use only one of the adnominal demonstratives in the paradigm specifically for anaphoric use (Diessel 1999: 99). Recall in Khamti, as discussed in Section 4.3.1, that exophoric adnominals occur with all three demonstratives, *an³-nai¹, a-maeu⁴,* and *pun².* However, with *endophoric* adnominals —items that refer to textual entities—the most common demonstrative used as an anaphor is the hearer-oriented medial *a-maeu⁴* as shown in (119). The lengthy discourse sample in (119) describes four rivers. Each river is first mentioned and named overtly and then, with adnominal *a-maeu⁴,* is referenced in a subsequent sentence. *A-maeu⁴* occurs in (119c, g, and i) and references the the head noun in the previous sentence. The fourth and final river, in (119j), however, is not initially mentioned or named. Instead, an initial general reference is made to a fourth river using the speaker-oriented adnominal *an³-nai¹* 'this one' and then equated with its name with the second nominal in the clause, *nam¹ E⁵pha⁵rat⁵* 'river Eparat'.[53]

(119) a.   *Luk¹   amaeu⁴ mai²   kjye⁵-luung⁵ sii⁵   an³   khaa³ luung⁴ kaa⁵   uu⁵.*
             from   there   ABL   main-river   four   CLF   divide descend AND   IMPF
             'From there the main river divides into four.'

       b.   *Nam¹ an³   uan⁵taang⁴ le⁵le⁵   nai¹   yaa¹   nam¹   Phi⁵sung⁵ nam⁵.*
             river REL   first   very   DEF   TOP   river Phisung   EQU
             'The very first river is the River Phisung.'

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53 More data collection is needed to see if *an³-nai¹* actually patterns as a general reference adnominal. There are not enough examples of *an³-nai¹* in the current corpus to fully support this.

c. *Nam¹* **a-maeu⁴** *kan²naeu⁴ meeung⁴ Haa⁵lee⁵wi⁵ an³ meeung⁴ kham⁴ tsee⁵*
river   one-2SG   into   city   Halewi   REL   city   gold   abundant

mai² lai⁵ luung⁴ uu⁵.
ALL   flow   descend   IMPF
'That river flows down into Halewi, a city of abundant gold.'

d. *Kham⁴ an³ luk¹ meeung⁴ amaeu⁴ mai² uak⁵ nai¹ nii³ luung⁵ nam⁵.*
gold   REL   from   city   there   ABL   out   RECG   be.good   very   COP
'The gold that comes out from that city is very good.'

e. *Luk¹ amaeu⁴ mai² man⁴ huam⁵ n-khaa⁵ hin⁵ siang⁵ phan⁴ leeung³ uak⁵ uu⁵.*
from   there   ABL   perfume   CNT.DU   stone   precious   kind   INDEF   out   IMPF
'Kinds of perfume and precious stones (also) come out there.'

f. *Nam¹ tu⁵ti⁵ya⁵ nai¹ yaa¹ nam¹ Ki⁵hung⁵ nam⁵.*
river   second   DEF   TOP   river   Kihung   EQU
'The second river is the River Kihung.'

g. *Nam¹* **a-maeu⁴** *yaa¹ taai² meeung⁴ ku⁵sa⁵ mai² lai⁵ luung⁴ kaa⁵ .*
river   one-2SG   TOP   near   city   kusa   ALL   flow   descend   AND
'That river descends away to the city Kusa.'

h. *nam¹ an³ ta⁵ti⁵ya⁵ nai¹ yaa¹ nam¹ Hi⁵kee⁵ra⁵na⁵ nam⁵ .*
river   REL   third   DEF   TOP   river   Hikerana   EQU
'The third river is the River Hikerana.'

i. *Nam¹* **a-maeu⁴** *yaa¹ wan⁴uak⁵ meeung⁴ Ku⁵sa⁵ mai² lai⁵ kaa⁵ .*
river   one-2SG   TOP   east   city   Kusa   ALL   flow   AND
'That river flows away east to the city of Kusa.'

j. *tang⁵sii⁵* **an³-nai¹** *yaa¹ nam¹ E⁵pha⁵rat⁵ nam⁵ .*
fourth   thing-this   TOP   river   Eparat   EQU
'The River Eparat is this fourth one.'

Even though *a-maeu⁴* is the more common anaphoric demonstrative, there are a few instances in the corpus where *an³-nai¹* is used as an anaphoric adnominal. In (120b), *an³-nai¹* is seen as a conoun co-occurring with the head noun, *kuun⁴* 'person'. The noun-conoun composite is an anaphor that coreferences *kuun⁴* 'person' in (120a).

(120) a. *Meeu³ khau⁵ kiin³khau² kan³ sii⁵uu⁵ nai¹ [kuun⁴] haai¹ nai¹-khau⁵*
when   3PL   dine   RCPR   PROG   TMP   person   worthless   DEF-PL

aan⁵taan⁵ tsuam⁴ maa⁴ sii⁵ tang⁴ khau⁵ huum³ kiin³ uu⁵.
many   follow   VENT   CONJ   with   PL   together   eat   IMPF
'When they were eating, many worthless people came to follow and were eating with them.'

b. *Ngai⁴sii⁵ peeun⁵ yaa¹ hiit⁵ksang⁵ nai⁵ tang⁴ [kuun⁴] [**an³-nai¹** khau⁵] huum³*
And.then   others   TOP   why   Q   with   person   one-this   PL   together

kiin³ nai¹ n-sii⁵ khau⁵ thaam⁵ uu⁵.
eat   Q   DIR-QT   3PL   ask   IMPF
'And then others asked (them), "Why do (you) eat together with these people?'

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The anaphoric adnominal is a pragmatic extension from the exophoric convention with no morphological change. The full nominalized *an³-nai¹* is found for both usages. The pragmatic shift is one from "pointing" to a referent in the external context by way of a deictic center, often accompanied by a gesture, to one of indicating a referent somewhere inside the text with no gesture involved. In this exophoric usage, the adnominal is coreferential with a noun. The primary motivation for the development of anaphoric demonstratives is in tracking participants through connected discourse (Diessel 1999: 96; Langacker 1996: 358). Consequently, the next stage in demonstrative grammaticalization is extension to a variety of more abstract syntactic and less contextually situated grammatical markers such as definites, plurals, complementizers, and so forth. Exophoric usages of demonstratives never directly reanalyze as grammatical markers, but rather arise in the context of endophoric usages (Diessel 1999: 110). I turn now to the description of grammatical markers that arise from endophoric (anaphoric) uses of the adnominal just discussed.

4.3.3 Nai¹ *as conoun in a definite determiner construction* [DEF]

In this section, I demonstrate how *nai¹* functions as a definite determiner. Syntactically, it is adnominal and pragmatically it is anaphoric, in similar fashion to the demonstrative adnominal just discussed. However, when it grammaticalizes as the definite, it reduces to the deictic root *nai¹*. Morphologically, the definite determiner loses the nominal head *an³*, as shown in (121).

(121) *hleeu⁵si⁵nai⁵nkii⁴*   [*too³   phuu²taai³*]   [***nai¹***] *mau⁵   naau³   sii⁵   nam⁵*
      because   body   deceased   DEF   NEG   rot   PROG   CONT
      'because the deceased's body would not be rotting'

In (122), the noun *khau⁵pha¹* 'corn' is pluralized and occurs with the plural-definite, *nai¹-khau⁵*. The definite conoun, *nai¹*, is postposed in the nominal with intervening modifiers, including relative clauses. In (122), the head noun *khau⁵pha¹* 'corn' and the relative clause *an³ puak⁵ yau¹* 'that is already shucked' are followed by the definite conoun in its plural form, *nai¹-khau⁵*, and exemplified with the familiar juxtaposition template, [NOUN][*nai¹-(khau⁵)*].

(122) *kan²neeu⁵* *phai⁴* *mai²* [*khau⁵pha¹* *an³* *puak⁵* *yau¹*] [***nai¹**-khau⁵*] *uam⁵* *uu⁵*
  above fire LOC corn REL shuck already DEF-PL roast IMPF
  'above the fire, the corn that is already shucked roasts'

Like the anaphoric demonstrative *an³-nai¹* 'this thing/one', the definite conoun *nai¹* 'DEF' is a participant-tracking device in discourse. Often *nai¹* marks a third mention of a discourse participant, with the hearer-oriented demonstrative *a-maeu⁴* marking the second mention. While this secondary and tertiary marking distinction forms a pattern, especially in narrative discourse, it is by no means a strict discourse "rule" in the language. However, there are multiple texts in the corpus that do show this secondary/tertiary pattern of tracking participants through the discourse, as shown in (123), which is a short text describing a picture that the speaker is looking at. The text details a city bus loaded down with people and belongings. The introduction of the target participant, *kaa⁴luung⁵* 'bus', is found in the sentence in (123a). In the subsequent sentence, in (123b), the bus, as sentential participant, is being mentioned for the second time with *a-maeu⁴*. The third mention of the bus then occurs in the following sentence and is marked with the definite *nai¹*. Furthermore, the fourth mention of the bus is not marked with *nai¹*, (123d), but still is considered definite, showing further that the marking of definiteness is not necessarily obligatory in Khamti.

(123) a. *Kaa⁴luung⁵* *an³* *leeung³* *yang⁴* *uu⁵* .
    bus CLF INDEF be IMPF
    'There is a bus.'

  b. [*Kaa⁴luung⁵*] [*a-maeu⁴*] *yaa¹* *kaa⁴* *an³* *pai³* *meeung⁴* *tii⁵* *kai³* *nam⁵* .
    bus one-2SG TOP vehicle REL travel city IRR far CONT
    'That bus is a vehicle that might travel far in the city.'

  c. *Kan²naeu⁴* [*kaa⁴luung⁵*] [***nai¹***] *mai²* *kuun⁴* *nam⁵* *khii⁵* *kan³* *sii⁵*
    inside bus DEF LOC person plenty ride PROG CONJ

  d. *kan²neeu⁵* [*kaa⁴luung⁵*] *mai²* *kaw¹* *kheeung³* *nam⁵* *taang⁵* *kan³* *uu⁵* .
    above bus LOC also belongings plenty place PROG IMPF
    'Plenty of people are riding inside the bus and plenty of belongings are also being placed above (the) bus.'

It is important to note more generally that *nai¹* 'DEF' tracks subsequent mentions of a previous referent in the text. There are other functions of *nai¹* in which

it does not reference any previously mentioned participant (see *nai¹* as a specific indefinite marker and a plural marker in Sections 4.3.4 and 4.3.5).

A final example of *nai¹* as a definite determiner comes from a cultural text that describes the burial customs of the Khamti. A *suang⁴ nip⁵* 'living basket' is a basket arrangement of foods and other items that a living person uses on a daily basis. The living basket is prepared for the dead body with the cultural idea that the corpse remains alive for up to seven days and, so, the living basket aids *the person* during this time. Two subsequent sentences from this text are shown in (124a and b). The first mention of *suang⁴ nip⁵* is in (124a) and the second, anaphoric mention is seen in (124b) with the adnominal usage of *nai¹*. In (124b), *nai¹* is serving as a conoun, as indicated with the familiar noun-conoun bracketing convention employed in my analysis. In (124b), *k-* is a contraction of the question word *kasang⁵* 'what' that is compounded with the question particle *nai⁵* 'Q' (see Section 4.3.6 for the use of *nai¹* as a question particle).

(124) a. *tsung⁴ man⁴ mai² suang⁴ nip⁵ kaw¹ taang⁵ wai¹ haeu² uu⁵* .
     coffin 3SG ALL basket living also place DUR APPL IMPF
     'Place a living basket also on his coffin.'

    b. [*suang⁴ nip⁵*]⁵ [***nai¹***] *yaa¹ k-*   *nai⁵ n-kii⁴*
     basket living DEF TOP what Q DIR-QT
     'What does the living basket mean?'

Definites are known to develop from adnominal demonstratives and Diessel (2006: 128) cites over 20 studies to this effect. More specifically, it is common that languages use an anaphoric demonstrative (such as *amaeu⁴* 'that') to mark a second mention, but the plain definite (such as *nai¹* 'the') to mark subsequent mentions (Lichtenberk 1996; Himmelmann 1996: 229; Gerner 2009: 70). In this participant-tracking strategy, after introducing new participants (usually with an indefinite), the pragmatic goal is to emphasize some significant aspect of a participant being mentioned the second time. The demonstrative is used with this intention. Then, a third or any subsequent mention is meant to maintain or reactivate previously established referents. The preferred device for marking nominals that have been mentioned more than twice is third person pronouns and definite full nominals (Himmelmann 1996: 226; Gerner 2009: 70). It has been shown in this section that

this seems to be the case that is arising in Khamti for participant reference with *nai¹*.

In summary, the Khamti definite conoun *nai¹* is an adnominal construction that is pragmatically anaphoric in tracking participants in the *current discourse space*[54] and semantically indicating that the referent is already established in the conversation and known to both the speaker and hearer. Joint attention and shared intentionality towards the referent presumes the use of the definite nominal in communication.

4.3.4 Nai¹ *as conoun in a specific indefinite construction* [SP.INDEF]

Nai¹ is used as a definite, as described in (121)-(124) in Section 4.3.3, and in this context, it functions as a conoun that specifies a referent mentioned previously in the discourse. However, the definite *nai¹* is also found in discourse contexts to mark referents that have not yet been mentioned in the discourse. There are several non-anaphoric usages of *nai¹*—the plural construction, described in Section 3.4.5, and the specific indefinite construction, discussed in this section.

When *nai¹*, as a definite construction, co-occurs with an indefinite construction, the result is what others have called a specific indefinite construction (Wright and Givón 1987; Frawley 1992: 76; Diessel 1999: 138). Regular indefinites are often used in languages to introduce any participant, whether major or minor in the story. Specific indefinites, however, are largely restricted to introducing a major participant in the discourse. Oftentimes, a major participant that is introduced with a specific indefinite construction is an unlikely candidate to be a protagonist, but by the end of the story is seen as one. The unlikely hero overcomes such odds as to convincingly win over a more likely hero.

The example in (125) is the first sentence of a Khamti narrative that introduces a beggar, *kuun⁴ phan⁵ an³ pan⁵ sii⁵ yuan⁴ kin³ uu⁵* 'person who goes around and begs for a living', with the specific indefinite construction, *nai¹ koo¹ leeung³* 'this CLF INDEF'. The construction is shown with the template, [NOUN][*nai¹* CLF

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54 The current discourse space is a term that Langacker (1996: 357, 2013: 59) uses to describe the background context surrounding a given expression and used for interpreting that expression. This context includes the unfolding discourse, situational context, background knowledge, and so forth. I am using this term in the description because of its usefulness in laying out the cognitive reference point analysis found in Chapter 6.

INDEF].

(125) *meeu³nan¹*   *maan²* *leeung³* *mai²* [*kuun⁴* *phaan⁵* *an³* *pan⁵*   *sii⁵*
  long.time.ago village INDEF LOC   person poor   REL meander CONJ

  yuan⁴kin³   *uu⁵*] [***nai¹***   *koo¹* *leeung³*] *yang⁴* *uu⁵*
  beg   live   SP.INDEF CLF   INDEF   be   IMPF
  'a long time ago, in a village, there is this one poor person who lives going around begging'

The story is of a poor beggar man who goes up against a prominent, higher-status landlord. In the end, the beggar is the hero who outwits the more respected and successful person in Khamti culture. The use of *nai¹* in this specialized participant-introduction strategy is to set up in the mind of the hearer something unexpected about the normal routines of society; in this case, the extreme social difference between the low-status beggar and the higher-status landlord. The use of *nai¹* along with an indefinite construction is non-anaphoric because its referent is not mentioned previously, but is rather being introduced for the first time.

Diessel (1999: 139) postulates that a specific indefinite construction arises from a definite construction and that both definite and specific indefinites develop from the adnominal demonstrative function. The grammaticalization pathway they take is as follows. Most basically, the exophoric adnominal demonstrative serves as a verbal pointer to objects in the encompassing speech situation that are located vis-à-vis the speaker and hearer. This exophoric demonstrative is a deictic source for subsequent endophoric functions, which "point to" referents inside the discourse, rather than in the real world surrounding the speaker and hearer. The endophoric adnominal demonstrative conoun and the definite conoun are both discourse-pointing devices that have an anaphoric function with textual referents in order to maintain coherence in the flow of a text.

The specific indefinite construction, however, is no longer anaphoric in function, because its referent has not been previously mentioned in the discourse or established in background knowledge. Instead, it serves merely to introduce a specialized referent (mainly a participant in a narrative). This highly restricted context seems to be valid evidence for further specialized usages of *nai¹* as it extends from a more general definite construction, which also introduces and tracks referents.

Whereas, the definite conoun has a deictic-like function of establishing joint attention with referents inside the current discourse space, the specific indefinite is bleached of any pointing function and instead is used grammatically to set up a mental space (Fauconnier 1985: 240) for comprehending the development of a particular participant in a certain counter-expectational fashion (such as a lower-status beggar outwitting a much higher-status landlord). This explanation of specific indefinites follows Givón's (1990: 921) "grammatical signal" to the hearer to open "a file" for the newly introduced participant (see also Diessel 1999: 139). This extension of *nai[1]* as a conoun carries a new and highly specialized grammatical function.

4.3.5 Nai[1] *as conoun in plural constructions* [DEF-PL] [PL] [A-PL]

As a definite conoun, *nai[1]* is also found in a compound plural marker *nai[1]-khau[5]*. With this compound, *nai[1]* is a marker of definiteness, while *khau[5]* is a plural marker (grammaticalized from a third person plural pronoun 'they/them')[55]. The example in (126) shows the second nominal, *psaau[5] nai[1]-khau[5]* 'the single ladies' as a conoun internally headed by *psaau[5]* 'ladies', which is coreferential with the head noun, *tai[4]koo[1] mee[5] kau[3] khau[5]* 'my mom's friends'. The definite plural compound marker, *nai[1]-khau[5]* functions in relation to the head noun maintaing its plurality (i.e. the *khau[5]* 'PL' of the head noun and second noun) and further specifying the head noun, *tai[4]koo[1]* 'friends', as single ladies, *psasu[5]*. Furthermore, the *nai[1]* component of the compound plural marker indicates that the referent of the second nominal was previously established in the discourse space or current sentential context. *Khau[5]* marks plurality, while *nai[1]* indicates previous mention. The constructional template is [NOUN][NOUN *nai[1]-khau[5]*]. The definite plural construction does not have to be an anaphoric conoun as shown here in (126). It can simply be a plural compound marker. An example of a simple compound plural is seen in (122) above.

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55 Third person plural pronouns are recognized as a common source for extending in function to a plural marker of nouns. The grammaticalization process is one of bleaching the main semantic content of person and leaving just the number feature (Heine and Kuteva 2002: 237-238).

(126) *yau¹kii⁴ man⁴ mai² [tai⁴koo¹ mee⁵ kau³ khau⁵] [psaau⁵ **nai¹-khau⁵**]*
　　　then　　3SG　　F.OBJ　friend　　mom　　1SG　　PL　　single.lady　DEF-PL

　　　au³　　　nam⁵
　　　look.after　CONT

　　　'then my mom's friends, the single ladies, would look after her [my sister]'

Frajzyngier (1997: 237) suggests that the first nouns in language to acquire a plural marking are those that are known in the current discourse space and have been previously mentioned, just as in the Khamti example in (126). The coreferencing feature of plural definites, furthermore, account for the affinity of definite and plural marking found in languages from different families—Basque, Khasi, Hawaiian, Maung and Chadic languages (Dryer 1989; Frajzyngier 1997: 237).

From a cognitive linguistics perspective, definiteness and plural marking are closely linked in that they both entail grounding with the speech-act participants.[56] In English, the sentences, *The dog does tricks*, *Dog-s do tricks* are grammatical, while **Dog does tricks* is not. The first sentence has a singular subject that is grounded with a definite determiner and the second sentence has a plural -*s* which grounds the noun *dog* as a plural noun. However the ungrammatical sentence lacks either grounding predication. A determiner and/or a plural marker both function to ground a referent in the communication situation. The grounding process (or instantiation process) with the English determiner *the* was presented in Figure 3.3 above with the noun *cup* and is shown again on the left in Figure 4.1 with the noun *dog*. The definite determiner or plural -*s* are the grammatical elements that turn a noun type (*dog*) into a nominal instance (*the dog* or *dogs*).[57] The marker of English plurality (-*s*) actually instantiates a set of dogs (hence, plural) rather than a single instance. The point is not to describe plural -*s*, *per se*, but to show that definiteness and plurality both can ground a noun.[58]

56　Recall from Section 3.1 that the term *grounding* is used in CG as a process that instantiates a predication with some aspect of the ground (i.e. speaker, hearer, the speech event in which they participate, and their immediate circumstances (Langacker 2013: 78).

57　The second diagram in Figure 4.1, with the English plural -*s* is similar in grounding function to a numeral classifier construction in other languages (for Mandarin numeral classifiers, see Langacker 1991: 166; and for Thai numeral classifiers, see Inglis 2003: 234)

58　Also in Figure 4.1, the dashed potential instances of the same type 'dog' indicate other latent possibilities of location in the domain of instantiation.
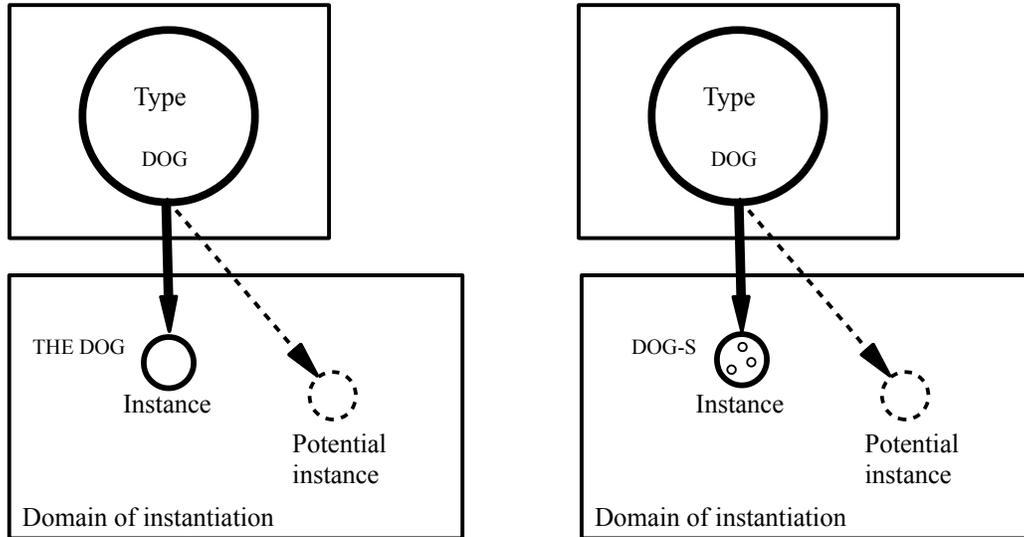
Figure 4.1. English instantiation with the definite determiner and plural marker

The affinity of definites and plurals as grounding morphemes is easily demonstrated in Khamti with examples such as (127)-(129). In (127), the object nominal *phuu²seu¹* 'shopper' is pluralized with *nai¹khau⁵*. In (128), two separate nouns *mak⁵* 'fruit' and *phak⁵seeu²* 'vegetable' receive their own plural markers, whereas, in (129) the three nouns *tin³* 'foot', *meu⁴* 'hand', and *naa²* 'face' strung together receive only a single instance of the plural marker, which signals plurality for all three nouns. In these examples, I gloss *nai¹khau⁵* as a plain plural marker (i.e. non-compounded) because the notion of *definiteness* is no longer maintained, due to the fact that there is no antecedent for the nominals in these textual examples.

(127) [*phaseu¹*] [***nai¹khau⁵***]   *mai² kaw¹ khoo⁵khoo⁵ yum¹yum¹   sii⁵   taan² nii³nii³ uu⁵*
      shopper   PL   ADD   also   laugh.laugh smile.smile CONJ speak nicely   IMPF
      (they) also are laughy and smiley and speak nicely to shoppers'

(128) [*mak⁵*] [***nai¹khau⁵***]   *phak⁵seeu²* [***nai¹khau⁵***] *ksang⁵   khaeu³ kin³ mlaeu³   khaeu³*
      fruit   PL   vegetable   PL   whatever   want   eat   whenever want

      kin³ nkaw¹   nai² uu⁵
      eat   then [emph] can   IMPF
      'Then, whatever fruits or vegetables (you) want to eat, whenever (you) want to eat, (you) can'

(129) *meeu³ khau⁵ tii⁵ meeu⁴ nai¹   nam¹ mai² kaa⁵ ngai⁴sii⁵* [*tin³ meu⁴ naa²*] [***nai¹khau⁵***]
      when 3PL   IRR return TMP   water ALL go   and.then foot hand face PL

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ngai⁴sii⁵   meeu⁴   nam⁵
and.then   return   IRR
'when (they) are about to return, (they) go to the water and then wash feet, hands, and faces and then return'

In (127)-(129), however, the definite particle *nai¹* in the plural marker, *nai¹khau⁵*, no longer indicates definiteness because in each example there is no coreferent; that is, no previously mentioned entity. Each of the referents in these examples receives, instead, a plain marker of plurality, *nai¹khau⁵*, and is a first and only mention in their respective texts. If definiteness were being overtly indicated by the *nai¹* component of the plural compound, one would expect there to be an antecedent. Generally speaking, because of the close-knit relationship between definiteness and plurality, adnominal demonstratives may become correlated with the semantic feature of plurality and then grammaticalized as plain plural markers once they lose their deictic function (Diessel 1999: 137-138). In Khamti, specifically, the adnominal demonstrative conoun *nai¹* indeed correlates with the notion of plurality vis-à-vis the compound conoun *nai¹khau⁵*.

Further evidence supporting *nai¹* as a head-initial component of the plain plural *nai¹khau⁵* is found in (130) with a first-mention possessed noun, *nuk¹ man⁴* 'his bone'. In Khamti, the normal situation for a possessed noun is that definiteness is implied rather than overt. In (130), the presence of a possessive pronoun, *man⁴*, makes a definite reading of *nai¹* redundant and unwarranted.

(130) [*nuk¹ man⁴*] [**nai¹khau⁵**] *tang⁴meeung⁴ mai² hum³khuan² yau¹kii⁴ nin³   mai²*
      bone 3SG   PL   all   F.OBJ gather.up after   ground LOC

      phaang⁵ ngai⁴sii⁵ (...)
      bury   and.then
      'after gathering up all his bones, (they) bury (them) in the ground, and then ...'

The diachronic argument that I am making is that the plural compound *nai¹-khau⁵* started out with two critical components—*nai¹* as a definite marker with a deictic function of pointing to an antecedent and *khau⁵* as a reference to more than one of a given object. This deictic function of the plural compound evolved into a non-deictic one of marking plain plurality *with no allusion to definiteness*.

The plural compound can also be seen as part of a lesser-known construction,

the associative plural. The associative plural construction consists of a noun and a compound associative plural marker, *nai¹-khau⁵* [A-PL], and has a meaning approximating the referent of the noun, along with other entities known to be *associated with* that referent (Daniel and Moravcsik 2013; see also Corbett 2000; Moravcsik 2003). An associative plural construction using the compound marker, *nai¹-khau⁵*, is shown in (131) and a plain but semantically associative plural marker *khau⁵* [(A).PL], in (132), which has the approximate inference 'and (related) stuff' in the associative plural context. In (131), the full plural compound is not pluralizing the co-occurring noun *tsung⁴* 'coffin', but instead is associating all of the cultural details that go into constructing that coffin. In (132), the plural word *khau⁵* is referring to the twelve disciples of Jesus that have come to be equated with his entourage in the story.

(131) *yau¹kii⁴ tsaa¹ man⁴* [*tsung⁴*] [***nai¹-khau⁵***] *kaw¹ hiit⁵ sii⁵*   (...)
　　　 then　　 for　　 3SG　　coffin　　 A-PL　　　 also　 make CONJ
　　　 'then (they) also make a coffin, and all its related stuff, and ...'

(132) *wan⁴ leeung⁵* [*tsau² yee⁵su⁵*] [***khau⁵***] *tang⁴*　　　 *phung⁵ kuun⁴ kaa⁵ wiing⁴ uu⁵*
　　　 day　 one　　　 lord　 Jesus　　　 (A).PL　 along.with crowd　 person go　 city　 IMPF
　　　 'one day, Jesus and his disciples, along with a crowd of people, go to the city.

In my corpus, examples of the associative plural with the full plural compound, such as the one in (131), is rare. The more common associative plural in Khamti relates to people such as family members, tribesmen, or cohorts of some sort, as in (132). When the associative plural is referring to people of this nature, it is primarily the single *khau⁵* (without *nai¹*) as a plural marker, and not the full compound.

　　　Khamti also has the plain *khau⁵* as a general marker of plurality. This is quite common and readily exemplified by with sentences such as (133) and (134).

(133) *koo¹*　　***khau⁵*** *ooi⁴*　 *kau³ suu⁵ mai²*　 *inn³*　 *maap⁵kiin³*
　　　 person PL　　 oh　　 1SG　 2PL　 F.OBJ NEG　 cheat
　　　 'oh men! I didn't cheat you.'

(134) *tsau²maan² amaeu⁴* ***khau⁵*** *kaw¹ hap¹tuan³ kan³*　 *sii⁵*　 (...)
　　　 villager　　 that　　 PL　　 then　 welcome　 RCPR CONJ
　　　 'those villagers, then, welcomed each other ...

　　　These examples of the plural marker *khau⁵* hypothesize a grammaticalization process that has dropped *nai¹* as a necessary component expressing plurality. A final

step in grammaticalization would be to drop the plural marker altogether. There are examples in Khamti with an unmarked plural noun. In (135), the noun *wan⁴* 'day' is plural even though there is no overt plural marker (other than the numerals). In (136), the three nouns *ngoo⁴* 'bull', *paa³* 'fish', and *nuk¹* 'bird' are plural nouns that also do not receive a plural marker.

(135) *nang⁵ suu⁵ tuang⁴ n-kan³   ngai⁵ suang⁵ **wan⁴** kii⁴ puai⁴   tii⁵ theeung⁵ yau¹*
       just 2PL know this-RCPR now two day after festival IRR arrive PERF
       'just as you know, after two days the festival will arrive already'

(136) *meeu³ amaeu⁴ kat⁵   mai²   kuun⁴ nai¹-khau⁵ khaai⁵ **ngoo⁴** khaai⁵ **paa³** khaai⁵*
       time that market LOC person DEF-PL sell bull sell fish sell

       ***nuk¹** uu⁵*
       bird IMPF
       'at that time people sell bulls, sell fishes, sell birds at the market'

When a numeral precedes the noun, as in *suang⁵* 'two' in (135), plurality is entailed and so an overt plural marker is not necessary. Plural nouns that do not include a numeral nor carry an overt plural marker, as with the nouns in (136), are actually quite limited. Also, when nouns occur postverbally, as in *khaai⁵ ngoo⁴* 'sell bull', *khaai⁵ paa³* 'sell fish', and *khaai⁵ nuk¹* 'sell bird' in (141), there is no overt plural marker. This would be expected with nouns that follow the verb, because postverbal objects are analyzed as non-referential and non-specific (see Section 5.8).

4.3.6 Nai¹ *as conoun in an interrogative construction* [Q]

Khamti interrogative constructions are comprised of a compound question word (a question word followed by a high-toned *nai⁵*), then a predicate, and finally a sentence-final *nai¹*. Examples of interrogative constructions are provided in (137), with the question word *phaeu⁵* 'who', and in (138), with *ksang⁵* 'what'. Question words do not appear alone, but are always found in a compound question word whose second component is *nai⁵*. A second instance of *nai¹*, with the normal low tone occurs sentence-finally to frame the predicate inside the interrogative construction.[59] Both instances of *nai* are glossed [Q] to indicate a question particle. The construction template is [INTERROGATIVE-*nai⁵*][PREDICATE *nai¹*]. The bracketing convention

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59   This instance of sentence-final *nai¹* 'DEF' relates to its use as a emphatic-final particle, discussed in
    Section 4.9.

follows the intonation breaks found in the construction. Moreover, a contracted version of any question construction can be used, *khian⁴ yaeu⁵ phaeu⁵-nai⁵* for the question in (137) and *waa³ hiit⁵ ik⁵ ksang⁵-nai⁵* for (138).

(137) [*phaeu⁵-**nai⁵***] [*khian⁴ yaeu⁵ **nai¹***]
     who-Q   most   be.big   Q
     lit. 'who-this be most old this?'
     'who is the oldest?'

(138) [*ksang⁵-**nai⁵***] [*waa³ hiit⁵ ik⁵ **nai¹***]
     what-Q   must   do   more   Q
     lit. 'what-this must (I) do more this?'
     'what more must (I) do?'

High-toned *nai⁵* functions as an interrogative compound "suffix" that forms a head noun in Khamti (cf. Asheninka mentioned in Diessel 2003: 641). The second low-toned *nai¹*, along with a predicate, makes up a conoun that is juxtaposed with the question head noun. This noun-conoun pairing is commonly used for all interrogative question words in Khamti, including *amai⁵-nai⁵* 'where' in (139) and *meuu⁵laeu⁵-nai⁵* 'when' in (140).[60]

(139) *man⁴ waa³ mee⁵* [*amai⁵-**nai⁵*** [*phmee⁴ tsaa¹ kau³ **nai¹***] *n-sii⁵ thaam⁵ uu⁵*
     3SG   say   mom where-Q   wife   for   1SG Q   DIR-QT   ask   IMPF
     'he asks, "Mom, where is a wife for me?"'

(140) *an³ maeu⁴ waa³ nai¹-khau⁵ tang⁴meeung⁴* [***meeu³laeu⁵-nai⁵***] [*tii⁵ piin³maa⁴ **nai¹***]
     thing 2SG   say   DEF-PL   all   when-Q   IRR   happen   Q
     'when will all what you say happen?'

The question word *laeu⁵* 'what' is also used in two additional interrogatives *khaeu³laeu⁵* 'how much' (literally 'what amount'), shown in (141), and *an³laeu⁵* 'which' (literally 'what one'), shown in (142).

(141) *suu⁵ mai² khau²mun⁴* [***khaeu³laeu⁵-nai⁵***] [*yang⁴ **nai¹***]
     2PL   POSS   bread   how.much-Q   be   Q
     'how much bread do you have?'

(142) [***an³laeu⁵-nai⁵***] [*khian⁴ ngaai³ hiit⁵ **nai¹***]
     which-Q   most   easy   do   Q
     'which is most easy to do?'

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60 In (139) and (140), the question words *amai⁵* and *meeu³laeu⁵* are themselves compounds. *Amai⁵* 'where' comes from the reduced noun *a(n³)* 'thing' and the proximal deictic *mai²* 'here' (see Chapter 5). *Meeu³laeu⁵* 'when' comes from *meeu³* 'time' and *laeu⁵*, which is a particle that cannot stand on its own and appears to mean something equivalent to 'what', as in the case of (140), 'what time'.

The question word 'why' is a compound made up of the verb *hiit*^{5} 'do' and the question word *ksang*^{5} 'what', as in (143).

(143) [***hiit*^{5}-*ksang*^{5} *nai*^{5}**] [*maeu*^{4} *kau*^{3} *mai*^{2} *nik*^{1}*sak*^{1} ***nai*^{1}**]
do-what   Q   2SG   1SG   F.OBJ   mistreat   Q
'why do you mistreat me?'

The final question word *heu*^{5}*leu*^{5} 'how' in (144) is used for questioning the manner of a situation. This question word is unique in that *sii*^{5} is used in the compound instead of *nai*^{5}. Alternatively, *sii*^{5} could be part of the question particle itself. I am unsure of any derivation of the manner question particle.

(144) *maeu*^{4} *tsau*^{2} *kau*^{3} *khaa*^{2} *mai*^{2} [***heu*^{5}*leu*^{5}*sii*^{5}**] [*tuang*^{4} *tii*^{5}*khaa*^{2} ***nai*^{1}**]
2SG   POL   1SG   POL   F.OBJ   how   know   POL   Q
'how do you know me?' (polite speech to higher status person)

Following Diessel (2003), a summary of the interrogatives exemplified in (137)-(144) is shown in Table 4.1 with the semantic features involved with each question word, along with the relationship interrogatives have with demonstratives. It can be observed in the far right column in Table 4.1 that, syntactically, the initial *nai*^{5} component in interrogative compounds functions as a conoun with each co-occurring question morpheme.[61]

Table 4.1. Demonstratives and interrogatives in Khamti

SEMANTIC FEATURE	DEMONSTRATIVES		INTERROGATIVES	
PERSON	*an*^{3}-*nai*^{1}	one-this	*phaeu*^{5}-*nai*^{5}	who
THING	*an*^{3}-*nai*^{1}	one-this	*ksang*^{5}-*nai*^{5}	what
PLACE	*mai*^{2}	here	*amai*^{5}-*nai*^{5}	where
TIME	*nai*^{1}-*mai*^{2}	then (lit. at this)	*meeu*^{3}*laeu*^{5}-*nai*^{5}	when
AMOUNT	--		*khaeu*^{5}*laeu*^{5}-*nai*^{5}	how much
REASON	--		*hiit*^{5}*ksang*^{5}-*nai*^{5}	why
SELECTION	--		*an*^{3}*laeu*^{5}-*nai*^{5}	which one
MANNER	--		*heu*^{5}*leu*^{5}*sii*^{5}	how

What is striking when looking at the summary in Table 4.1 is the relationship or correspondence of the demonstrative deictic root *nai*^{1} (with a low tone) and the

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61 Initially, one might argue that the interrogative *amai*^{5}*nai*^{5} 'where' is not adnominal because *mai*^{2} 'here' is an adverb. However, because the interrogative uses the defective nominal *a* preceding the adverb, the question word is considered nominal and the interrogative particle *nai*^{5} is functioning adnominally and as a conoun.

interrogative particle *nai⁵* (with a default high tone; cf. Section 2.4.1). In both sets of compounds, *nai* serves a similar deictic function of "pointing" the hearer to search for a specific referent that is "located" in the surrounding situation or inside the hearer's knowledge store. This is, in fact, what Diessel claims is central to what makes demonstratives and interrogatives a special kind of basic lexical category found in every language, along with noun and verb.

> "[both] types of expressions are commonly used as directives that instruct the hearer to search for a specific piece of information outside of discourse (i.e. in the surrounding situation or in the hearer's knowledge store)" (2003: 636)

In Khamti, the deictic particle *nai* (with both a low tone and a grammaticalized default high tone) signals referents (either present or absent) in the speech context. For demonstratives, *nai¹* indicates an entity in the communication situation and, for interrogative, it indicates an entity in the knowledge framework of the hearer.

The interrogative construction (along with the exophoric demonstrative construction) is a basic linguistic expression that exists in all languages and initiates a search for information within speech situation. Grammatical markers organize the flow of information in the current discourse space, whereas interrogatives (and exophoric demonstratives) are "immediately concerned with the speaker-hearer interaction" (Diessel 2003: 635). This suggests that demonstratives and interrogatives have a unique standing in language and should be recognized as such and not be considered as either lexical items or grammatical markers (ibid.: 636). The single grammaticalized deictic root *nai¹* from Khamti provides good evidence for the affinity between demonstratives and interrogatives.

4.3.7 *Nai¹* as conoun in a binary coordination construction [CRD]

In Section 4.3.2, I discussed the anaphoric adnominal *nai¹* as a *de dicto* extension from an exophoric, *de re* function. The grammatical pathway is one that starts from a deictic pointing towards a real-world referent to one of selecting a referent, encoded as an entity, from within the text. The primary motivation for the development of anaphoric demonstratives is to track participants through connected discourse. As an

anaphoric demonstrative, *nai¹* extends to grammatical markers such as definites and plurals. In Khamti it also extends to a binary coordination construction in which *nai¹* is part of a compound connector to two nominals in a clause.

The binary coordinating compound, *n-khaa⁵* 'CRD-BIN', is used to link two, and only two, participants encoded as nominals within a sentence. The first component of the compound is the familiar *nai¹* in reduced form, *n-*. The demonstrative root *nai¹* or *n-* is followed by the third person *dual* pronoun *khaa⁵* yielding 'those two' (*n-khaa⁵* follows the Khamti spelling, but is pronounced /nakhaa/). In (145), it is observed that *n-khaa⁵* coordinates the dual participants *puu⁵* 'grandpa' and *yaa⁵* 'grandma' as subjects of the verb *haak¹* 'love'. Haspelmath (2007a: 2) calls a linking of only two items *binary coordination*, which is a connection limited to two constituents. The noun-conoun template for the nominal connective construction is shown as [NOUN][*n-khaa⁵* NOUN]. The function of *nai¹* is evident from the literal translation, 'grandpa, *this* and grandma, *you two*. The first component of the compound points back to the initial nominal, *puu⁵* 'grandpa', while the second component affirms the second nominal, *yaa⁵* 'grandma' in binary fashion. Together, the compound expresses a limit of two participants in a compound nominal which I have translated as '*both* the grandpa and grandma'.

(145) [*puu⁵*]   [*n-khaa⁵* *yaa⁵*]   *nai¹* *kaw¹* *man⁴* *mai²* *haak¹* *luung⁵* *nai¹-sii⁵*
     grandpa CNT.BIN grandma DEF also 3SG F.OBJ love big ADV-and

     see⁴khaam⁵ *sii⁵uu⁵* *uu⁵*
     patient PROG IMPF

     lit. 'grandpa, *this* and grandma, *you two*'
     'because *both* the grandpa and grandma also really love him, (they) are being patient'

In (146), *n-khaa⁵* links in binary fashion the two nominals *tii³ an³ kau³ tii⁵ kaa⁵* 'the place I will go' and *taang⁴ kaa⁵ amaeu⁴mai²* 'the way to go there'.

(146) [*tii³*   *an³*   *kau³*   *tii⁵*   *kaa⁵*] [*n-khaa⁵* *taang⁴* *kaa⁵* *amaeu⁴mai²*] *suu⁵* *tuang⁴* *uu⁵*
     place REL 1SG IRR go CNT.BIN way go there 2PL know IMPF
     lit. 'you know the place that I'll go, *this* and *second*, the way to go there'
     'you know the place that I'll go *and* the way to go there'

In both (145) and (146), the dual pronoun *khaa⁵* is the component that limits the compounded elements to two, while the *nai¹* component back-references the initial

nominal creating a single compound nominal argument for the verb. Diessel (1999: 130) shows that this kind of nominal connective construction is observed in other languages in which a linker coordinates two nominals within a clause as a grammatical extension of definite articles in languages such as Tagalog, Toba Batak, Tolai, Wolio, and Ilocano (Foley 1980: 181-192). This is seen in Khamti with examples such as (145) and (146) above.

4.4 *Nai¹* as a discourse deictic [DISC]

Demonstratives not only function exophorically to focus the hearer's attention on concrete entities in the surrounding speech context—a *de re* usage—but also serve endophorically—a *de dicto* usage—to point to linguistic elements inside the text (Diessel 1999: 95ff, 2006: 475; see also Fillmore 1997; Himmelmann 1996; Levinson 1983, 2004). There are several types of endophoric function—an *anaphoric* usage in which demonstratives are coreferential with a previous discourse participant (see Section 4.3.2) and a *discourse deictic* usage (described in this section) in which demonstratives refer to a proposition*, event,* or illocution in the text (Diessel 1999: 101, 2006: 475; Gerner 2009: 71; see also Lyons 1977: 668; Webber 1991; Himmelmann 1996: 224-229; Fillmore 1997; Levinson 2004). A clear example in Khamti of the discourse deictic function of the speaker-oriented *an³-nai¹* 'this one (near me)' and the hearer-oriented *a-maeu⁴* 'that one (near you)' is shown in the assertion and response in (147). The proposition in (147 A) can elicit the reply in either (147 B) with *an³-nai¹* or (147 B´) with *a-maeu⁴*.

(147) A   *aai²   aan⁵ taan⁵   khaan⁴   uu⁵*
            Aai   3SG   be.lazy   IMPF
            'Aai is very lazy'

       B   ***an³-nai¹***   *tsaeu³   uu⁵*
            one-DISC   true   IMPF
            lit. 'this one is true'
            'this is true'

       B´   ***a-maeu⁴***   *tsaeu³   uu⁵*
            one-DISC   true   IMPF
            lit. 'your one is true'
            'that is true'

As indicated with the literal translation, (147 B) would be similar to 'this what *I* just said is true' and so the use of *an³-nai¹* indicates that the one who uttered (B) is also the one who uttered the original proposition in (147 A). However, as shown with the literal translation, (147 B′) would be 'that what *you* just said is true' and the use of the hearer-oriented demonstrative *a-maeu⁴* would reflect a response as uttered by the hearer of the original proposition in (147 A). The discourse deictic paradigm in (147) demonstrates that a demonstrative (either *an³-nai¹* or *a-maeu⁴*) replaces the entire proposition *aai² aan⁵taan⁵ khaan¹ uu⁵* 'Ai is very lazy'. The example shown in (147 B) is a speaker-oriented response and (B′) is a hearer-oriented response to the proposition set forth in (A). This interpretation of the discourse deictic usage follows from the meaning of the pronominal demonstrative source—near-speaker or near-hearer—as described above in Section 4.2. These speaker/hearer viewpoints are established by the choice of demonstrative uttered.

The discourse deictic contrast (*an³-nai¹* or *a-maeu⁴*) expressing speaker/hearer perspective is a tendency rather than a definitive rule of Khamti discourse. There are examples in my text material showing a speaker using either discourse deictic. For example, in the sentence in (148) from a text about Khamti funerals, the speaker uses *amaeu⁴*, while in the sentence in (149) from a different text about the narrator's younger sister, the same speaker uses *an³-nai¹*.

(148) **a-maeu⁴**   *hleeu⁵sii⁵nai⁵nkii⁴ man⁴ mai² sum⁵phai⁴ haeu² naai³ nkaw¹*
     one-DISC   because   3SG   F.OBJ cremate   give   only   although
     'that is because although (we) only cremate him...'

(149) **an³-nai¹** *yaa¹ wuung³kaang³ man⁴ nakhaa⁵ kau³ mai² lak¹   nai¹   nam⁵*
     one-DISC TOP between   3SG   and   1SG   STD   different DEF   COP
     'this is the difference between she and me'

A-maeu⁴ in (148) refers to the proposition in the preceding sentence, which explains how the deceased's relatives will pour cups of water on the body while it is burning, in order to cool his spirit. In contrast, *an³-nai¹* in (149) refers to the content from several preceding sentences, which tell of the speaker's younger sister being a very lazy student compared to the speaker who was a very diligent one. More literal translations of these examples highlight the distinction that the two demonstratives

offer. The example in (148), with the hearer-oriented demonstrative, is something equivalent to 'that (what you just heard) ...', whereas in (149), with the speaker-oriented demonstrative, means approximately 'this (what I just said) ...'.

The Khamti discourse deictic analysis presented here requires further research in order to establish clear patterns of perspective distinctions. What is important for purposes of this research is that the paradigmatic contrast found in the source pronominal demonstratives extend to the discourse deictic function. While it seems plausible, for Khamti, that the use of a discourse deictic might have started with the *de re* notion of a spatial speaker/hearer-oriented distance that extends to an endophoric *de dicto* "textual" speaker/hearer-oriented distance, the fact still remains that language patterns, typologically and historically, tend to demonstrate a development from pronominal demonstrative usages to discourse deictic ones (Diessel 1999: 100-105).

In referring to propositions, a discourse deictic can be used with either backward reference or forward reference to an in-text proposition. In (150), *an³-nai¹* exhibits a cataphoric function by referring to a proposition that follows, while in (151), *nai¹* is used at the beginning of a text in an introductory sentence for anticipating the propositional content of the entire text that follows. In this text-initial position, *an³-nai¹* is always found in a reduced form *nai¹*. The variant *nnai¹* follows the Khamti script and is phonemically /nanai/ is shown with the verbs *mat¹* 'remember' and *nai²nyin⁴* 'hear'. Furthermore, in (150), *an³-nai¹* functions to connect two juxtaposed sentences at the discourse level, while in (151) the nominal *nai¹ yaa¹* is juxtaposed with its copular complement *luang³ puai⁴ptaai³ tii⁵khaa² nam⁵* 'is about a funeral'. The familiar noun-conoun template [NOUN][CONOUN] with a head noun and an adjoining nominal now generalizes as juxtaposed linguistic entities, [ENTITY] [ENTITY]. The notion entity is used here for a *thing* or *relation* that can be conceptualized as a whole.

(150) [*sin⁵   an³   khian⁴   yaeu⁵   nai¹   yaa¹   **an³-nai¹**   nam⁵*] .   [*tsau² thaa⁵wa⁵ra⁵*
     precept   ADJ   most   big   DEF   TOP   one-DISC   COP   lord   eternal

     pha⁵raa⁴   yaa¹   tsau²   pha⁵raa⁴   suu⁵   liau³   nam⁵]
     god   TOP   lord   god   2PL   only   EQU
     'The most important precept is this. The lord eternal God is your only god.'

(151) [**nai¹** yaa¹] [luang³ puai⁴ptaai³   tii⁵khaa²   nam⁵]
      DISC TOP about funeral   POL   COP
      'this is about a funeral'

     Unlike an anaphoric deictic, which only back-references a participant, a discourse deictic can refer either backward or forward to a proposition. Gerner (2009: 69, citing Maillard 1974) refers to this bi-directional capability of the discourse deictic as *diaphora*. In Khamti, the discourse deictic exhibits grammaticalization pathways particular to this diaphoric characteristic. The first pathway derives from the back-referencing function of the discourse deictic, *nai¹*, leading to a proposition that can be re-construed as an entity in a complement construction. In this case, the construction gets encoded as an argument of a verb and the demonstrative functions to mark a complement clause. I discuss the complement construction and its extensions next, in Sections 4.5-4.7.

     The second grammaticalization pathway extends from the forward referencing function of *nai¹*. A discourse deictic that is part of the introductory sentence at the beginning of a text sets up a thematic ground for that entire text. Similarly, between two paragraphs within a text, a discourse deictic that occurs at the beginning of a new section of discourse summarizes the information found in the preceding discourse paragraph and sets up a thematic ground for the ensuing paragraph. Consequently, the discourse deictic establishes a thematic link between discourse paragraphs and is similar to a sentence connective (Diessel 1999: 102). In Khamti, *nai¹* develops into several sentence connectives and an emphatic particle, which I describe in Sections 4.8 and 4.9.

4.5 *Nai¹* as marker in complement constructions [COMPL]

Nai¹-complement constructions most readily function as subordinate clauses that act as the clausal object of a restricted set of ideational and communicative of verbs.[62] Complement verbs have generally been classified as three basic types of complements: fact, activity, and potential. Fact-complement clauses include verbs

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62   There are other types of predicate complementation that are not introduced by *nai¹*, including a plain juxtaposition between two clauses with an inference of subordination and an infinitival construction. These are not discussed in this dissertation.

such as *think*, *imagine*, *assume*, *remember*, *forget*, *believe*; activity-complement clauses have verbs such as *see*, *hear*, *like*, *enjoy*, while potential-complement clauses make use of verbs such as *promise*, *threaten*, *order*, and *persuade* (Dixon 2006: 43; see also Noonan 1985: 59ff). In this section, I demonstrate two of these types (fact and activity) for Khamti and claim that *nai¹* arises from its back-referencing usage of the deictic demonstrative (just described in Section 4.4) to be used as a complement clause marker.

It is well recognized that demonstratives frequently grammaticalize into complementizers (Diessel 1999: 123; Heine and Kuteva 2002: 106; Frajzyngier 1991: 123). A back-referencing function of a discourse deictic points to a previously stated *proposition*, rather than a previous nominal. Khamti uses the back-referencing feature of *nai¹* in order to become a marker of a clause that encodes a complement *proposition*. This is demonstrated in (152) in which the initial clause, *tang⁴ man⁴ uu⁵ nai¹* '(I) live with her' encodes a proposition that is juxtaposed to the complement marker, *nai¹*. In this position, *nai¹* can be seen as as a "conoun" in the sense that it is (pro)nominal and occurs adjacent to a preceding linguistic item, a complement clause, [CLAUSE][*nai¹*]. With this construction template, however, *nai¹* is not a prototypical conoun because the linguistic item it co-occurs with is not a noun. However, the function of *nai¹* in this more generalized "item"-conoun pairing remains the same as in a true noun-conoun complex—as a functional marker, and in (152), a complement marker, 'COMPL'. At the next level of analysis, the *nai¹*-marked subordinate clause (an "item"-conoun complex) is followed by a main clause, *kau³ piyuu⁵ uu⁵* 'I am happy'.

(152) [*tang⁴   man⁴ uu⁵*] [***nai¹***]   *kau³ piuu⁵   uu⁵*
      with   3SG live COMPL 1SG be.happy IMPF
      lit' 'I live with her, this I am happy (about)'
      '(I) am happy that (I) live with her'

When the conoun, *nai¹*, functions as a complement marker, it serves as a transition between the initial subordinate clause and the ensuing main clause. This transitional role calls upon *nai¹* to conceptually condense the preceding subordinate proposition into a (pro)nominal, 'this', that is used in the main clause as its object

argument. The literal translation of (152),'I live with her, this I am happy (about)', exhibits the *conceptual* transitional role *nai¹* maintains throughout the sentence. The conceptual construal of *nai¹* as a complement conoun will become more apparent in its description as a reference-point construction in Section 6.2.

There are plenty of examples of the complement construction that utilize *nnai¹* as a variant of *nai¹* for a complement conoun. The variant *nnai¹* is part of a grammaticalized copula construction that, in form, is a partial and reduced reduplication from *nai¹nai¹* with a more literal meaning 'this, this'. The free translations in (153) and (154) attempt to represent a reduplication interpretation by using a double demonstrative 'continue to be remembering *this*, *that* all these matters will happen' and 'we hear *this*, *that* there are lazy working people living among you'.

(153) [*luang³ nai¹-khau⁵ taang⁴meeung⁴ tii⁵ piin³maa⁴ nam⁵*] [***nnai¹***] *mat¹*   *wai¹*
      matter DEF-PL   all   IRR happen   CONT   COMPL remember DUR

      kan³   *uu⁵*
      PROG   IMPF
      lit. 'continue to be remembering *this*, *that* all these matters will happen'
      'all these matters will happen; what you keep remembering *is this*'

(154) [*ngau⁴ suu⁵ mai² kuun⁴   an³   khaan¹ hiit⁵amuu⁴ yang⁴ uu⁵ sii⁵*] [***nnai¹***]
      among   2PL   LOC   person ADJ be.lazy work   be   live PROG COMPL

      tuu³   *nai²nyin⁴* *uu⁵*
      1DU   hear   IMPF
      lit. 'we hear *this*, *that* there are lazy working people living among you'
      'there are lazy working people living among you; what we hear *is this*'

The reduplicated demonstrative, *nnai¹*, has an emphatic effect on the sentence in which the reading would be something similar to 'is this'. The example in (153) would then mean, 'All these matters will happen. What you keep remembering *is this*' and in (154) would be 'There are lazy working people living among you. What we hear *is this*'. The emphatic analysis of the complement construction, presented here, anticipates a grammatical extension to a final focus construction that I discuss in Section 4.9 in which I demonstrate that *nai¹* has grammaticalized into a sentence-final particle expressing emphasis.

Additional examples of *nai¹* in a complement construction are given in (155)-(158) with two verbs *tuang⁴* 'know' and *yum⁵* (or *yum⁵yam³*) 'believe', each shown

with examples of both complement-marker variants *nai¹* and *nnai¹*.

(155) [*kau³ piin³ pseeu⁵*] [**nai¹**]   *man⁴ tuang⁴ yau¹*
       1SG is   witch COMPL 3SG know   PERF
       lit. 'I am a witch, *this* he now knows'
       'he now knows that I am a witch'

(156) [*an³*   *tiam² wai¹*   *nai¹-khau⁵ tsaeu³uu⁵*] [**nnai¹**] *kaw¹ tuu³ tuang⁴ uu⁵*
       thing write DUR   DEF-PL   correct   COMPL also 1DU   know   IMPF
       lit. 'we also know *this*, *that* the things I wrote down are correct'
       'the things that I wrote down are correct; what we also know *is this*'

(157) [*kau³ waa¹*   *seu⁵seu⁵*] [**nai¹**]   *mai²   hiit⁵ksang⁵ nai⁵ suu⁵ mau⁵ yum⁵   nai¹*
       1SG speak truthfully COMPL   F.OBJ   why   Q   2PL NEG   believe Q
       lit. 'I speak truthfully, why don't you believe *this*?'
       'why don't you believe that I speak truthfully?'

(158) [*kau³ mai²*   *puai⁴tsaeu¹ maa⁴   nam⁵*] [**nnai¹**] *aw¹   khau⁵ yum⁵yam³ uu⁵*
       1SG F.OBJ   send   VENT EMPH   COMPL also   3PL   believe   IMPF
       lit. 'they also believe *this*, *that* you have sent me'
       'you have sent me; what they also believe *is this*'

     The complement marking function of *nai¹* and its variant *nnai¹* is that of a postposed (pro)nominal that construes its preceding and juxtaposed clause as a nominal. This is conceptually similar to the nominalizing function of *an³* that was analyzed in Chapter 3. For verbal complementation, once a clause is reified as a nominal, it can serve as an argument for a predicate.

     A functionally-based definition of subordination is helpful for understanding the cognitive motivation that underlies the grammaticalization patterns of the demonstrative, *nai¹*. A complement construction involves two SoAs expressed by two separate events, a main and a dependent event. The dependent event is construed in the context of the main event and therefore adopts the profile of the main event (Cristofaro 2003: 2). For example, the sentence in (155), *kau³ piin³ pseu⁵ nai¹ man⁴ tuang⁴ yau¹* 'he now knows that I'm a witch', profiles the main event of 'knowing' and not the subordinate event of 'being a witch'. Thus, the sentence is about knowing something and not about being a witch. In relation to complement clausal subordination, the dependent SoA entails that the main SoA is referred to (ibid.: 95). Thus, for the example in (155), the main SoA, 'he knows', requires that the SoA representing the object of thought, 'I am a witch', also be specified as a (pro)nominal. Furthermore, it is the meaning of the main SoA which determines exactly what kind

of specification is entailed for the subordinate SoA (ibid.: 99); that is, the need for a (subordinate) proposition to be construed as a nominal in order to act as a verbal argument. While languages use different strategies in marking a complement relation (simple juxtaposition, apposition, embedding), Khamti utilizes *nai¹* as a juxtaposed conoun to definitively re-construe subordinate events (relations) as entities (things). Therefore, the relationship between the subordinate proposition and *nai¹* is one of pronominal anaphora. *Nai²* acts as an (object) nominal in a main clause because it is anaphoric with a preceding subordinate clause. *Nai¹* is a transitional component between subordinate and main SoAs. This construal is a key one when describing the complement construction as a reference-point construction, in Section 6.2.2.

Morphologically, the complement marking function of *nai¹* is restricted to the speaker-oriented demonstrative and either reduces in form to *nai¹* or partially reduplicates to *nnai¹*. As an extension of the grammaticalization pathway from pronominal demonstrative to discourse deictic to complementizer (Diessel 1999: 123), *nai¹* has evolved into an obligatory grammatical marker that identifies a clause as a grammatical argument. The *nai¹*-complement construction is a pragmatic extension from the endophoric, discourse deictic construction. Khamti also has several quotative constructions that I analyze as a subtype of complement constructions involving *nai¹*, which I present next.

4.6 *Nai¹* as marker in direct quotative constructions [QT]

In this section, I describe *nai¹* as it is found in four quotative constructions: an indirect quotative, *wa-n¹* [say-IND.QT], a simple direct quotative, *n-wa-n¹* [QT-say-IND.QT], an adverbial quotative, *n-kii⁴* [QT-when], and a specific direct quotative, *n-sii⁵* [QT-thus]. Furthermore, *nai¹* reduces in form to *n-* and is a central component of each compound marker in that it "points to" the quotation. As such, I gloss the reduced *n* in each compound as QT, which stands for *quotation*. The second component in each of the compound markers features a particular quotative function that I will describe in this section. The first marker I discuss, *wa-n¹*, is an indirect quotative and I show that it grammaticalizes from the verb, *waa³* 'say'. The second construction arises from the indirect quotative to become a discourse-final direct

quotative, *n-wa-n¹*. I then analyze a sentence-medial quotative, *n-kii⁴*, that is positioned in the middle of an ongoing discourse. The final compound marker, *n-sii⁵* is found at the conclusion of a quotation and includes a more specific speech-act predication than the all-purpose one presented with *n-wan¹*, 'say'. I argue that, in these constructions, *nai¹* has extended in function from the endophoric complementizer to a set of specialized complementizers that is used in conjunction with verbs of speech and thought.

I start with the description of the indirect and simple direct quotatives, *wa-n¹* and *n-wa-n¹*. The notions of *proximal narrator* and *distal narrator* are helpful in distinguishing direct and indirect quotations. The proximal narrator is the speaker/writer of the text, while the distal narrator is the one quoted. In direct speech, proximal narrators repeat the ideas, thoughts, or words of distal narrators, while with indirect speech, repeated ideas shift to the spatio-temporal domain of the proximal narrator (Noonan 2006: 5). For example, when I say the sentence *Connie said, "I went to the store, ..."*, the quote uses the pronoun *I* to reflect the exact words Connie used about herself going to the store. As the writer of this sentence, I am the proximal narrator who is presenting the quote of a distal narrator, Connie. With the indirect discourse sentence *Connie said that she went to the store ...,* the demonstrative *that* is used to reference what Connie said indirectly and the pronoun *she*, which refers to Connie, reinforces that these were not Connie's direct words, but mine, as the writer of the sentence. In this second sentence, the proximal narrator (myself) is relating the speech of a distal narrator (Connie) within my own spatial and temporal framework, which is the framework of a proximal narrator. In English, indirect speech is signaled by the demonstrative *that*. For Khamti, indirect speech utilizes a compound quotative final particle *wa-n¹*, shown in (159) and glossed as indirect quote, IND-QT. Evidence in (159) that the quotative particle *wa-n¹* is indirect is that it cross-references the third singular pronoun *man⁴* 'he' instead of an expected first singular pronoun *kau³* 'I', were it to be the direct words of the distal narrator.

(159) "*maeu⁴   mai²   man⁴ khaeu³   han⁵   uu⁵*"   ***wa-n¹***
         2SG   F.OBJ   3SG   want   see   IMPF   IND-QT
         'he says he wants to see you'

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The indirect quote marker, *wa-n¹*, grammaticalizes from the verb *waa³* 'say' and a word-final demonstrative *nai¹* which reduces to *-n¹*. Syntactically, the indirect quotative has moved to a sentence-final position and so it is no longer considered a main verb. A literal translation of the indirect quotative marker is 'say this'. Typologically, this indirect quotative marker can be considered a *hearsay evidential marker*, as Haspelmath has shown for the Lezgian verb *luhun* 'say', which grammaticalizes in this way (Haspelmath 1993: 232). Heine and Kuteva (2002: 265) suggest that more research is needed for understanding the general process in which evidential markers arise. However, for the grammaticalization of direct quote markers across languages, the verb *say* is a common source. Many languages, including Nama, Tiwi, Sranan, Khmer, and Thai, use a form of the verb *say* to function as a direct quotative (ibid.: 267-268).

The Khamti *simple* direct quote marker, *n-wa-n¹*, takes the indirect quote marker *wa-n¹*, demonstrated in (159) above, and compounds it with an initial (reduced) *nai¹* to arrive at *n-wa-n¹*, which is shown in (160). The compound quotative marker *n-wa-n¹* follows the Khamti script but is phonemically /nawan/. In the direct quotative construction in (160), the initial *nai¹* (*n-*) serves to "point out" and identify the direct words spoken by the distal narrator. Moreover, the simple direct quotative can be seen as a juxtaposition between an initial quotation followed by the sentence-final quotative marker, *n-wa-n¹*, with the construction template, [QUOTATION][*n-wa-n¹*], as shown in (160). This template follows the complement construction template, [CLAUSE][*nai¹*], in principle, but is more generalized than a single clause because a quotation can be a word, phrase, clause, or an entire discourse from a distal narrator.

(160) ["*maeu⁴ kuun⁴ an³ nii³ nam⁵ nnai¹ kau³ nuu³naa²nuu³taa³ sii⁵ naai³*
      2SG   person REL be.good EMPH COMPL 1SG appearance   CONJ only

      kau³ tuang⁴ uu⁵ "] [***n-wa-n¹***]
      1SG know IMPF QT-say-QT

    lit. ' "I also know that you are a good person, only (because) of your appearance," *this* (he) says.'
    '(He) says, "I also know that you are a good person, only (because) of your appearance."'

In (160), the exact words of the distal narrator is indeed reflected in the use of the first person singular pronoun, *kau³* 'I'. I conclude from (160) that the

grammaticalized *nai¹* in the compound quotative *n-wan¹* functions as back-reference to identify a stream of speech within the text as belonging to the distal narrator. In this way, the direct speech quotative *n-wan¹* functions in similar fashion to the complement-marking *nai¹* emerging from the discourse deictic *nai¹* in signaling the quote as an argument of the speech-act predicate. A literal translation of (160) is: 'I also know you are a good person, only because of your appearance, *this* he says'.

The *adverbial* quote marker *n-kii⁴* is observed as a sentence-medial quotative that uses the adverbial *kii⁴* 'when'. The sentence-medial position of this marker makes the initial quotation an adverbial subordinate clause to a subsequent main quotation. The example in (161) shows *n-kii⁴* as an adverbial quotative marker situated between an initial dependent quotation, *tsau²pmii⁴ waa³* 'when the tycoon says "..." ' and a main quotation, *kuun⁴ phaan⁵ tuap⁵ waa³* 'the poor man says "..." '. In this way, *n-kii⁴* acts as a transitional marker that connects an initial subordinate quotation to a main quotation. The *n-kii⁴* quotative template can be described as [QUOTATION][*n-kii⁴*] QUOTATION. The literal translation reflects the pointing function of the deictic component, *n-*, by referencing the initial quotation and the component, *kii⁴* 'when' dictates that the initial quotation is an adverbial clause.

(161) [*meeu³ nai¹ tsau²pmii⁴ waa³* "*maeu⁴ hiit⁵k-nai⁵ kuu³ meeu³ pan⁵ heeun⁴ peeun³*
day this tycoon say 2SG why-Q every day meander house others

sii⁵ yuan⁴kiin³ uu⁵ nai¹ "] [***n-kii⁴***] *kuun⁴ phaan⁵ tuap⁵ waa³* "*kau³ yaa¹*
CONJ beg PROG Q QT-when person poor answer say 1SG TOP

heeun⁴yee⁴ mau⁵ yang⁴ sii⁵ amuu⁴ kaw¹ an³waa³ pan⁵ sii⁵ yuan⁴kiin³
livelihood NEG be CONJ work then so.to.speak meander CONJ beg

naai³ nam⁵ yang⁴ nai¹ " *n-wa-n¹*
only FOC be EMPH QT-say-QT

lit. "This day the tycoon says, "Why do you go around the houses of others begging," *when* saying *this*, the poor man answers, "As for me, there is no livelihood and (my) work, so to speak, is only meandering and begging," this (he) says.

'When this day the tycoon says, "Why do you go around the houses of others begging," the poor man answers, "As for me, there is no livelihood and (my) work, so to speak, is only meandering and begging."

In contrast, *n-wan¹* at the end of (161), acts as a sentence-final quotative marker for the previous quotation. Furthermore, when the quotation markers, *n-kii⁴* or *n-wan¹*, are used, as in (161), the speech-act verb, *waa³* 'say', can introduce the quotations.

The *specific* direct quote marker, *n-sii⁵* [QT-thus], is used when the speech act predicate is sentence-final, which is a common occurrence given the basic SOV word order of Khamti.[63] In (162), the quotative marker, *n-sii⁵*, is used to end a quotation, but, in this case, it also provides a link from the direct quote to a more specific speech-act verb than the all-purpose *waa³* 'say'. Furthermore, *n-sii⁵* can also provide additional speech-act information, such as the specification of interlocutors. In (162), *n-sii⁵* marks the preceding quotation with *n-* and introduces the accompanying speech act with the general conjunction *-sii⁵*. I gloss the conjunction as 'thus' to suggest a semantically specified manner entailed in a particular speech-act predicate. In (162), the speech-act predicate encodes a manner of request, *man⁴ mai² thaam⁵* '(they) ask him'. The *n-sii⁵* quotative construction is generalized with the template, [QUOTATION] [*n-sii⁵*] SPEECH-ACT PREDICATION. The *nai¹* quotation marker, *n-kii⁴*, acts as a transition between the quotation and its speech-act predicate.

(162) [*ngai⁴sii⁵ khau⁵ yaa¹ "thuung²wang⁵ nai¹-khau⁵ mai² tuu³ waa³ kaa⁵ thuai² khuat⁵*
and.then 3PL TOP weed DEF-PL F.OBJ 1DU must go uproot discard

*aw⁴ "] [**n-sii⁵**] man⁴ mai² thaam⁵ uu⁵*
Q QT-thus 3SG ADD ask IMPF

lit. 'And then, "Do we need to pull out the paddy weed?", *this* (they) *thus* ask him.'
'And then (they) ask him, "Do we need to pull out the paddy weed?"'

N-sii⁵ is the only quotative compound that is used with speech-act predicates other than *waa³*, as shown in (163) with the speech act verb *haam²* 'forbid' and (164) with the verb *khang⁴* 'grumble'. The literal translation of the compound quotative marker, '*this ... thus ...*' has the the deictic root, *n-*, pointing to the quotation and the conjunction, *sii⁵*, introducing the speech-act.

(163) [*yau¹kii⁴ "luang³ nai¹ phaeu⁵ mai² kaw¹ pii⁵ khai³"] [**n-sii⁵**] man⁴ khau⁵ mai²*
after.this about this anyone ADD also do.not tell QT-thus 3SG 3PL F.OBJ

haam² wai¹ uu⁵
forbid DUR IMPF
lit. 'After this, "Don't tell anyone about this," *this* (he) *thus* forbids them.'
'After this, he forbids them, "Don't tell anyone about this."'

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63 There might be more complex discourse-level issues determining the actual usage and distribution of each of these *nai¹*-quotatives, but this goes beyond the scope of the dissertation.

(164) [*khau⁵ yaa¹* "*phaeu⁵ kaw¹ haap¹ inn³ piin³*"] [***n-sii⁵***]   *khang⁴*   *kan³*   *uu⁵*
      3PL   TOP anyone also accept NEG able   QT-thus   grumble RCPR IMPF
      lit. ' "No one is able to accept (it)," *this* they, *thus*, grumble to each other.'
      'No one is able to accept (it)," they grumble to each other.'

A textual example employing all three *nai¹*-quotative compounds is shown in (165), in which there are two sentences. The first sentence is brief and uses the specific *n-sii⁵* construction. The second sentence comprises two quotations, the first is adverbial using the quotative *n-kii⁴* and the second quote ends with the simple quotative *n-wan¹*. In all three quotatives, reduced *nai¹*, *n-*, serves as a pointer to the direct quotation that precedes it.

(165) [*Ngai⁴kii⁴ khau⁵* *yaa¹* "*maeu⁴ maa² kyiaa⁴*" [***n-sii⁵***]   *man⁴ mai²*   *waa³ uu⁵* . [*man⁴*
      and.then 3PL   TOP 2SG   crazy Q   QT-thus 3SG   ADD   say IMPF 3SG

      yaa¹ "*tee¹tee¹* *saa⁴*"   [***n-kii⁴***]   ["*khau⁵ yaa¹ nai¹ kii⁴ amaeu⁴ phii⁵ an³ paeu¹*
      TOP   really   CERT   QT-when 3PL   TOP this if   that   spirit REL guard

      man⁴   *inn⁵thaang¹*"] [***n-wa-n¹***]
      3SG   perhaps   QT-say-QT
      'And then, "Are you crazy?" they, thus, say to her. When she (says), "Really, for sure!"
      (they) say, "If (it is like) that, perhaps that is a spirit who guards her."

In each of the direct quotative constructions, *nai¹* occurs in a highly specific sentential context, either between two quotations, at the end of a quotation but before the speech verb, or at the end of a quotation as a sentence-final particle. As a deictic root, *nai¹* gives rise to a quotative particle. It can also be seen that *nai¹* gets phonetically reduced to /*na*/ in the quotative constructions. A new sentential context, morphological restriction, and phonetic reduction are all indicators that a grammaticalization process has occurred for quotative constructions in Khamti.

This is a rather cursory look at quotative constructions, mostly from the diachronic perspective of how the demonstrative root *nai¹* grammaticalizes as a key component in quotation markers. Other issues, such as quotations being used for rhetorical style as in heightening immediacy, developing the participants, involving the addressee, raising emotions (Noonan 2006: 27), or the interaction of direct speech and prosodic integration (Genetti 2011a), are valid topics for future research.

4.7 *Nai¹* as marker in adverbial constructions [ADV]

It has been shown with the quotative marker *n-kii⁴*, described in Section 4.6, that *nai¹* functions as a component with the adverbial *kii⁴* 'when'. *Nai¹* also functions in a wider variety of adverbial constructions as a marker "pointing to" adverbial clauses. In this section, I briefly illustrate each of these adverbial constructions and show how *nai¹* has grammaticalized into a general-purpose adverbial marker, which I individually gloss to reflect the meaning of the overall construction. Moreover, adverbial constructions are a third type of subordinate clause in addition to relative clauses (or clausal nominalizations, Section 3.6.3) and complement clauses (Section 4.5). As with the relative and complement constructions, adverbial constructions include two clauses—a subordinate clause followed by a main clause. The subordinate clause expresses a dependent SoA, while the main clause asserts an independent SoA. The notions of dependent and independent SoAs will also be used to describe a variety of *nai¹*-adverbial subordinate clauses next.

4.7.1 Temporal

The temporal *nai⁵* adverbial construction, 'when', is shown in (166), with a clause-initial *meeu³* meaning 'time' or 'day', followed by a specification of time *neeun³ saam⁵ phuun⁵ tuuk⁵* 'month three rains', and then a clause-final *nai¹*. This initial subordinate clause is followed by a main clause. The main clause uses *nai¹* to refer to the preceding adverbial clause.

(166) [***meeu³** neeun³ saam⁵ phuun⁵ tuuk⁵*] [***nai¹***] *paan³ leeung³ pheeun⁵ wai¹ uu⁵*
     time   month three rain   fall   ADV   interval one   plow   DUR IMPF
     lit. 'the time of the third month rains, *this* (time) plow (the field) for the first time.'
     'when the third month rains come, plow (the field) for the first time.

The temporal adverbial exemplified in (166) is one of temporal overlap. The main SoA overlaps in time with the dependent SoA and for purposes of discourse, the two SoAs can be considered as taking place simultaneously (Cristofaro 2003: 159). In (166), *nai¹* serves as a "pointer" to a portion of text introduced by the morpheme *meeu³* 'time'. *Meeu³* and *nai¹* function together in the construction to arrive at the adverbial notion of temporal overlap, translated as 'when'. A literal translation for

(166) reflects the deictic nature of *nai¹* being utilized in the temporal adverbial 'the time of the third month rains, *this* (is the time) to plow (the field) for the first time'.

4.7.2 Purposive

The purposive *nai¹* adverbial construction features a clause-initial adverbial morpheme of purpose, *haeu² poo⁴* 'so', which treats the SoA, *man⁴ mai² kau³ puang⁴tsaeu³,* 'I understand him' as a purpose. The purpose clause includes the clause-final *nai¹*, as a conoun which serves anaphorically to point back to the adverbial clause and link it to the main clause, expressed by the predicate *khai³* 'tell', in (167).

(167) [**haeu²poo⁴**   *man⁴   mai²   kau³   puang⁴tsaeu³*] [**nai¹**] *khai³   haeu²   ta¹*
     in.order.that   3SG   F.OBJ   1SG   understand   ADV   tell   APPL   OPT
     lit. 'in order that I understand him, *this* (is the purpose to) tell me'
     'tell (me) in order that I understand him'

The relationship between the dependent and main SoA in (167) implies that the agent (the addressee) of the main SoA *khai³ haeu² ta¹* '(you) tell me' is involved in the realization of purpose expressed in the dependent SoA *puang⁴tsaeu³* 'understand' (see Cristofaro 2003: 157). In (167), *nai¹* identifies the textually-stated purpose that *haeu²poo⁴* introduces in an anaphoric fashion. A more literal translation would be similar to 'in order that I understand him, *this* (is the purpose to) tell me'.

4.7.3 Reason

In *nai¹* adverbial constructions marking reason, the dependent clause does not have an initial morpheme that signals reason in the dependent relation. Instead, there is a sentence-medial compound, *nai¹-sii⁵*, that expresses a transition from the reason clause to the main clause. In (168), the initial reason clause, *puu⁵ nkhaa⁵ yaa⁵ nai¹ kaw¹ man⁴ mai² haak¹ luung⁵* 'grandpa and grandma also really love him', is followed by a main clause that includes the compound reason marker, *nai¹-sii⁵*. The bracketing convention of juxtaposition attempts to delineate the subordinate-to-main-clause configuration.

(168) [*puu⁵ n-khaa⁵ yaa⁵   nai¹ kaw¹ man⁴ mai²   haak¹ luung⁵*] [***nai¹-sii⁵***]
      grandpa CNT.DU grandma DEF   also 3SG F.OBJ   love big   ADV-and

      see⁴khaam⁵ sii⁵uu⁵ uu⁵
      patient   PROG   IMPF
      lit. 'the grandpa and grandma also really love him, *this* (reason) *and* (the result is), (they)
          are being patient'
      'because the grandpa and grandma also really love him, (they) are being patient'

The reason marker *nai¹-sii⁵* is a compound made up of the familiar pointer, *nai¹*,
along with the all-purpose conjunction *sii⁵*, which generally means 'and' (but can also
have other meanings; see Section 2.4.3). *Nai¹-sii⁵* is positioned between the initial
reason clause and the subsequent result clause and in this way functions as a marker
of both clauses. *Nai¹* back-references and thus identifies the dependent SoA as a
reason, while *sii⁵* links the reason to a main result SoA. In this fashion, (168) reflects
a more literal reading 'the grandpa and grandma also really love him, *this* (reason)
and (the result is) (they) are being patient'.

       The *nai¹-sii⁵* construction imposes a strong reason-result relationship between
the two clauses because the deictic pointing function of *nai¹* highlights the reason.
However, there is a second type of reason construction that forms a weaker reason-
result relationship between the two clauses. In this weak reason construction, the
plain conjunction *sii⁵*, rather than *nai¹-sii⁵*, is used as a marker of the dependent
reason clause. An example is shown in (169).

(169) *khau⁵   koo³ nguu⁴ **sii⁵**   paai³ uu⁵*
      3PL   fear snake CONJ   flee IMPF
      'they fear the snake and flee'

In (169), the plain conjunction *sii⁵* 'and' makes a transition between the reason
dependent clause *khau⁵ koo³ nguu⁴* 'they fear the snake' and the result main clause
paai³ 'flee'. A causal relationship between the two SoAs is only inferred using the
simple conjunction and context. Furthermore, the *sii⁵* component of the reason
construction *nai¹-sii⁵* is the same conjunction expressing simple coordination between
two clauses. In (170), the first clause *man⁴ yaeu⁵* 'he is big' is conjoined with the
second clause *suun⁵ uu⁵* 'is tall' and the relationship between the two clauses
expressed by the single word *sii⁵* 'and' is one of plain conjunction and not reason-

result. In (170), being big is not the reason for also being tall.

(170) *man⁴ yaeu⁵* **sii⁵** *suun⁵ uu⁵*
     3SG   big   CONJ tall   IMPF
     'he is big and tall'

       The difference between the *nai¹-sii⁵* reason construction in (168) and the plain *sii⁵* reason construction in (169) and (170) is one of causal strength. The *nai¹-sii⁵* construction is strong and always represents a causal relationship, whereas the plain *sii⁵* construction is weak and a causal reading is only implied from context. In the *nai¹-sii⁵* construction, causal emphasis is a contribution from the *nai¹* component by virtue of its deictic characteristic which points to and thus puts emphasis on the reason.

4.7.4 Concessive

The concessive construction consists of a single compound adverbial marker, *n-kaw¹*. This compound features an initial component, *nai¹* (phonemically reduced to *na*, although spelled *n*), along with a general conjunction *kaw¹* 'also/then' that expresses a simple sequencing of events. Together, the two components express a concessive meaning within the construction as a whole, as illustrated in (171). Like all adverbial clauses in Khamti, the subordinate clause in (171), *tang⁴ kheun⁴ khaa⁵* 'fish all night', precedes the main clause, *paa³ too³ leeung³ naai³ kaw¹ inn³ nai²* 'they can't even get one fish'.

(171) [*tang⁴ kheun⁴ khaa³*] [***n-kaw¹***]   *paa³ too³ leeung³ naai³ kaw¹ inn³ nai²*
     all   night fish ADV-then   fish CLF one   even also NEG get
     lit. '(they) fish all night, *this*, *then* (they) can't even get one fish'
     'even though (they) fish all night, (they) can't even get one fish'

With the compound *n-kaw¹*, the demonstrative component *n-* identifies and reinforces the dependent SoA (fishing all night) as a concession on which the main SoA (can't get one fish) is based. The second component, *kaw¹* 'also/then', links the concession to the subsequent situation. Together, the full compound marker *n-kaw¹* acts as a continuative conjunction that highlights a concessive SoA and relates it to a *contrasted* main SoA (Thompson et al. 1985: 262). A more literal rendition of (171)

in English would be '(they) fish all night, *this*, *then* (they) can't even get one fish'.

4.7.6 Summary of adverbial uses of nai[1]

The *nai[1]* adverbial constructions use the demonstrative *nai[1]* as a pointer to a previous SoA in order to identify it as a modifying relation to a main SoA. Because *nai[1]* functions similarly in all adverbials, I gloss it as ADV in these constructions. This is a reasonable grammatical extension because the demonstrative acts endophorically and deictically by pointing to clauses found inside the text in the many constructions analyzed previously in this chapter. Specifically, the grammaticalization pathway from demonstrative to subordination marker, as demonstrated in Khamti, is also reported for other languages. Heine and Kuteva (2002: 115) show that subordinators routinely arise from demonstratives in languages like !Xun, Sango and Saramaccan English Creole (Byrne 1988: 358, 347-348), along with Haitian French Creole (Hall 1953: 60).

Generally speaking, subordinating constructions include relative, complement, and adverbial clauses. All subordinating constructions involve two SoAs expressed by two separate events, a main event and a dependent event. The dependent event is construed in the perspective of the main event and adopts the profile of the main event (see Cristofaro 2003 for a comprehensive assessment of subordination from a functional/cognitive perspective). In this way, for example, the main event of plowing is profiled in (166) with the overall sentence being about plowing, rather than being about the time of rains coming. Likewise, in (167), the main event is about telling, instead of understanding and in (168), it is about being patient rather than loving. Finally, in (171), the overall sentence profiles the idea of not being able to catch a fish, rather than fishing all night.

The understanding of a profiling relationship between a main and a dependent clause will be central in analyzing the extensions of *nai[1]* as a constellation of reference-point constructions in Chapter 6.

4.8 *Nai¹* as marker in a comparative construction [COMP]

The final adverbial construction that uses *nai¹* is also in reduced form, as seen in the compound, *n-kan³*. The component, *kan³*, is the word for 'share' and is also used as a coverb to express general reciprocity. With the *nai¹* comparative construction, the subordinate clause is introduced with an initial comparative morpheme *nang⁵* 'same'. In (172), the comparative compound *n-kan³* follows three comparative clauses that each express their own dependent SoA—*kuun⁴ nai¹-khau⁵ kiin³* 'people eating', *kuun⁴ nung³* 'people dressing', and *uu⁵* '(people) living'. The first two of these subordinate clauses are introduced with *nang³*, while the third clause is left un-introduced. Each of the subordinate clauses are followed by a the comparative marker, *n-kan³*, which indicates that the dependent SoA is as a standard to which the main SoA *haeu²* *tii⁵khaa⁵* 'let (a dead person) be' is to be compared. Although this is a complex example that uses three instances of the comparative compound marker, *n-kan³*, for each instance, *-kan³* leads to the full main clause, *haeu² tii⁵khaa² nam⁵* 'let (a dead person) be'.

(172) [***nang⁵*** *kuun⁴* *khau⁵* *kin³*] [***n-kan³***]   [***nang⁵*** *kuun⁴* *khau⁵* *nung³*] [***n-kan³***]
     same.as person PL   eat   COMP-RCPR same.as person PL   dress   COMP-RCPR

    [*uu⁵*] [***n-kan³***]   *haeu²* *tii⁵khaa⁵* *nam⁵*
    live   COMP-RCPR let   POL   CONT

    lit. 'the same as people eating, *this share...*; the same as people dressing, *this share...*; the same as living, *this share* (by) letting (a dead person) be'
    'let (a dead person) be the same as people eating, be the same as people dressing, be as (the people) living'

     In the comparative construction, *nai¹* is pointing to and highlighting the preceding clause as the standard of comparison, while *-kan³* directs attention to the comparee of the main clause, along with the event situation surrounding the comparee. The reciprocity inherent in the meaning of *kan³* reinforces a relationship between standard and comparee. In this way, a more literal translation of (172) would read something along the lines of 'the same as people eating, *this share...*; the same as people dressing, *this share...*; the same as living, *this share* (by) letting (a dead person) be'.[64] The reciprocal marker, *kan³* derives from the verb, 'share'.

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64   The sentence in (172) comes from a text explaining cultural aspects of a Khamti funeral. The

4.9 *Nai¹* as marker in an emphatic sentence construction [EMPH]

In this section, I present examples of *nai¹* functioning as a sentence-final particle which makes the entire sentence pragmatically emphatic. There are two types of *nai¹*-based emphatic constructions, both using *nai¹* in sentence-final position. The first emphatic construction uses the morpheme *nam⁵* as a *phrase focus* marker for a phrase inside the sentence and is exemplified in (173) and (174). The marker *nam⁵* identifies as focused the prepositional phrase, *tang⁴ mee⁵ naai³* 'only with mother', in (173), and the prepositional phrase, *luk¹ kuun⁴ heeun⁴ mai²* 'from one's own family members', in (174). In both examples, the sentence final particle *nai¹* signals that the entire proposition expressed by the sentence is indeed emphatic and the *nam⁵* constituent is the focused part of that overall emphasis. The FOCUSED EMPHATIC SENTENCE construction, [...*nam⁵*][*nai¹*], features two juxtaposed elements—the full proposition expressed by the sentence, along with a *nam⁵* focused phrase, and the sentence-final *nai¹* that expresses emphasis. The juxtaposed sentential elements are related pragmatically, with the *nam⁵*-marked phrase making a particular pragmatic focus and the sentence-final *nai¹* pointing to the sentence as a whole and construing it with a general pragmatic emphasis.

(173) [***tang⁴ mee⁵ naai³ nam⁵***   *uu⁵*   *maa⁴*] [***nai¹***]
      with   mother only FOC   live PRF   EMPH
      lit. '(she) had lived **with only mother**, *this*'
      '(she) had lived **with only mother** !'

(174) [*lan⁵suu⁵ an³*   *khian⁴ yaeu⁵*   *yaa¹* ***luk¹***   ***kuun⁴heeun⁴ phuu²tsaeu² mai²***   ***nam⁵***
      enemy   REL   most   be.big TOP from family   own   ABL   FOC

      tii⁵   *uak⁵*   *maa⁴*] [***nai¹***]
      IRR   out   come   EMPH
      'the biggest enemy will come out **from one's own family members**' lit. (*this* emphasized)

The context for the sentence in (173) is that the speaker is upset that, when growing up, she has had to live in various places and under different circumstances, such as with her father in a different city, with her grandma in another town, and also with her own mother. She narrates her own jealousy of her younger sister who had the

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Khamti believe that the spirit of the dead person is still with everyone in the room and so they consider the spirit of the departed as part of the ongoing funeral festivities, enjoying life like those living.

advantage of growing up in more stable circumstances by living in one place 'with mother', which is the focused part of the emphatic sentence indicated by *nam⁵*. The sentence-final *nai¹*, then, back-references the entire sentence to make the proposition emphatic within the overall discourse. In (174), the speaker uses the sentence-final *nai¹* to emphasize the surprising prediction that an enemy is actually a member of the family, rather than an outsider. The *nam⁵* focus marker accentuates the striking part of the overall emphasis, that of an enemy 'being from one's own family'.

The second of these constructions, the EMPHATIC SENTENCE construction, features *nai⁵* sentence finally as an emphatic marker, but does not include a *nam⁵* focus marker. In (175) and (176), *nai¹* signals in a more general way an emphasis on the entire proposition encoded by the sentence. This second kind of emphasis without a focused constituent is reflected in the translation with the word 'indeed'.

(175) [*amaeu⁴ saa⁴ maeu⁴ mai² au³ sian²*] [***nai¹***]
     that   CERT 2SG   CAUS make be.pretty EMPH
     lit. 'that makes you pretty, *this*'
     '*Indeed,* that makes you pretty !'

(176) [*naa⁴tii⁵peeun³ man⁴ naai³ ksang⁵ mau⁵ tsaang³ uu⁵kaw¹ taai² kau³ mai² uu⁵*
     pity   3SG just anything NEG proficient but   near 1SG LOC stay

     sii⁵ kau³ mai² tsuaai³ maa⁴] [***nai¹***]
     CONJ 1SG F.OBJ help   VENT   EMPH
     '*Indeed,* (I) just pity her, (she's) not proficient with anything but to stay near me and help me'

The emphatic marker *nai¹* described in this section shows the demonstrative *nai¹* in a new constructional context: sentence finally. The function of *nai¹* in this construction is as a back-referencing discourse deictic that points to the previous proposition for the purpose of expressing that proposition emphatically. The analysis of sentence-final *nai¹* as an emphatic marker has been shown typologically to extend from what Heine and Kuteva (2002: 111) describe as a DEMONSTRATIVE > (PERS-PRON) > COPULA > FOCUS grammaticalization chain.[65] In the analysis of the sentence-final *nai¹* construction, what Heine and Kuteva call FOCUS, I call EMPHASIS, because I use the term *focus* to additionally refer to the role of the constituent-focus marker *nam⁵* within the overall construction. Heine and Kuteva cite Cahuilla as a language

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65   The PERS-PRON stage of development is said to be optional.

that uses a proximal demonstrative functioning as an "emphatic" marker in certain contexts (Heine and Kuteva 2002: 111; Seiler 1977: 115-116).

Similar to Cahuilla, the Khamti speaker-oriented demonstrative *nai¹* seems to have extended from a copular function *nnai¹*, which I described as a complement clause marker in Section 4.5 above. I repeat the complement clause example given in (153) as (177) here.

(177) [*luang³ nai¹-khau⁵ taang⁴meeung⁴ tii⁵ piin³maa⁴ nam⁵* **nnai¹**] [*mat¹ wai¹*
      matter DEF-PL all   IRR happen CONT COMPL remember DUR

   kan³ uu⁵]
   PROG IMPF
   'continue to be remembering *this*, *that* all these matters will happen'

In Section 4.5, I described the complementizer *nnai¹* as a grammaticalized copula construction that is a partial reduplication from *nai¹* and carries a literal meaning 'this, that' or 'is this'. The analysis in Section 4.5 for the sentence that is here shown as (177) is that *nai¹* is a pointer to a (subordinate) SoA. It follows from this analysis that *nai¹* could also be found in a new constructional context—sentence finally—to perform a pointing function, but in this case, the back-referencing is of an entire proposition encoded by a sentence and the purpose is to impose a pragmatic emphatic construal on it.

The sentence-final emphatic *nai¹* presented in this section likely has grammaticalized from the copular *nnai¹* (presented earlier) as both constructions assert a pragmatic emphasis. In the case of the sentence-final construction, when *nai¹* shifts from a sentence-medial position to a sentence-final one, the emphasis is placed on the entire sentential proposition, in respect to the discourse surrounding it. In addition, the copular-like, partially reduplicated *nnai¹* further reduces to plain *nai¹* when in a sentence-final context.

4.10 *Nai¹* as marker in sentence connectives [CNT]

In Section 4.4, I described *nai¹* as a discourse deictic in which demonstratives refer to previous propositions (as opposed to nominals) in the current discourse space. In this section, I take the discourse deictic function of *nai¹* and hypothesize that *nai¹* might

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have evolved from the discourse deictic usage into two sentence connective constructions. In these two constructions, *nai¹* functions as part of a compound connective and glossed [CNT].

The first sentence connective construction described in this section employs the compound connective, *nai¹-mai²* 'CNT-LOC', which literally means 'at this' but is reflected in the free translation as expressing simple temporal succession, 'then'.[66] The compound connective is seen as a discourse linker by joining consecutive sentences in what Longacre (2007: 380) calls *temporal succession*. A Khamti example of what I am calling the SIMPLE TEMPORAL SUCCESSIVE construction is shown in (178) with the second sentence beginning with *nai¹-mai²* which links the two sentences in the discourse. The adjoined sentences (S) are described by the juxtaposition template, [S][*nai¹-mai²* S].[67]

(178) [*phuu²tsaeu¹ amaeu⁴ uak⁵ kaa⁵ kii⁴ phuu²tai⁴koo¹ man⁴ an³ man⁴ mai² nii²*
       servant   that   exit AND when friend   3SG REL 3SG F.OBJ sum

   tsuan³ tki⁵ leeung³ ma¹ mai² nyiaa⁴ uu⁵.] [***nai¹-mai²*** *man⁴ yaa¹ tai⁴koo¹*
   little tiny INDEF   borrow F.OBJ meet IMPF   CNT.LOC 3SG TOP friend

   amaeu⁴ mip⁵khoo⁴ sii⁵ nii² kau³ saai² ma¹ n-sii⁵ waa³ uu⁵.]
   that   choke   and sum 1SG pay.back borrow QT-thus say IMPF

   'When that servant went away, (he) meets his friend who borrowed a tiny little sum. *Then* (lit. at this), he choked that friend and thus said, "pay back my sum." '

With the compound connector, *nai¹-mai²*, the *nai¹* component functions anaphorically, while *mai²* points out a textual "location" (Chapter 5 presents a detailed analysis of locative *mai²*). In the SIMPLE TEMPORAL SUCCESSIVE construction, the compound *nai¹-mai²* serves to point out a previous sentence proposition which is inferred as a location to which a subsequent sentence proposition is situated. A literal translation of the linker *nai¹-mai²* is intended to represent the inference: 'at this [PROPOSITION$_i$], [PROPOSITION$_{ii}$]'. Because *nai¹* points back to and references the antecedent sentence, an intentional notion of temporal succession is obtained. The proposition of the first sentence provides the basis on which the proposition of the second sentence acts.

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66 For the description of *mai²* as a locative, LOC, see Section 5.3.
67 There is another temporal succession marker, *ngai⁴-sii⁵* 'and then', that I do not describe because it does not contain a *nai¹* component. However, it does occur with some data in this dissertation, such as (182) below.

The second sentence connective construction conjoins two sentences but places more emphasis on the initial sentence. In this temporal succession construction, the compound connector *ngai⁴-nai¹* 'and-CNT' is used. A literal gloss of this connector is 'and this' which links to the initial sentence with the *ngai⁴* 'and' component and points ahead to the subsequent sentence with the *nai¹* component. Unlike (178), in which *nai¹* is used to back-reference a previous proposition in the discourse, the *nai¹* in (179) functions as a forward-reference marker by pointing ahead to the next proposition in an anticipatory fashion.

(179) [*paa³sa²njee¹ nai¹   naeu⁴ paa³ mai² an³ khian⁴ kin³nii³   nam⁵* .]   [***ngai⁴-nai¹***
        eel   DEF   among fish LOC   one most   delicious   COP   and.CNT

       tai⁴koo¹ kau³ khaa² wan⁴ leeung³ paa³san²njee¹ amaeu⁴ mai² kaa⁵ siau² uu⁵ .]
        friend   1SG   POL   day   one   eel   that   F.OBJ go   capture IMPF

       'The eel, of all fish, is the most delicious. *And so*, my friend, one day, went to capture that eel'

The pragmatic effect of the anticipation for the the second sentence creates more emphasis on the second sentence which imposes a degree of intentionality—a reason-result relationship between the two sentences. I call this construction the INTENTIONAL TEMPORAL SUCCESSIVE construction with the sentence in (179) shown as an example. The *nagi⁴-nai¹* connective concerns an intentional temporal successive meaning in which the first proposition is linked to a second, more intentional, proposition, '[PROPOSITION$_i$][and so, PROPOSITION$_{ii}$]'. The pragmatic emphasis that ensues is reflected in the free translation of the intentional sentence '*And so*, my friend, one day, went to capture that eel.'

At the discourse level, Diessel talks about sentence connectives in which pronominal demonstratives are compounded with some other element such as an adverb or adposition to signal a semantic relationship between the conjoined propositions (Diessel 1999: 125; Heine and Kuteva 2002: 107). Hixkaryana is cited as a language using the demonstrative and a causal postposition as a compound linker (Derbyshire 1985: 157) in similar fashion to Khamti's two temporal successive constructions, demonstrated in (178) and (179). These both utilize a demonstrative and either a locative *mai²* or an initial coordinating conjunction *ngai⁴*.

4.11 *Nai¹* as a recognitional deictic [RECG]

According to Diessel's typology (1999: 113), there are three major endophoric extensions emerging from the exophoric demonstrative pronoun—an anaphor (described in Section 4.3), a discourse deictic (in Section 4.4), and a recognitional deictic, which I describe here.

Recognitional deictics are little discussed in descriptive grammars (Himmelmann 1996; see also Diessel 1999: 105ff). A recognitional usage of a demonstrative is distinguished from other uses in that the deictic only functions as an adnominal and does not have a referent in either the external speech context (*de re*) or in the preceding discourse (*de dicto*). Instead, a recognitional deictic refers to a specific shared knowledge between interlocutors (Diessel 1999: 105). The specific shared knowledge frame could be either a common sense fact, some cultural piece of information, or a referent that the speaker believes the hearer to know, as in the English example provided by Diessel (ibid.) *I couldn't sleep last night.* ***That*** *dog (next door) kept me awake*. In this brief discourse, *that dog* is a first mention nominal and the speaker assumes that the hearer knows exactly which dog it is, the one next door, based on the assumption of shared knowledge. In Khamti, demonstratives can be used recognitionally with both the hearer-oriented and speaker-oriented demonstratives *amaeu⁴* and *nai¹*. An example of the hearer-oriented demonstrative used as a recognitional deictic is shown in (180), while a speaker-oriented demonstrative is shown in (181). The template assumes a preceding domain of shared knowledge, (shared knowledge)[NOUN DEM]. The recognitional usage of both demonstratives is glossed as [RECG] and translated as 'that' and 'the', respectively.

(180) *ngai⁴-nai¹* *tai⁴koo¹* *kau³* *khaa²* *wan⁴* *leeung³* [*paa³san²njee¹* ***amaeu⁴***] *mai²* *kaa⁵*
     and.CNT   friend   1SG   POL   day   one   eel   RECG   F.OBJ   go

     siau² *uu⁵*
     capture   IMPF

     'and so, my friend, one day, goes to capture *that* eel'

(181) *yau¹kii⁴* *tkaa²* *mai²* *pheeu⁵* *liak⁵liak⁵* *nam¹* *au³* *hiang²* [*nin³* ***nai¹***]
     after   seedling.bed   F.OBJ   harrow   finely   water   take   dry   topsoil   RECG

kheeung⁴kaang³	*luak⁵*	*tkaa²*		*mai²*	*au³*	*koo⁵*	*hiit⁵*	*tii³*	*ngai⁴-nai¹*
middle		section	seedling.bed	LOC	take	left.over	make	part	and.CNT

'then, finely harrow the seedling bed, take *the* topsoil from the dried up water in the middle of the seedling bed section, taking the left over soil and making it into parts, and so...'

In (180), even though the nominal *paa³san²njee¹* 'eel' is encoded with what seems to be an anaphoric demonstrative *amaeu⁴* 'that', this instance of 'eel' is a first mention in the text. The speaker is assuming that the hearer shares an understanding about the characteristics of an eel that sets the stage for the unfolding story. Likewise, in (181), *nin³* 'topsoil' is a first mention nominal in the text, but is referenced with the speaker-oriented recognitional deictic *nai¹* 'RECG'. The speaker is narrating with the understanding that the hearer knows about the role that topsoil plays in Khamti agriculture.

A final example of a recognitional deictic relates to the accessing of the cultural knowledge about the spirit world. A first-mention referent encoded as a recognitional deictic is shown in (182) from a cultural text about Khamti funerals. In this example, the first-mention referent, *phii⁵hai¹phii⁵huk¹ nai¹* 'the bad spirits', is encoded as a plural noun. The speaker assumes that the hearer knows about the spirit world of the Khamti and uses the recognitional function of the deictic to express that assumption.

(182)
ngai⁴-sii⁵	*meeu⁴*	*kii⁴*	*yaa¹*	*paa⁵tsa¹*	*mai²*	*mau⁵*	*win⁵*	*puak¹*	*meeu⁴*	*nam⁵* .
and.then	return	when	TOP	grave	ALL	NEG	crane.neck	again	back	EMPH

hleu⁵sii⁵nai⁵nkii⁴	*paa⁵tsa¹*	*mai²*	*yaa¹*	[*phii⁵hai¹phii⁵huk¹*	**nai¹**	*khau⁵*]	*yang⁴*	*uu⁵* .
because	grave	LOC	TOP	bad.spirit	RECG	PL	be	IMPF

'And then, when (they) are returning, (they) don't crane (their) necks back again to the grave. Because (they) are afraid there are *the* bad spirits at the grave.'

Amaeu⁴ and *nai¹* are demonstrative pronouns that extend in function to three main exophoric uses—anaphoric, discourse deictic, and recognitional deictic. As a recognitional deictic, *nai¹* is syntactically restricted to an adnominal position, which for Khamti I call a conoun position. The adnominal recognitional construction (noun and conoun) evolves from the pronominal demonstrative that maintains a deictic function of pointing. In the case of a recognitional usage, the referent that is "pointed" to is found in an assumed shared knowledge domain between the speaker

and hearer. The speaker uses the demonstrative recognitionally, when she is confident that the hearer recognizes a referent from this domain.

Each of these three endophoric extensions (anaphor, discourse deixis, and recognition) are also source constructions for other extensions described in this chapter, such as definite, plural, complement, sentence connectives, and so forth. In the next section, I posit a semantic map in order to provide a more coherent picture of the *nai¹* data discussed here and show how it grammatically evolves in the language.

4.12 A summary of the functions of *nai¹*

In this chapter, discussion was centered on the functional proliferation extending from the source morpheme of the demonstrative *nai¹* 'this' in Khamti. There are several important aspects of the demonstrative that allow it to be a source for grammaticalization. First, the demonstrative is one of the basic words in the language evidenced by its overall function of identifying an object/referent in similar fashion to a physical gesture of pointing. The purpose of any kind of pointing, be it gesture or vocal, is to single out an entity in the environment in order to establish an intentional joint attention with the speaker and hearer to that entity. After joint attention is achieved, a communicative intent and dialogue can be constructed around the entity. The semantics of deictic pointing inherent in the demonstrative morpheme is the element that drives the extension to other kinds of textual and contextual pointing. Secondly, the type/instance organization of nominals demonstrate that demonstratives generally, and *nai¹* specifically, are *grounding predications*, in the sense of Langacker (2002: 8). That is, demonstratives serve to anchor an entity type into a communicative domain of instantiation in which one of the speech-act participants is also part of the overall conception (see Section 6.4). Only when an entity is thus focused on and elaborated with other entities can linguistic convention articulate a message that is jointly coherent. It is these kinds of cognitive general capacities (foregrounding and relating of entities) that underlies the larger processes of grammaticalization of *nai¹* (also *an³* and *mai²*), to be explored further in Chapter 6. Finally, *nai¹* functions in a speaker-oriented demonstrative paradigm that is significant for several lines of extension found in the data of this chapter.

One of the caveats in picturing *nai[1]* in a semantic map is that the interconnections between uses might appear cut and dried and rather simplistic. This is probably not the case, especially for *nai[1]*. While the general lines of development that I will present in this section follow documented grammaticalization accounts of similar demonstrative phenomena, the specific interactions of the pathways shown by arrows might not take into consideration a more complex scenario of developmental stages for *nai[1]*. Additional research, such as quantitative corpus analyses, speaker interviews, and more time-depth literary studies, would verify or disconfirm what is presented currently in this preliminary map.

Diessel (1999: 113) posits a general outline for the notions of exophoric and endophoric extension as it pertains to pronominal demonstratives—two notions that have their origin in work by Halliday and Hassan (1976: 33). Diessel's grammaticalization cline of demonstratives is shown in Figure 4.2. The exophoric or *de re* usage on the left is the source for three general endophoric or *de dicto* usages, *anaphoric*, *discourse deictic*, and *recognitional*. These endophoric extensions lead to a variety of documented grammatical functions across languages, many of which show up with the Khamti demonstrative, *nai[1]*.

EXOPHORIC   ENDOPHORIC   GRAMMATICAL

anaphoric   ⟶   e.g. 3rd person pronoun

ostensive ⟶ discourse deictic   ⟶   e.g. sentence connective

recognitional   ⟶   e.g. determinitive
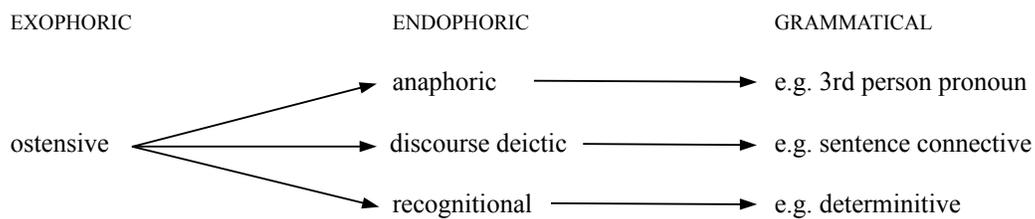
Figure 4.2. The grammaticalization cline of demonstratives (Diessel 1999: 112)

Diessel's outline in Figure 4.2 is interpreted for Khamti in Figure 4.3 and includes *nai[1]* as the exophoric pronominal source in its ostensive function as a deictic pointer, on the left in Figure 4.2. The source leads to the three endophoric usages, illustrated with heavy bold extension arrows. The Khamti-specific facts presented in this chapter are consistent with general grammaticalization patterns found in the literature.

```
          ┌─────────────┊─────────────┐
          │  exophoric  ┊  endophoric │                        SPECIFIC INDEFINITE
          └─────────────┊─────────────┘                      ↗
                                          ANAPHORIC  ──→  DEFINITE  ──→  PLURAL  ──→  ASSOCIATIVE
                                          (nominal)                                   PLURAL
                        ADNOMINAL                                      ↘
                                                                        INTERROGATIVE
                                                      ↘
                                                       BINARY COORDINATION

  PRONOUN                                  DISCOURSE  ──→  COMPLEMENT  ──→  QUOTATIVE
  nai¹                                      DEICTIC
  this                                      (propositional)            ↘
                                                      ↘                 EMPHATIC  SENTENCE
                                                       ADVERBIAL
                                                                                    SENTENCE
                                                                                    CONNECTIVES

                                          RECOGNITIONAL
                                          (shared knowledge)
```
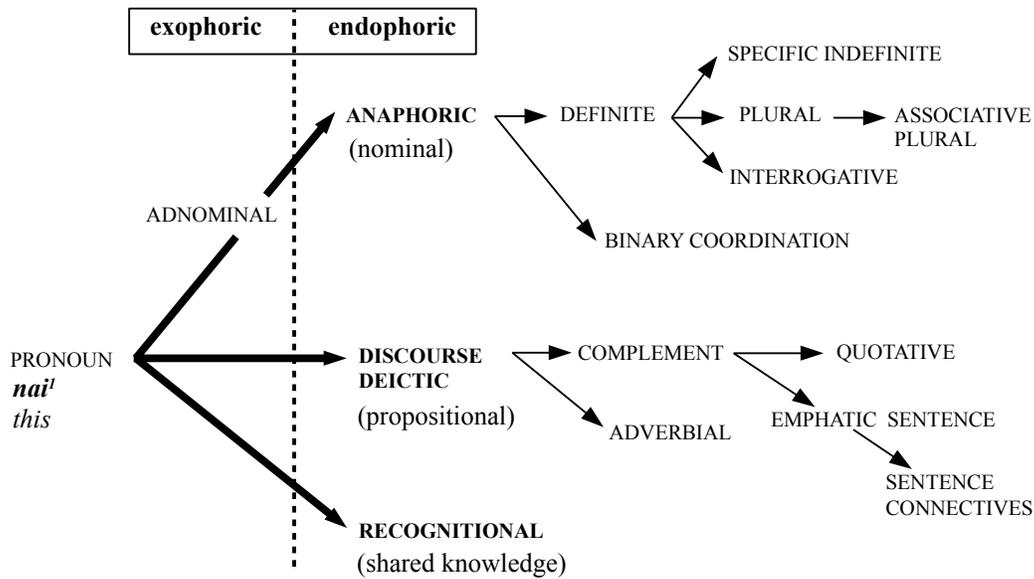
Figure 4.3. Semantic map for the grammaticalization extensions of *nai¹* 'this'
      (expanded from Diessel 1999: 113)

      The source morpheme *nai¹* is exophoric and expands to three well-documented endophoric functions in Khamti—an anaphoric usage, which refers to a nominal referent in the text, a discourse deictic usage, which refers to a propositional referent, and a recognitional usage, which references some aspect of shared knowledge.

      A *de re* usage shows *nai¹* functioning as an exophoric ADNOMINAL. This is an intermediate stage between the PRONOUN *nai¹* and the *de dicto* ANAPHORIC (adnominal). As an ANAPHORIC adnominal, *nai¹* is a conoun that modifies a co-occurring noun with a deictic reference to an object in the speech context. This endophoric usage makes *nai¹* coreference a previously-stated nominal in the discourse. Several functions result from this anaphoric source. With the DEFINITE construction, *nai¹* serves as a conoun that identifies the co-occurring noun as a referent previously mentioned in the discourse for the purpose of tracking that same referent in subsequent text. The DEFINITE construction is cognitively grounded by virtue of instantiating a noun type in reference to the speech-act participants and their external situation. Next, the DEFINITE construction seems to act as a source for several other constructions that pragmatically mark *specificity*, the SPECIFIC INDEFINITE

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construction and the SPECIFIC construction. The SPECIFIC INDEFINITE construction is likely an extension by virtue of being in a much more restricted syntactic context. The SPECIFIC INDEFINITE co-occurs with nouns that are also marked as indefinite, [CLF INDEF]. *Nai[1]* is the specific marker when collocating with a normal indefinite construction. In this construction, the indefinite component introduces a referent to the discourse, while the *nai[1]* component identifies the referent as an important participant in the unfolding text. Furthermore, the participant marked with *nai[1]* usually is one of counter-expectational significance in the story—an archetype such as a beggar or thief that has redeeming value in the story. Like the SPECIFIC INDEFINITE construction, the PLURAL construction also extends from the DEFINITE. In this case, the plural conoun serves to quantify the co-occurring noun. Finally, the PLURAL extends in function to a more restricted ASSOCIATIVE PLURAL construction. *Nai[1]* as an associative plural conoun signals any person or thing that accompanies the referent encoded by the co-occurring noun. I further suggest that the INTERROGATIVE construction stems from the DEFINITE construction. This is due to the fact the *nai[5]* grammaticalizes as a mark of the question word [Q] and also as a sentence-final particle that frames the entire INTERROGATIVE proposition.[68] Along with the anaphoric-definite grammaticalization pathway just described is the anaphoric-(nominal) BINARY COORDINATION pathway. In this grammaticalization chain, the anaphoric usage functions as a source construction for conjoining two nominals within a sentence.

In Figure 4.3, the DISCOURSE DEICTIC use of *nai[1]* is first seen as a direct extension from the pronominal use. The discourse deictic exhibits diaphora; that is, it can either back-reference a previous proposition or forward-reference a subsequent proposition.

The pathways that extend from the DISCOURSE DEICTIC include the COMPLEMENT and ADVERBIAL constructions, which both employ *nai[1]* as a grammatical marker extending from the usage of the discourse deictic. In the case of the COMPLEMENT construction, *nai[1]* becomes a complementizer that introduces clauses as nominal arguments of predicates. With a subset of ADVERBIAL

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68   I recognize that this proposed pathway to an interrogative construction does not necessarily reflect its complexity. In this construction there are nominal and propositional marking features.

constructions, *nai¹* marks the clause as dependent specifying that the SoA encoded by the clause is a modifier of a main SoA.

Nai¹ in a COMPLEMENT construction is hypothesized to extend to QUOTATIVE constructions. QUOTATIVES, like the COMPLEMENT construction, are clauses or sentences that figure as object arguments of complement predicates. The QUOTATIVE, however, is more contextually restricted to a subtype of complement predicates or speech-act predicates. Contextual restriction is indicative of grammaticalization processes and hence, the QUOTATIVE is seen as a further extension of COMPLEMENT constructions.

The Khamti EMPHATIC SENTENCE constructions—or a general FOCUS construction as described in the grammaticalization literature (see Section 4.8)—has been documented as an extension of demonstratives (Diessel 1999: 148)[69] and is a sentence that has *nai¹* as a final particle. The EMPHATIC construction is found in a novel syntactic position (sentence-final) and infers a degree of pragmatic emphasis over the entire sentence proposition in relation to the greater discourse context. The posited grammatical pathway is due to the fact that final particles can be considered highly grammatical and subjective or epistemic elements. Next, along this pathway that extends from a *forward-referencing* deictic—one that anticipates a subsequent element—are the SENTENCE CONNECTIVES. In this case, an initial sentence is used as a foundation to introduce a subsequent sentence.

A final endophoric usage that extends from the pronominal demonstrative *nai¹* is the recognitional usage. RECOGNITIONAL constructions do not refer to any previous or subsequent referent in the text, but rather to referents that are located in the shared knowledge space common to the speaker and hearer. This *mental space* provides the underlying assumption(s)—found in cultural domains or general knowledge of the world—that the speaker and hearer make in order to correctly interpret a *nai¹*-marked referent. The RECOGNITIONAL construction using *nai¹* points

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69 Diessel (1999: 78) actually describes focus markers as extending from what he calls *identificational demonstratives*, which are locational deictics that function as copulas. The Khamti locational deictic *mai²* 'here' also is seen as a similar type of focus marker (foregrounding objects), which I discuss in Sections 5.2 and 5.8. The focus marker *nai¹* discussed here develops from the discourse deictic vis-à-vis the complement construction and is not quite the same as that described in Diessel (1999: 148).

to a first-mention referent in the discourse that is neither in the *de re*, nor the *de dicto* context, but rather in the mental models of the speech-act participants.

The morpheme *nai[1]*, as described in this chapter, is depicted as a source for a wide variety of grammatical constructions. Diessel (1999) provides a solid foundation for the study of grammaticalization processes arising from demonstratives with his definition of demonstrative being a broad one that includes locational deictics (demonstrative adverbs), such as *here* and *there*. In the following chapter, I describe the Khamti spatial deictic, *mai[2]* 'here', expanding on the general framework set out by Diessel and thereby demonstrating the similarity that demonstrative pronouns share with demonstrative adverbs in grammaticalization processes.

Chapter Five

The locational deictic *mai²* 'here'

5.1 Introduction

The description of *mai²* in this chapter (along with the discussion surrounding the demonstrative pronoun *nai¹* in Chapter 4) shows that demonstratives—in a broad sense of the word—have taken an evolutionary path towards participation in an expansive set of constructions in the morphosyntax of Tai Khamti.

In Khamti, the locational deictic *mai²* is a basic lexical item with a high-frequency of occurrence due to its function as a conoun in many nominal constructions (see Section 1.2). The token frequency of *mai²* in my corpus of 90,100+ words is 8,701, making up 9.6% of the overall corpus. In an isolating language such as Khamti, this kind of frequency suggests a strong polysemous (polyfunctional) potential, where a basic lexical item takes on many other grammatical meanings and functions in the language. Moreover, *mai²* is basic in that its core meaning, 'here', forms a foundational speaker-oriented locational deictic that serves to verbally point out a physical *place* that is near the speaker. Its fundamental nature is evident in the more general fact that spatial deictics occur as semantic primitives which are used in building other, non-basic lexical and grammatical items (Wierzbicka 1996: 10). Spatial deictics universally express "demonstrative" concepts, that are found in every language (ibid.: 42). According to Tomasello (1998: 229, 1999; Tomasello et al. 2005: 280), spatial deictics also emerge as some of the earliest linguistic items acquired in language. This is because they are closely tied to shared intentionality (see Section 4.1), along with a particular pointing gesture.

In this chapter, I show the synchronic distribution of constructions surrounding *mai²* and suggest extensional pathways that semantically link them as a holistic diachronic phenomenon. The description of *mai²* supports the contention of this dissertation that Khamti, being an isolating language, has exploited basic lexical symbolic structures (morphemes) to establish much of the more complex symbolic assemblies (compound words and constructions) used for communication.

5.2 The basic lexical *mai²* 'here'

The Khamti locational *mai²* 'here' is part of a person-oriented deictic paradigm that exhibits a two-way contrast in relation to two possible deictic centers—proximal to the speaker (*mai²* 'here, near the speaker') and proximal to the hearer (*amaeu⁴-mai²* 'there, near hearer'). The speaker-based deictic *mai²* 'here', in (183), also shows up in the compound hearer-based deictic *amaeu⁴-mai²* 'there', shown in (184). *Mai²* can be analyzed as a "pointer" in which its basic and default value is 'near speaker' and its compounded value is literally, 'that here' or 'that place', with a general translation, 'there'.[70]

(183) **mai²**   *kaw¹*   *kin³khau²*   *nai²*   *uu⁵*
      here   also   dine   can   IMPF
      '(you) can also dine *here*'

(184) *meeu³*   *kaa⁵*   *paang⁵*   *nai¹*   **amaeu⁴-mai²**   *kaa⁵paang⁵*   *n-sii⁵*   *huang¹*   *uu⁵*
      when   go   graveyard   DEF   that-here   Kaapang   QT-thus   call   IMPF
      'When going to the graveyard...(we) thus call *there* (lit. 'that here/that place') "Kapang".'

The analysis of the deictic component, *mai²*, in the spatial paradigm is similar to the demonstrative *nai¹* in Chapter 4 in which the locational demonstrative, *mai²*, is a deictic root that is seen in both the speaker-oriented and hearer-oriented deictics. With the hearer-oriented compound, *a-maeu⁴-mai²*, the component *a-maeu⁴* is actually the pronominal demonstrative 'that' discussed in Chapter 4. Moreover, the word *a-maeu⁴* 'that' is itself a compound with a reduced *an³* 'thing' and *maeu⁴* '2SG' (see Section 4.2). In order to highlight the paradigmatic contrast between *mai²* and *amaeu⁴-mai²* I gloss *amaeu⁴* more generally as 'that-here'.

      The speaker-oriented locational *mai²* appears in three lexical contexts—as an ostensive morpheme (a verbal pointer), as a predicate, and as an adverb. The most basic use of *mai²* is what I am calling *ostensive*, which means that it verbally identifies a general spatial reference and can be uttered in isolation simultaneously with a physical pointing gesture. In its most basic form as an isolated, simple

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70   There is also a very rare locational deictic *pun²* 'over there away from speaker and hearer'. It occurs only once in the corpus. For all intents and purposes, the locational deictic paradigm works off a binary, rather than tertiary, distinction.

utterance, *mai*^{2} is clearly deictic, linguistically functioning as a pointer to a general location in reference to the speaker's location, as shown in the dialogue in (185), with Speakers A and B.

(185) A *ama^5-nai^5* *phmaau^{5}maeu^5* *nai^1*
      where-Q   groom   Q
      'Where is the groom?'

    B ***mai^2***
      here
      'here' (pointing with a finger)

The use of the one-word utterance, *mai^2* 'here', by Speaker B in (185), is nearly always accompanied by a physical gesture on the part of the speaker such as a pointed finger or a directed eye gaze. The dialogue in (185) occurred when interlocutors were both looking at a photograph of a wedding. Speaker A asked the question about the groom and Speaker B answered with *mai^2* while pointing to the groom in the picture with his finger. Ostensive *mai^2* in (185) establishes joint attention by both the speaker and addressee to a proximity conceptualized as near the speaker (Diessel 2006: 465). The pointed finger further delimits a more specified location or object.

      Basic ostensive *mai^2* also has a *predicative* usage, meaning that it is used as a verbal construction that requires aspectual marking, usually in the absence of a physical gesture. This is demonstrated in the dialogue in (186), which illustrates a telephone exchange with no visual reinforcement of physical gesture. Speaker A is planning to meet Speaker B at a school where Speaker B works. Speaker A is late in arriving and is not sure if Speaker B has yet arrived at the school and so asks the question in (186 A). It would be ungrammatical for Speaker B to answer solely with the ostensive *mai^2*, as shown in B'. Instead, Speaker B must reply using an aspectual marker, making his use of *mai^2* predicative with a meaning approximately 'already here'.

(186) A *ngai^5* *maeu^4* *amai^5-nai^5*
      now   2SG   where-Q
      'where are you now?'

B ***mai²*** *yau¹*
   here   PERF
   '(I'm) already here'

B' *mai²

Basic ostensive *mai²* also has an *adverbial* usage, identifying a space near the speaker, which is the locus of an event. The deictic, like other locative expressions, most commonly surfaces sentence-initially, as shown in (187).

(187) ***mai²*** *pying⁴* *nai¹* *mau⁵yaan⁵mau⁵yaan⁵* *maa⁴* *uu⁵*
       here   woman DEF   often   come   IMPF
       'the woman often comes here'

In (187), the motion verb *maa⁴* 'come' expresses movement towards a goal. The goal is a general location specified by *mai²* and anchored by the speaker's location. It just happens to also be the endpoint of the motion taken by *pying⁴* 'woman'.

5.3 *Mai²* as conoun in spatio-temporal constructions [LOC] [ALL] [ABL] [TMP]

In Section 5.2, I described lexical *mai²* as a linguistic pointer to a spatial location that gets its reference by virtue of the speaker's location. In this section, *mai²* shows up as a conoun that grammatically marks its co-occurring noun as various types of propositionally anchored locations. In this way, lexical *mai²* is a *de re* usage that incorporates the speech ground, specifically the speaker, as part of its overall meaning. When *mai²* is used in nominal constructions, it shifts to a *de dicto* usage in which it points to a head noun, rather than to the speaker.

Mai² encodes the topological locations of coincidence (*on* and *at*), which expresses near or complete overlap between a figure (a located object) and its ground (a reference object). *Mai²* also encodes topological interiority (*in*), which marks inclusion or containment of a located object within some ground (Frawley 1992: 254-258). In Khamti, these three spatial configurations are expressed by a noun-conoun pairing in which the conoun *mai²* encodes a reference noun as a spatial location, as seen in (188) with with *kat⁵* 'market', in (189) with *khuun⁴taang⁴* 'road', and in (190) with *suang⁵* 'basket'.[71] The particular topological relation—contiguity with a 0-, 1-,

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71 A third topological relationship of exteriority requires the spatial conoun *mai²* along with a preposition *luk¹* 'from/of'. I discuss prepositional constructions later.

2-, 3- dimensional ground (as translated by *at*, *on*, or *in* in English)—depends on the physical properties of the ground. Furthermore, the juxtaposed noun-conoun pairing, [NOUN][*mai²*], forms a single nominal, making the conoun a marker of its head noun and hence, shown with its own conoun brackets.

(188) [*kat⁵*]   [***mai²***] *pying⁴*   *nai¹*   *yang⁴*   *yau¹*
       market   LOC   woman   DEF   be   PERF
       'the woman was *at* the market'

(189) *huee²phan⁴ kam³phaung⁴ yaa¹* [*khuun⁵taang⁴*] [***mai²***] *tuk⁵*   *kaa⁵*   *yau¹*
       seeds   some   TOP road   LOC   fall   AND   PERF
       'some seeds fell *on* the road'

(190) [*suang³ keeu³ man⁴*] [***mai²***] *khiit⁵*   *too³*   *leeung³ khau²*   *sii⁵*   *yuan³*   *uu⁵*
       basket salt   3SG   LOC   frog   CLF   INDEF   enter   CONJ   hide   IMPF
       'a frog entered *in* his salt basket and hid'

The typological marking function of *mai²* , as observed in (188)-(190), is semantically vague compared to its translation equivalents in English, *at*, *on*, and *in*. Cross-linguistically, it is not uncommon for static locative readings, such as these, to be associated with a single locative adposition, often glossed schematically as LOC. Indonesian, for example, has a location marker, *di*, that when followed by a noun, *rumah* 'house', is semantically vague for 'on the house', 'at the house', or 'in the house' (MacDonald 1976: 112-4). It requires extra semantic input from the rest of the proposition to sort out the specific topological relations intended.

Additionally, the Khamti LOC conoun is vague in the context of marking the goal of motion verbs, translated as the English allative 'to'. Rice and Kabata (2007) have described the typologically common pattern of LOC/ALL syncretism cross-linguistically. I gloss the allative usage of *mai²* in Khamti as [ALL], as shown in (191) and (192). When the conoun *mai²* appears as a marker of location, it carries no deictic reference to the speaker, as with its basic lexical meaning. This lack of deictic reference is most noticeable when comparing the motion verbs *maa⁴* 'come' in (191) and *kaa⁵* 'go' in (192).

(191) [*kat⁵*]   [***mai²***] *pying⁴*   *nai¹*   *maa⁴*   *yau¹*
       market   ALL   woman   DEF   come   PERF
       'the woman came to the market'

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(192) [*kat⁵*] [**mai²**] *pying⁴ nai¹ kaa⁵ yau¹*
       market ALL   woman DEF   go   PERF
       'the woman went to the market'

Both motion verbs convey a deictic movement of the clausal subject in reference to the speaker—*maa⁴* expresses movement toward the speaker, while *kaa⁵* indicates movement away from the speaker. However, *mai²* marks the noun *kat⁵* 'market' in (191) and (192) as a locative goal of the motion expressed by each verb. It is not clear in (191), though, that *mai²* has an actual allative reading, because the meaning could be something like 'the woman came to the market here (where I am)'. Both the deictic use of *mai²* and the deictic motion of the verb towards the speaker are semantically commensurate. However, in (192) with *kaa⁵* expressing motion *away from* the speaker, it is clear that *mai²* is not deictic, because *mai²* is signaling a location that is moving in opposite direction to the deictic center. The meaning could not be 'the woman went to the market here (where I am)'. The meaning of 'go' is inarguably equivalent to motion away from the speaker, while the meaning of deictic *mai²* is always near the speaker. *Mai²* as a conoun makes no reference to the speaker at all, only to more local (i.e. clause-internal) relationships.

It is not a coincidence that both deictic and (grammaticalized) conoun *mai²* are involved in locative expressions. These two different functions of *mai²* quite convincingly trace a grammaticalization pathway from a locative deictic 'here' to a grammatical LOC conoun that is signaled by both a syntactic and a semantic change. Syntactically, *mai²* moves from a sentence-initial position to a post-nominal position. Semantically, *mai²* generalizes to a location that no longer references the speech context vis-à-vis the speaker.

As a noun-conoun configuration that expresses a topologically vague location, conoun *mai²* also occurs with prepositions to express more fine-grained spatial meanings. This can be seen with the ablative construction which must use the preposition *luk¹* 'from', as shown in (193). The ablative reading of *mai²* 'ABL' arises in conjunction with the spatial meaning associated with *luk¹* 'from'.

(193) [**luk¹** *nuai⁴*   *nai¹*] [*mai²*] *nam¹nyue²khee⁴ leeung³ lai⁵   uu⁵*
       from   mountain DEF   ABL   stream   INDEF   flow   IMPF
       'a stream flows from the mountain'

The examples in (194) and (195) show two other spatial prepositions, *him⁴* 'beside' and *kan²naeu⁴* 'inside'. I gloss *mai²* in these examples as LOC because the semantically specific meanings ensuing from the spatial relationship with the respective prepositions are more static than the ablative in (193).

(194) [***him⁴*** *man⁴*] [*mai²*] *phai⁴* *pau⁵* *haeu²* *uu⁵*
      beside 3SG LOC fire light APPL IMPF
      '(he) lights a fire beside her for (her)'

(195) *man⁴* *mai²* *lwin⁵* [***kan²naeu⁴*** *maan²*] [*mai²*] *han⁵* *puak¹* *yau¹*
      3SG F.OBJ Lwin inside village LOC see again PERF
      'Lwin saw him again inside the village'

Many languages, besides Khamti, use an all-purpose LOC marker in tandem with a spatial adposition to specify more semantically fine-grained relationships. Frawley (1992: 257) cites Indonesian and Manam as examples and Svorou (1993: 66-67) cites examples from Car, Halia, Basque, and Bari.

      The *mai²* marker is also in play in identifying nouns as temporal locations. This is not surprising given that the two basic experiential domains of space and time have long been recognized to interact by way of conceptual metaphorical processes (Lakoff and Johnson 1980). Moreover, Rice (1992: 90-91) finds a temporal function of English spatial prepositions, *at*, *on*, and *in* as representing various-sized episodes situating an event relative to a *brief point*, *short period*, or *vast expanse* of time. Because *mai²* is vague in marking topological location, it is of no surprise that it also is vague in marking certain time meanings, such as those outlined by Rice and shown in (196)-(198) for Khamti. The English translation 'at' in (196) expresses a point-like instance in time, whereas, in (197) 'on' expresses a short-period time reference, in regards to the situation *heeun⁴ psaau⁵ mai² kaa⁵* 'go to the girl's house' which occurs at some general point in time within the time boundaries of an entire day. Then, in (198) with the English meaning 'in', the situation of *phaai⁵nam¹ naa⁴ hiit⁵* 'make field water gates' endures for a vast-expanse time period that lasts from the beginning to the end of a given time span.[72]

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72 Haspelmath also describes this vast-expanse or duration reading as *telic extent* (Haspelmath 1997a: 130).

(196) [*phaai⁴kaang⁴wan⁴   saam⁵   naa⁵lii⁵*] [***mai²***]   *man⁴   tsaeu²   yaa¹* "..."
      midday   three   o'clock   TMP   3SG   POL   TOP   "..."
      'midday, *at* three o'clock, he (royal) said, "..." '

(197) [*wan⁴   an³   tii⁵   au³   saau⁵*] [***mai²***]   *heeun⁴   psaau⁵   mai²   kaa⁵   ngai⁴sii⁵*
      day   REL   IRR   take   bride   TMP   house   girl   ALL   go   and.then
      '*on* the day when (he) will take (his) bride, (he) goes to the girl's house, and then'

(198) [*yau¹kii⁴   neeun³haa⁵*] [***mai²***]   *phaai⁵nam¹   naa⁴   hiit⁵   uu⁵*
      after.this   April   TMP   water.gate   field   make   IMPF
      'after this, *in* April, make (the) field water gates'

Given that Khamti *mai²* subsumes all three spatial notions signaled by *at, on*, and *in* in English, temporal inferences of these spatial notions—instantaneousness, generality, and duration—should be expected, because spatio-temporal conceptual metaphor is commonplace as evidenced in many studies (Givón 1979: 217; Heine et al. 1991; Rice 1992, 1993, 1996; Haspelmath 1997a; Kabata 2000; Heine and Kuteva 2002: 41, 205; Rice and Kabata 2007).

Once a grammaticalization extension has been made from locational deictic to that of a general locative meaning (LOC or ALL), many well-attested grammaticalization pathways come into play. Khamti *mai²* is no exception.[73] Moreover, languages overwhelmingly utilize their most general spatial marker in temporal nominals to mark the reference time simultaneously with the located situation (Haspelmath 1997a: 102). In sum, just as *mai²* is an all-purpose LOC conoun, it also serves as an all-purpose TMP conoun vis-à-vis conceptual mapping from space to time.

5.4 *Mai²* as conoun in a predicative possessive construction [POSS]

In Section 5.3, I described *mai²* as conoun that marks its noun as either a locative or temporal noun. In this section, I analyze *mai²* as a conoun that specifies a noun as the possessor in a predicative possessor construction. Examples are shown in (199), with an animate possessor expressed by the third-singular pronoun *man⁴,* and in (200), with an inanimate possessor, *maan²* 'village'. The possessor is marked with the *mai²* conoun.

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73 For a typological overview of the extensive grammaticalization pathways stemming from a basic locative (i.e. an ALLATIVE), see Rice and Kabata (2007).

(199) [*man⁴*] [***mai²***] *luk¹* *saam⁵* *koo¹* *yang⁴* *uu⁵*
     3SG   POSS   child three CLF be   IMPF
     lit. 'three children are *at* him'
     'he has three children'

(200) [*maan²* *amaeu⁴nai¹*] [***mai²***] *an³yap⁵* *aan⁵taan⁵* *yang⁴* *uu⁵*
     village that   POSS   problem many   be   IMPF
     lit. 'many problems are *at* that village'
     'that village has many problems'

The predicative possessive construction patterns as a locative construction with the verb *yang⁴* 'be', as conveyed in the literal translations. The conoun *mai²* marks its head noun as a possessor in the nominal grouping, [NOUN][*mai²*], while the clausal subject is the possessee. The possessor-possessee relationship patterns in similar fashion to the location nominal-subject relationship of locative constructions—as described in (188)-(190) above—in that the *mai²*-marked nominal is the ground from which the possessee subject is realized as possessed.

    The use of locative constructions as a basis from which to express possession is quite common across languages (Clark 1978; Heine 1997a, Lichtenberk 2002; Heine and Kuteva 2002: 204-5; Dryer 2007a: 244; Rice and Kabata 2007; Langacker 2009: 98). In moving conceptually from location to possession, an inference occurs that takes a reference location signaled by *mai²* in the locative construction and re-characterizes it as a possessor nominal. A reference location exhibits a *search domain* that is analogous to a reference possessor that exhibits a conceived "region of possession" (Langacker 1993: 12; also Hawkins 1984). The search domain of the locative conception corresponds to the possessive region of the possessive conception and are both signaled by *mai²*. A clausal subject in a locative clause, which encodes an existing entity, is conceptually reconfigured as a possessee. By virtue of existing within the possessive region of a reference possessor, an entity encoded as the clausal subject is schematized to be possessed by that reference point (Langacker 2009: 100). The inference described here does not necessarily mean that any particular speaker is cognizant of the conceptual metaphor involved, but rather that this was a process, common to many languages, that occurred over generations of speakers and throughout an entire speech population. I discuss the conceptual basis of locatives and possessives in more detail when analyzing both constructions as instances of a

cognitive reference-point schema in Section 6.3.1.

5.5 *Mai²* as conoun in ditransitive constructions [REC] [ADD] [BEN]

In Section 5.3, I described *mai²* as a locative conoun that signals a reference noun, which is either the location in an intransitive LOCATIVE construction or the goal in an ALLATIVE construction. In Section 5.4, I demonstrated further that *mai²* surfaces as a conoun that marks a reference noun as a possessor in a POSSESSIVE construction. In this section, I describe *mai²* as a conoun that marks the semantic GOAL in ditransitive constructions with verbs of transfer.

In ditransitive constructions with verbs of transfer, *mai²* is a conoun that specifies its co-occurring noun as a general GOAL. The GOAL, which is semantically vague in these constructions, can have several readings—RECIPIENT, ADDRESSEE, and BENEFICIARY. With these double object constructions in Khamti, both the goal and patient/theme occur before the verb and the goal is always marked with *mai²*. The patient/theme in *ditransitive* constructions is never marked.[74] In contrast, the patient/theme is sometimes marked with *mai²* in single object *monotransitive* constructions. I address the marking in monotransitive constructions later in Section 5.8. In this section, I demonstrate the RECIPIENT, ADDRESSEE, and BENEFICIARY constructions.

The RECIPIENT construction concerns the general goal observed as a more specific recipient, as shown in (201) below. The conoun *mai²* specifies the recipient, *Lydia*. The double object grouping of this ditransitive clause involves two clausal objects that form a close-knit relationship—the recipient noun-conoun pairing, *Lydia mai²*, along with the patient (unmarked second object), *paa³* 'fish'. The relationship between the two objects highlights the recipient as a conceptual ground for the more foregrounded patient which moves in relation to the ground (the patient is the item transferred to the recipient). The RECIPIENT construction is akin to the ALLATIVE construction, discussed earlier, with the goal as ground for the foregrounded mover. The affinity between the ALLATIVE and RECIPIENT constructions will become more

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74 Stephen Morey, who has studied the Khamti in Northeast India, has one example in a text where both the goal and patient receive a *mai²* marker (2006: 335, also in personal communication). This is extremely rare and I have not found any examples to this effect in my corpus of Burmese Khamti (Khamti Shan).

apparent when they are analyzed as reference-point constructions in Section 6.3.2.

(201)   *kau⁵* [*Lydia*] [***mai²***] *paa³* *haeu²* *yau¹*
        1SG   Lydia   REC   fish   give   PERF
        'I gave the fish to Lydia'

The ADDRESSEE construction is shown in (202) with the addressee, *mee⁵tsau²heeun⁴ kau³* 'my wife', encoded as a noun-conoun pairing with *mai²*. With this ditransitive construction, the second (unmarked) object is the theme, *pung⁵pseu⁵ nai¹* 'the witch story'. The noun-conoun clausal object (the *mai²*-marked object) conveys the conceptual ground from which the theme is figured. It is a witch story that is being told in relation to the one hearing the story. The transfer of the story is towards the addressee as indicated with the applicative coverb, *haeu²*.

(202) [*mee⁵tsau²heeun⁴ kau³*] [***mai²***] *pung⁵* *pseu⁵* *nai¹* *kau³* *khai³* *haeu²* *yau¹*
        wife   1SG   ADD   story   witch DEF 1SG   tell   APPL   PERF
        'I told the witch story to my wife'

The BENEFICIARY construction in (203) involves the beneficiary *man⁴* '3SG' as the noun that co-occurs with *mai²* and is thus understood as a beneficiary. Similar to the RECIPIENT and ADDRESSEE ditransitive constructions, the BENEFICIARY construction concerns a double object grouping with the noun-conoun beneficiary, *man⁴ mai²* 'him', along with a second clausal object, *taang⁴ptuu⁵* 'gate', which is opened on behalf of the beneficiary. Likewise, the beneficiary of the benefit is signaled by coverb *haeu²*.

(203) [*man⁴*] [***mai²***] *yaa¹* *phuu²paeu¹* *taang⁴ptuu³* *nai¹* *taang⁴ptuu³* *puut⁵* *haeu²* *uu⁵*
        3SG   BEN   TOP   guard   gate   DEF   gate   open   APPL   IMPF
        'the gate guard opened the gate for him'

In all *mai²*-based ditransitive constructions, the GOAL follows the nominal template, [NOUN][*mai²*]. While the recipient [REC], addressee [ADD], and beneficiary [BEN] roles are semantically vague in being marked with a single conoun, *mai²*, the semantic distinctions are helpful in hypothesizing *mai²* as a gram (and construction) that evolves in the language according to well-trodden typological pathways.

     An ALLATIVE construction has been well-described in the grammaticalization

literature as a source for all sorts of "cohort senses" or collapsed senses (Rice and Kabata 2007: 452). For Khamti, the extension from ALLATIVE to RECIPIENT is an important one because it represents an association of a spatial goal or endpoint to that of a person-based GOAL or endpoint. A person-based endpoint is most readily recognized with the RECIPIENT construction, which uses *haeu²* 'give' as the basic transfer verb—rather than as an applicative coverb—and represents the more prototypical human endpoint of a physical transfer. For example, Rice and Kabata's study of 44 languages and 54 ALLATIVE markers reveals that RECIPIENT syncretism registered 34%, while ADDRESSEE was 25%, and BENEFICIARY 17% (ibid.: 480-481). In the RECIPIENT construction, a person is the endpoint of an action of transfer, which makes a reasonable source for other person-based endpoints that do not necessarily involve a physical transfer of a secondary object. The Khamti ADDRESSEE and BENEFICIARY constructions (as well as the CAUSEE construction described later in Section 5.6) are considered extensions of the RECIPIENT construction because the transfer does not involve spatial movement. The typological study of Rice and Kabata further suggests that a single marker of BENEFICIARY and ADDRESSEE would entail the marking of RECIPIENT, as well. The association of these extensions is further established in Khamti by utilizing the applicative coverb *haeu²* for each construction, which can be viewed as a new stage in its grammaticalization. It can be seen in (201)-(203) above that the transfer verb *haeu²* 'give' in (201) appears as a grammaticalized applicative coverb in (202) and (203). The central verb of transfer, *haeu²* 'give', becomes the coverb APPLICATIVE marker in the other ditransitive constructions.

In the grammaticalization account to this point, I have first described a source deictic *mai²* 'here' that indicates a reference location with respect to the speaker that is located in the speech situation. This external reference location in the real world, *de re*, is diachronically inferred (in LOCATIVE constructions) as a spatial location for clausal referents in the textual world, *de dicto*. This inference from deictic 'here' to LOC is a critical one, because from LOC, *mai²* develops into a single marker for extensive syncretism in a way that is well-documented for many languages (Rice and Kabata 2007). From LOCATIVE, *mai²* extends to mark TEMPORAL locations and based on a different inference altogether, as a POSSESSOR. Continuing within the spatial

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domain, LOCATIVE extends to marking the many all-purpose GOALs associated with the ALLATIVE constructions that involve motion verbs. Naturally from there, the marking of more semantically specified goals—REC, ADD, and BEN—in ditransitive clauses seems rather straightforward and reasonable, as described in this section.

ALLATIVES are known to be grammatical sources that extend to GOAL (dative) arguments in the clause (Heine 1990, 1997b; Genetti 1991; Heine and Kuteva 2002: 37-38; Rice and Kabata 2007). Furthermore, Blansitt (1988: 177), in a hypothesis that anticipated today's semantic maps, identifies a four-way functional syncretism that a single marker can exhibit in many languages by positing what he calls the *Functional Contiguity Hypothesis*, as shown in (204).

(204)   OBJECT ≡ DATIVE ≡ ALLATIVE ≡ LOCATIVE

This hypothesis states that if the functions OBJECT, DATIVE, ALLATIVE, and LOCATIVE share a single overt marker, they are functionally contiguous in the order shown. For example, if a single morpheme marks DATIVE and LOCATIVE, it will also mark ALLATIVE. If it marks OBJECT and LOCATIVE, then it also marks DATIVE and ALLATIVE. This hypothesis makes sense from a grammaticalization perspective, if the functions trace the evolutionary path from LOCATIVE to ALLATIVE to DATIVE to OBJECT. In this case, any function located to the left on the grammatical cline entails previous functions to its right, in its diachronic development. In other words, the developmental pathway of a syncretistic marker is also hypothesized to move from LOCATIVE to ALLATIVE to DATIVE to OBJECT. My analysis of the Khamti ditransitive *mai²* construction strongly suggests that the evolution of *mai²* as a conoun indeed follows this pathway, starting with the marking of a LOCATIVE and moving leftward, in (204), to marking an ALLATIVE and a variety of GOALs (datives). So far, the Khamti analysis of conoun *mai²* lends additional typological evidence to Blansitt's hypothesis (and the proposed grammaticalization chain), up to OBJECT marking. Indeed, in Section 5.8, I also argue for the conoun *mai²* extending as a marker of an (foregrounded) OBJECT. Before analyzing *mai²* as a marker for an object, I describe a CAUSATIVE construction in which the conoun *mai²* is a marker of the CAUSEE.

5.6 *Mai²* as conoun in a causative construction [CAUS]

The conoun *mai²* also signals the causal undergoer or CAUSEE in a causative construction. For Khamti, there are two causative constructions, one using the grammaticalized verb *au³* 'take' with the general meaning 'to cause' (Heine and Kuteva 2002: 286) and the other using the grammaticalized verb *haeu²* 'give' with the general meaning 'to let' (Newman 1996, 1997; Heine and Kuteva 2002: 152). The conoun *mai²* identifies its co-occurring noun as the CAUSEE in both constructions.

Generally, causatives involve two related events, the cause and the effect, and languages encode cause and effect in two basic ways—periphrastically and non-periphrastically (Dixon and Aikhenvald 2000: 35; Song 2011). For periphrastic causatives, the first clause has a subject and a main verb that express a causer in a causing event. The second clause has a different subject and a causative verb that together express a causal undergoer that either carries out a resulting action or experiences a change of state. Khamti only has non-periphrastic causatives in which the causer's action and the causee's effect are reflected inside the same clause. Furthermore, non-periphrastic causatives are of two types—having either a causative morpheme affix on the verb such as Japanese (Kabata 2000: 119; Rice and Kabata 2007: 456; Song 2011) or a serial verb compound made up of a main verb and a causative coverb such as Manam (Lichtenberk 1983: 447) and Tuvaluan (Besnier 2000: 325). I analyze the Khamti causative constructions with *au³* 'take' and *haeu²* 'give' SERVING as preverbal causal coverbs.

In (205), moreover, the head noun, *nam⁵khiang⁴* 'ice', is the CAUSEE, being marked as such by the conoun, *mai²*, which follows the standard template [NOUN] [*mai²*].

(205)   *au³*   *hin³*   *luk¹*   *leeung³*   [***nam¹khiang²***]   [***mai²***]   *au³*   *tiat¹*   *uu⁵*
       with   stone   CLF   INDF   ice   CAUS   cause   crack   IMPF
       '(someone) causes the ice to crack with a stone'

The example in (205) shows causal *au³* with an action verb, *tiak¹* 'crack', that acts upon the CAUSEE, *nam¹khiang²* 'ice', while in (206), the causal event is expressed by a serial verb comprised of the causal coverb, *au³*, and a predicate adjective, *mut⁵saa⁵*

'cause to be clean'. The CAUSEE , *khau³* '3PL', is marked as such by the conoun, *mai²*. In (206), however, the CAUSEE is *animate* and therefore takes the applicative coverb, *haeu⁴*.

(206) [**khau⁵**] [**mai²**] *au³* *mut⁵saa⁵* *haeu²* *maa⁴* *ta¹*
    3PL CAUS cause be.clean APPL VENT OPT
    '(you) cause them to become clean'

The examples in (205) and (206) show the causative coverb, *au³*, an action verb, *tiat¹* 'cause to crack', and a predicate adjective, *mut⁵saa⁵ maa⁴* 'cause to become clean'. The next example, in (207), shows the causative coverb, *au³*, along with a motion verb, *au³ luung⁴* 'cause to descend', which expresses an action to be carried out by the CAUSEE, *kau³* '1SG'. The animate CAUSEE in (207) calls for the applicative coverb, *haeu²*.

(207) *phuu²* *an³* [**kau³**] [**mai²**] *au³* *luung⁴* *nam¹* *haeu²* *inn³* *yang⁴*
    one REL 1SG CAUS cause descend water APPL NEG be
    'there is no one who causes me to go down to the water'

When the coverb, *haeu²*, is positioned after the main verb, it functions as a grammatical applicative marker. However, when *haeu²* comes before the main verb, it contributes a causal meaning to the main verb, as shown in (208) with the meaning 'have/let someone do something'. In (208a), the CAUSEE, *phaeu⁵* 'anyone' (lit. 'who'), is marked with the conoun, *mai²*, but in (208b), the CAUSEE, *lkhaa⁵ nai¹-khau⁵* 'the children', is not so marked. The let-causatives, therefore, feature a CAUSEE that is optionally marked with *mai²*.

(208) a. *nai¹nkaw¹* [**phaeu⁵**] [**mai²**] *kaw¹* *pii⁵* *haeu²* *tuang⁴*
      but who CAUS also do.not let know
      'but also do not let anyone know'

     b. *lkhaa⁵* *nai¹-khau⁵* *haeu²* *maa⁴* *kuat⁵*
      child DEF-PL let come OPT
      'let the children come'

Both causatives (based on *au³* 'take' and *haeu²* 'give', in Khamti) are used in causative serial verb constructions. The typical word order in these constructions is S (causer), O (causee), and V (causal event). This word order follows what Frawley

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(1991: 162) describes as a general cognitive figure/ground organization. The CAUSEE is encoded as a cognitive ground, within which a cognitive figure, the CAUSER, initiates a causal "movement" or chain.

As a final point, the applicative coverb, *haeu²*, which signals for an animate CAUSEE, seems to correlate with the ADDRESSEE and BENEFICIARY constructions, which use the applicative *haeu²* to signal human endpoints (metaphorical goals). As discussed in Section 5.5, constructions that infer human endpoints can readily extend from the ALLATIVE construction that involves a spatial goal. Therefore, I consider the CAUSEE construction to prototypically encode human or animate causees and so the construction primarily extends from the reading of *mai²* that is evident in the ALLATIVE and RECIPIENT-based constructions. To have a CAUSEE marked in similar fashion to an ADDRESSEE or BENEFICIARY, by virtue of metaphorical inference, is not unusual. Sally Rice (2005) discusses locationals (specifically, directionals) as markers for causality. Rice makes the crucial point—significant for the overall analysis in this dissertation—that there is a widespread human tendency to recruit language of motion for non-motional purposes. The main contribution to the grammaticalization literature stemming from this section is that Khamti seems to encode the CAUSEE based on an ALLATIVE / RECIPIENT source.

5.7 *Mai²* as conoun in a comparative construction [STD]

Mai² also participates in comparative constructions in Khamti. A comparative construction has three basic entities, a referent which is a STANDARD OF COMPARISON, or STANDARD, a referent which is a COMPAREE (that which is being compared), and a criterion of comparison that may or may not include an index marker (*more* for English and *saa⁵* for Khamti). The two referents are compared in reference to a given parameter or property (Dixon 2010a: 177). Languages employ a variety of marking strategies for comparative constructions. Some languages like English primarily use word order to mark the COMPAREE and STANDARD: *That house is bigger than that house*; *I am bigger than you*. Some languages like Uzbek (Sjoberg 1963: 142), Mudari (Hoffmann 1903: 110), and Estonian (Oinas 1966: 140) use ablative 'from' to mark the standard. Other languages use locative 'on' and 'at', as in Naga (Stassen

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1985: 147) and Hungarian (Heine 1997b: 114), respectively. Even other languages use a DATIVE such as Maasai (Tucker and Mpaayei 1955: 93), Siuslaw (Frachtenberg 1922: 555), and Easter Island (Chapin 1978: 147). In Khamti, the comparative construction uses *mai²* 'STD' as a conoun to mark its head noun as a standard of comparison. The COMPAREE is a bare subject noun and the property of comparison is usually expressed by a predicate adjective immediately followed by a comparative coverb *saa⁵* 'more than'.

In (209), the COMPAREE, *paa³sa²njee¹* 'eel', is correlated with the STANDARD, *kuun⁴* 'person', in regards to a property expressed by the predicate adjective *hiang⁴* 'be.strong'. In (210), *an³* 'something' is compared to *tsuang⁴pik¹maan⁵* 'temple' with the property encoded as *yaeu⁵* 'be.important'. The noun expressing the standard associates with its *mai²* conoun comparative marker, [NOUN][*mai²*].

(209) *paa³sa²njee¹*   *seung⁵* [***kuun⁴***] [***mai²***] *hiang⁴* *saa⁴* *kii⁴* *yaa¹* *kuun⁴* *mai²*
       eel EMPH person STD be.strong more.than if TOP person F.OBJ

       paa³sa²njee¹ *kin³* *uu⁵*
       eel eat IMPF

       'if an eel is stronger than a *person*, the eel eats the person'

(210) *mai²* *yaa¹* *an³* [***tsuang⁴pik¹maan⁵***] [***mai²***] *yaeu⁵* *saa⁵*
       here TOP something temple STD be.important more.than

       nai¹ *yang⁴* *uu⁵*
       FOC be IMPF

       'as for right here, there is something more important than the *temple*'

In the summary section below, I will postulate that the COMPARATIVE construction, exemplified in (209) and (210), grammaticalizes from a LOCATIVE use of *mai²*, because the construction does not necessarily involve a motion verb, as the ALLATIVE construction does. Furthermore, the primary pathway leading from the ALLATIVE includes constructions that take *haeu²* 'give' as either a main verb (RECIPIENT) or as an applicative coverb (BENEFICIARY, ADDRESSEE, and CAUSEE). The COMPARATIVE does not take this applicative coverb. I suggest that a grammaticalization pathway for Khamti leads from LOCATIVE to COMPARATIVE, as observed across many languages in which a static spatial configuration serves as a conceptual template for non-spatial comparative markers (Stassen 1985; Heine

1997b: 114-115; Heine and Kuteva 2002: 201; see also Rice 2005 for a rather significant variety of locatives that become comparative markers).

5.8 *Mai²* as a conoun in a foregrounded object construction [F.OBJ]

Earlier, in Section 5.5, the discussion surrounded the *ditransitive* construction that involves two clausal objects, the *mai²*-marked goal and the unmarked secondary patient/theme. More specifically, with certain ditransitive constructions, *mai²* was observed as signaling the goal as a RECIPIENT, ADDRESSEE, and BENEFICIARY. In these double-object constructions, the secondary clausal object (patient/theme) is never marked with *mai²*. However, in *monotransitive* constructions, carrying a single clausal object (patient/theme), the object is marked with *mai²* in some circumstances which take into consideration a specific semantic/pragmatic context. I discuss the conoun *mai²* as a marker of a FOREGROUNDED OBJECT [F.OBJ] in this section.

In regards to the clausal object of monotransitives, Tai Khamti exhibits three patterns, [O-*mai²* V], [OV], and [VO]. I propose that the differences between these patterns are due to subjective differences in *perspective* from the viewpoint of the speaker. Perspective, according to Mel'čuk (2001), concerns the degree of importance that a speaker places on a chunk of meaning within the sentence. The semantic-communicative (i.e. information structure) category of perspective can assign one of three values to a portion of a sentence—*foregrounded*, *neutral*, or *backgrounded*. With these three object options, the Khamti speaker can choose a portion of meaning that is of *special importance* for communication, that is of *no particular importance* (i.e. neutral), to that of *reduced* importance. In this way, for the linguistic encoding of perspective in the Tai Khamti sentence, the speaker can decide to mark certain meanings as accentuated or downplayed in her communication. I propose that [O-*mai²* V], [OV], and [VO] represent the three values of the category PERSPECTIVE—foregrounded, neutral, and backgrounded, respectively, and follow the *referent prominence hierarchy* in (211).

(211) SPECIAL IMPORTANCE > NEUTRAL IMPORTANCE > REDUCED IMPORTANCE

This kind of analysis, which posits a pragmatically-based hierarchy, is in line with

other researchers of the Tibeto-Burman linguistic area who have noticed that factors such as topicality, specificity, and so forth, might well be at play in regard to a flexible word order and variable object marking (Diller 1992: 21; Morey 2006: 339; Dryer 2007b, Dalrymple and Nikolaeva 2011: 14).

The first monotransitive pattern, *foregrounded* [O-*mai²* V], can be seen in (212) with a clausal object, *phmaau⁵* 'boy', positioned before the verb and taking the conoun *mai²* 'F.OBJ'. The construction shows the head noun, *phmaau⁵*, juxtaposed with its conoun, which marks it as a foregrounded object.

(212) *nguu⁵* [*phmaau⁵*] ***mai²***] *kat⁵* *yau¹*
      snake   boy   F.OBJ bite PERF
      'a snake bit the boy'

A foregrounded object serves to bring the referent of the object into psychological prominence for the speaker and hearer. Psychological prominence means it has, from the speaker's viewpoint, *special importance* in the communication; a term from Mel'čuk (2001: 199).

The Khamti FOREGROUNDED OBJECT analysis is comparable to what we see in Genetti (1997) for the Tibeto-Burman language Dolakha Newari. However, the semantic/pragmatic hierarchies posited as object-marking motivations in Genetti's analysis does not hold in Khamti.[75] For example, Dolakha Newari marks all goal arguments of ditransitives with a dative case marker, *-ta*, leaving the direct object unmarked, but in monotransitives only some direct objects are marked with *-ta*. Genetti posits three distinct hierarchies to account for the distribution of the clausal object in Dolakha Newari (1997: 60):

(213) a. RECIPIENT > PATIENT
       b. HUMAN > ANIMATE > INANIMATE
       c. GIVEN >ACCESSIBLE > NEW

The higher the ranking of an object on any of these three hierarchies, the greater

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75 While Tai Khamti is not considered a Tibeto-Burman language, it has adopted certain of its linguistic features because of extensive Tibeto-Burman language contact. For Khamti, SOV word order features the most recognized borrowing (Wilaiwan 1986: 178). For a Tibeto-Burman marked-object construction, a pragmatic hierarchy analysis, such as the one posited here by Genetti, is common. See also Section 7.1 for a summary of features described in this dissertation that I purport are due to areal influences from Tibeto-Burman.

probability that it will be marked with the dative case-marker *-ta*. If the clausal object encodes the semantic/pragmatic information represented on the far-right of each hierarchy in (213), PATIENT, INANIMATE, and NEW, the direct object is never case marked. In contrast, while Khamti strictly adheres to the RECIPIENT > PATIENT hierarchy in (213a), in marking goal-like objects, the animacy hierarchy in (213b), HUMAN >ANIMATE >INANIMATE, does not seem to hold. Examples of *mai²*-marked inanimate direct objects abound, such as (214) and (215), taken from first-person narratives of two different speakers. In (214), the inanimate object *paa⁵tsa¹* 'cemetery' and, in (215), the inanimate object *heeu⁵* 'boat' both take the conoun *mai²*.

(214) *kau³* [*paa⁵tsa¹*] [*mai²*] *kaw¹* *han⁵* *sa⁵sa⁵* *nam⁵*
       1SG   cemetery   F.OBJ   then   see   clearly   CONT
       'I then clearly see a/the *cemetery*'

(215) *ngai⁴-nai¹-mai²* *seung⁵* *nuu³* *pun²* *nuu³* *mai²* *kii⁴* *yaa¹* *tee¹tee¹seung⁵waa³*
       and-CNT-LOC   EMPH   look   yonder look here   when TOP   really

       kuun⁴ *koo¹* *leeung³* [*heeu⁴*] [*mai²*] *khii⁵* *sii⁵*...
       person CLF   INDEF   boat   F.OBJ   ride   CONJ

       'and so, when looking here and yonder, truly, a person is riding a *boat*...'

Furthermore, in looking within a single Khamti third-person narrative text in the corpus, I found 57 monotransitive constructions with a preverbal object. Of these 57, 46 co-occur with *mai²* and of these 46, 19 (or 41%) are inanimate. The fact that animacy does not play a significant role in motivating *mai²* as a marker of the direct object is striking, because all other Tibeto-Burman SOV languages that are purported to have a case-marked monotransitive object show *animacy* as a very strong predictor (LaPolla 1992, 2004; Genetti 1997; Morey 2006).

       Genetti's referent accessibility hierarchy, given in (213c), GIVEN >ACCESSIBLE > NEW, also does not seem to hold for Khamti. As an example, the sentence in (216) comes from narrative text (mentioned above) in which a man and his wife are upset with their grandson, who is hiding under a bamboo mat. The object, *sat⁵* 'mat', occurs twice. In both instances, it co-occurs with *mai²*.

(216) *ngai⁴sii⁵* *paai³haang⁵mai²* [*sat⁵* *too³* *leeung³* *nai¹* *ning⁵* *kan³suu⁵*
       and.then   finally   mat   CLF   one   SP.INDEF shake prog

nai¹]	[*mai²*]	*puu⁵*	*nai¹*	*han⁵*	*kaa⁵*	*kii⁴*	"*heeu⁴*	*mai²*	*uu⁵*.
EMPH	F.OBJ	old.man	DEF	see	go	when	Oh	here	IMPF

taai³tsau¹	*uan⁵*	*nai¹*,"	*n-sii⁵*	*waa³*	*yau¹kii⁴*	[*sat⁵*	*amaeu⁴*]	[*mai²*]
shit	little	DEF	QT-thus	say	after	mat	that	F.OBJ

au³	*saai⁵*	*phuk⁵*	*ngai⁴sii⁵*	*suang⁵khaa³*	*miak⁵*	*kaa⁵*	*uu⁵*
with	rope	tie.up	and.then	2DU	carry	AND	IMPF

'and then finally, when the old man goes and sees *this one mat shaking*, and after (he) says, "Oh! Here (he) is, the little shit," (he) ties up *that mat* with rope and then, those two carry (it) away'

In the first clause, *sat⁵* 'mat' is the head of a relative clause that co-occurs with *mai²* and is the clausal object of *han⁵* 'see'. This initial instance of *sat⁵* with its conoun *mai²* represents the first mention of the referent—being marked with the SPECIFIC INDEFINITE construction (see Section 4.3.4)—and so, it is considered new information. Genetti's analysis would predict that this first instance of *sat⁵* would not be case-marked, given that it represents new information. The second mention of *sat⁵* also co-occurs with *mai²*. Because both instances of the referent *sat⁵* take the conoun, Genetti's referent accessibility hierarchy is, therefore, not applicable for Khamti. My FOREGROUNDED OBJECT analysis shows, instead, that the speaker in (216) has chosen to *foreground* the meaning of the direct object in both clauses, even though it is the same referent. From the viewpoint of the speaker, *sat⁵* 'mat' is of *special importance* in this particular sentence and is therefore maintained as foregrounded in both instances vis-à-vis the special *mai²* marking. In addition, the text mentioned above, features 11 (or 24%) of its *mai²*-marked objects as new, previously unmentioned— and therefore inaccessible—participants in the discourse; again suggesting that Khamti does not follow Genetti's predictors of accessibility as required in Dolakha Newari.

While it is the case that a meaning is foregrounded purely by choice of the speaker, there are several factors that seem to motivate it, such as expressing contrast with referents within a sentence or in the setting and maintaining of a discourse topic, both of which are choices made by the speaker as well. A speaker can use foregrounding in order to express a contrast between two different referents in a sentence comprised of two transitive clauses. In (217), the contrasting referents *man⁴* and *kau³* are of high-ranking prominence and both are signaled as foregrounded with

the conoun, *mai²*.

(217) *mee⁵* *yaa¹* *meeu³laeu⁵kaw¹* [***man⁴***] [***mai²***] *naai³sang⁵* *liang¹* [***kau³***] [***mai²***]
     mother TOP always   3SG F.OBJ only   care.for 1SG F.OBJ

     yaa¹ *khuat⁵* *wai¹* *yau¹*
     TOP abandon DUR PERF
     'mother always cared only for *her*; as for *me*, (mother) abandoned'

This sentence contrasts the way in which the speaker views her mother treating both daughters, the younger sister and the speaker. In (217), the younger sister is encoded in the first clause as a foregrounded object, *man⁴*, of the verb, *liang⁵* 'care for', while the speaker is encoded in the second clause as a foregrounded object, *kau³,* of the verb, *khuat⁵* 'abandon'. The contrast conveyed is that the mother cares for the younger sister, but just abandons the speaker. The contrast between the two referents results in the foregrounding of both.

     A communicatively high-ranking referent can also play a role in the establishment or maintenance of a discourse topic. The stretch of discourse shown in (218a-e), from a text describing Khamti weddings, starts a new sub-section of the discourse. It describes the details pertaining to the bride herself, in regards to a bride-sending ceremony in which the wedding party takes the bride to the groom's house. The sentence in (218a) establishes the discourse topic with the clausal object, *phuu²saau⁵maeu⁵* 'bride', being foregrounded with the conoun *mai²*. The next sentence in (218b), also has a clausal object, *kheeung³ tai⁴* 'Tai clothes', but, this object is not foregrounded and therefore is not considered a discourse topic. The sentence in (218c), however, foregrounds the bride again with the verb, *au³ uu⁵* 'cause to stay'. In this case, the foregrounding of the bride has the purpose of maintaining the referent as the topic of discourse.

(218) a. [***phuu²saau⁵maeu⁵***] [***mai²***] *phuu²luam³* *suang⁵* *koo¹* *luee²*   *uu⁵*
       bride   F.OBJ bridesmaid two CLF accompany IMPF
       'two bridesmaids accompany the *bride*'

     b. *tai⁴koo¹* *man⁴* *suang⁵* *koo¹* *kaw¹* *nang⁵* *man⁴* *n-kan³*   *haang²* *kheeung³* *tai⁴*
       friend 3SG two CLF then just 3SG COMP-RCPR dress.in clothes   Tai
       'her two friends, then, dress up in Tai clothes, just like her'

     c. *ngai⁴sii⁵* [***phuu²saau⁵maeu⁵***] [***mai²***] *au³*   *uu⁵* *kheeung³kaang³* *ngai⁴*
       and.then bride   F.OBJ cause stay middle   and

> huum³ kaa⁵ heeun⁴ phuu²maau⁵maeu⁵ uu⁵
> together go house groom IMPF
>
> 'and then (those two) make the *bride* stay in the middle (of them) and together go to the groom's house'

d. ngai⁴yau¹kii⁴ kuun⁴ an³ kaa⁵tseu³ hoo⁵ keeu³ nai² nai¹ tang⁴meeung⁴
   and.after person REL gift package salt get DEF all

   luee² ngai⁴sii⁵ heeun⁴ phmaau⁵maeu⁵ mai² kaa⁵ suung⁵ haeu² uu⁵
   accompany and.then house groom ALL go send APPL IMPF

   'and after this, all the people who get a salt package gift accompany (her and her two friends), and then (they) send (her) to the groom's house'

e. phmaau⁵maeu⁵ kaw¹ luk¹ heeun⁴ man⁴ mai² tang⁴ tai⁴koo¹ suang⁵
   groom then from house 3SG ABL along.with friend two

   koo¹ kheeung³ tai⁴ kham⁴tii³ nung³ ngai⁴sii⁵ thaa² uu⁵
   CLF clothes Tai Khamti wear while wait.for IMPF

   'the groom, then, from his house, along with his two friends, wear Tai Khamti clothes while waiting for (her).'

The bride is further maintained as discourse topic in the next two sentences as the elided object of the verbs, *luee²* 'accompany' and *suung⁵ haeu²* 'send away', in (218d) and the elided object of the verb, *thaa²* 'wait for', in (218e). I do not argue that *mai²*-marked objects actually control elided objects in adjoining clauses, but I do suggest that foregrounding can be a topic-setting and maintaining strategy and, once properly established as topic, allows the referent as an object to be elided in subsequent clauses in discourse. The subject can also be elided, as in (218e), and more easily recovered in relation to the foregrounded object. In short, the foregrounded object is recovered as a referent for the elided object leaving the subject referent to be recovered as the elided subject.

In order to show the contrast between a FOREGROUNDED OBJECT and a NEUTRAL OBJECT construction, I briefly discuss the second monotransitive pattern, [OV]. In this case, the NEUTRAL OBJECT conveys a meaning for the speaker in her communication that is of *neutral importance* (Mel'čuk 2001: 198). I illustrate this [OV] pattern with the sentences (218b and c) above. The clausal object, *kaa⁵tseu³* 'gift', of the verb, *nai²* 'get' in (218b), and, *kheeung³* 'clothes', of the verb, *nung³* 'wear' in (218c), are encoded as plain [OV] constructions. These objects are neutral (not marked with *mai²*) and therefore, the speaker places NO SPECIAL IMPORTANCE on the gift received or the traditional clothes that the groomsmen wear relative to the

SPECIAL IMPORTANCE placed on the bride, as discourse topic. The neutral gift and clothes are not mentioned any further in this text. Neutral referents are either only mentioned once, as in (218b and c), or, if maintained through a stretch of discourse, are of secondary prominence relative to a more prominent foregrounded referent in that stretch of discourse.

The third monotransitive construction that requires mentioning—in order to establish the suggested paradigm of a three-way distinction that employs *mai²* as a marker of foregrounding—is the BACKGROUNDED OBJECT. This [VO] pattern, encodes a backgrounded referent which has REDUCED IMPORTANCE in the sentence from the viewpoint of the speaker (Mel'čuk 2001: 199). As discussed in Section 2.4.3, a [VO] construction expresses a non-referential object, which is generally indefinite and non-specific. These backgrounded object constructions in Khamti are numerous, refer to kinds of action, and correspond to a communicatively low-ranking referent in the situation described in the sentence (ibid.: 209). The relative contrast between a foregrounded and backgrounded object is shown in (219) which features four transitive clauses with overt clausal objects.

(219) *ngai⁴-nai¹* [***paa³sa²njee¹***] [***mai²***] *kuun⁴   pee¹   kii⁴ kuun⁴ nai²* [***kin³   paa³sa²njee¹***]
     and.CNT   eel   F.OBJ   person   defeat   if   person   get   eat   eel

     sii⁵   paa³sa²njee¹   seung⁵   kuun⁴   mai²   hiang⁴   saa⁴   kii⁴   yaa¹
     CONJ   eel   EMPH   person   STD   be.strong   more.than   if   TOP

     [***kuun⁴***]   [***mai²***]   *paa³sa²njee¹   kin³   uu⁵*
     person   F.OBJ   eel   eat   IMPF

     'And so, if a person defeats an *eel* the person gets to eat eel, but if it is that an eel is stronger than a person, the eel eats a *person*.'

In the first clause in (219), *paa³sa²njee¹* 'eel' is encoded as a foregrounded object of *pee¹* 'defeat' (O-*mai²* V pattern). In the second clause, however, the same referent is encoded as backgrounded in relation to the verb *kin³* 'eat' (VO pattern). Therefore in this VO clause, from the viewpoint of the speaker, the second instance of eel is non-referential and therefore of REDUCED IMPORTANCE. The translation of the first two clauses could be, 'if a person defeats an *eel*, the person gets to eat (eel-eat)'. The second instance of eel, is not a specific eel that is fought, but rather a non-referential eel that conveys a general activity that results from fishing eel, that of eating, or of

eel-eating.[76]

The final clause of (219) 'the eel eats a *person*' shows the conoun *mai²* marking its head noun *kuun⁴* 'person' as foregrounded. Here, the speaker contrasts *kuun⁴* 'person' with the referent *paa³sa²njee¹* 'eel' of the first clause in (219), which is also foregrounded. The unexpected and specific situation of a *person* getting eaten by an eel—rather than a more typical and general situation of an eel getting eaten by a person—gets encoded with the FOREGROUNDED OBJECT construction.[77] The one sentence in (219) demonstrates the *foregrounded* and *backgrounded* values of perspective relative to each other.

The analysis of *mai²* presented in Section 5.5 for ditransitives and here for monotransitives shows that *mai²* is a conoun marking all ditransitive goal-like arguments and some, but not all, monotransitive patient-like objects. This pattern of object marking, with the same (dative) marker being used for ditransitive goals and for monotransitive patients, is common across the world's languages and is especially prominent in Tibeto-Burman languages (Matisoff 1973: 156-157; Karapurkar 1976: 156-157; LaPolla 1992: 3; Genetti 1997). While specific semantic/pragmatic details differ in motivating the DATIVE marking in these languages, an overarching motivation seems to hold sway—that of referent importance (Genetti 1997: 60). In the ditransitives of these languages, the GOAL referent (human endpoint) holds the highest degree of importance from a topic-worthiness perspective and so receives an obligatory marking. When the same marker is used "optionally" for monotransitive patients in these languages, differing semantic/pragmatic hierarchies motivate the presence or absence of marking, such as animacy, referent accessibility, psychological importance, and so forth. The unifying theme of this variety of object-marking hierarchies is a more general *referential prominence*.

The grammaticalization process from ditransitive GOAL to monotransitive

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76 The conditional clause in (213) 'if it is that an eel is stronger than a person', shows *kuun⁴* 'person' as the standard of comparison [STD] in a comparative construction with the adjectival predicate *hiang⁴saa⁴* 'is stronger than' and so marked with COMPARATIVE *mai²*. This comparative use of *mai²* is discussed in Section 3.7 above.

77 Both instances of the foregrounded object, *paa³sa²njee¹* 'eel' in the first clause, and, *kuun⁴* 'person' in the final clause, precede the subject, creating an O-*mai²* S V word order. This word order requires further investigation under a broader scope of Topic/Comment configurations. I suspect that a fronted object further heightens the counter expectation of an eel eating a person.

PATIENT is widely recognized as one of discourse/pragmatic generalization. The highly topical status of RECIPIENTS in ditransitives allows for the marking of topical-like objects in monotransitives (Givón 1984a, 1984b; Dryer 1986: 841; LaPolla 1994; Genetti 1997: 60; Heine and Kuteva 2002: 103). Each language has a different set of criteria (hierarchies) for determining referent prominence of monotransitive OBJECTS. In the analysis for Khamti, the hierarchy is one of speaker perspective in determining which object referent is of psychological importance, as a kind of general object referent saliency (LaPolla 1992: 7).

Finally, this basic pattern of object-marking is rather common in the world's languages, especially of the Tibeto-Burman family that has surrounded the Khamti for centuries; languages such as Lisu, Jingpho, Rawang, and Burmese. While this pattern of object-marking is more common in Tibeto-Burman languages, Tai Khamti is unique among Tai languages in following this pattern. I propose that the object-marking pattern in Khamti is due to language contact with Tibeto-Burman. This proposal is along the lines of Heine and Kuteva (2011: 291), who say that grammaticalization is a ubiquitous process in language contact. In language-contact grammaticalization, speakers of a target language take a particular grammatical structure from a source language as a pattern to design a functionally equivalent structure unique to the marking needs in their own language. The result of the process is that target and source languages "share a structural isogloss" (ibid.: 291) that was not there prior to language contact. This is also what Weinreich (1964[1953]: 30-31) calls "grammatical replication". When Khamti, as a Tai SVO language, adopts a Tibeto-Burman SOV basic word order, it also "replicates" the Tibeto-Burman object-marking function with preverbal objects. Additional evidence that this is language-contact grammaticalization pertains to the fact that Khamti never morphosyntactically marks its postverbal objects. A postverbal object is the typical situation for Tai languages, which utilize the SVO word order for marking objects. In the marking of preverbal objects, Khamti replicates this Tibeto-Burman strategy for a different, but related purpose—that of making a three-way contrast in speaker perspective. The psychological contrast presented here is one of speaker choice, rather than the typical Tibeto-Burman-like referent animacy and/or accessibility hierarchies.

5.9 A summary of the functions of *mai²*

The grammatical distribution of the Khamti morpheme *mai²* is summarized as follows. *Mai²* was presented first in what I argue is its most basic sense as a lexical locational deictic 'here' in which it specifies a *place* that is proximal to the speaker and captures the joint attention of the speech-act participants. From its function as a place identifyer, *mai²* grammaticalizes into a conoun that functions as a marker for static topological location in LOCATIVES; a marker of time in a TEMPORALS; a possessor in predicative POSSESSIVES; a goal in ALLATIVES; a goal-like object expressing such roles as RECIPIENT, ADDRESSEE, and BENEFICIARY in ditransitives; a CAUSEE in causatives; a STANDARD OF COMPARISON in comparatives; and, a FOREGROUNDED OBJECT in one of three monotransitive constructions. In this section, I summarize these findings with a semantic map that is organized based on three domains of human experience, spatio-temporal, social, and logical (cf. Kabata 2000).

The description presented in this chapter of the polyfunctional distribution of *mai²* is not presented in a random order, but rather reflects a reasonable grammaticalization pathway leading from a basic lexical source to an abstract grammatical marker of pragmatic information. This pathway can be nicely modeled with a semantic map, similar in nature to ones posited for *an³* in Section 3.8 and *nai¹* in Section 4.12.

The semantic map that I posit for *mai²*, based on the analysis in this chapter, is shown in Figure 5.1. The diachronic pathway starts with the lexical locational deictic *mai²* 'here' on the far left in the figure and its immediate extensions comprise a spatio-temporal domain. This source morpheme specifies a spatial region (a static place) that is in reference to the speaker's location, making the source meaning a deictic one. The initial extension from a deictic source to a spatial locative is a crucial one (the heavy arrow and LOCATIVE oval), because once *mai²* is realized as LOCATIVE, it enters into many well-attested grammaticalization pathways that I describe in more detail below, based largely off of Rice and Kabata (2007). A LOCATION DEICTIC (such as the Khamti *mai²*) documented as a lexical source for a LOCATIVE extension is remarkably rather scarce in the literature. For instance, *The World Lexicon of Grammaticalization* (Heine and Kuteva 2002) does not list a LOCATIONAL DEICTIC

(here/there) as a source for a spatial LOCATIVE (LOC), even though this would seem to be quite reasonable and common across languages. Diessel (1999: 139) does refer to LOCATIVE DEICTICS as sources for TEMPORAL extension, but not SPATIAL ones. Be that as it may, the association of locative deixis, temporality, and spatial location is a tight-knit one. which I represent in Figure 5.2 with two grammatical pathways extending to TEMPORAL. The first pathway extends from the deictic source, while the second one extends from the spatial LOCATIVE. This spatio-temporal pathway is based on spatial topological readings (*at*, *on*, and *in*). To move from space to time requires an additional inferential mechanism (i.e. conceptual metaphor, TIME IS SPACE).
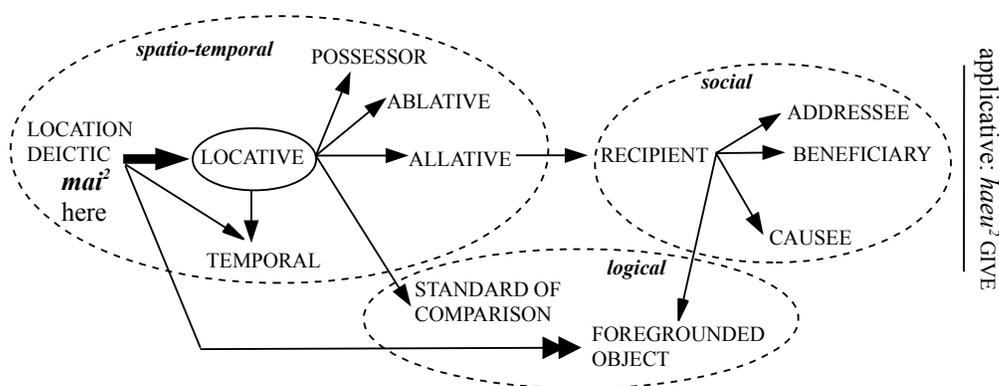
Figure 5.1. Semantic map for the grammaticalization extensions of *mai²* 'here'

Once the Khamti LOCATIONAL DEICTIC occurs as a spatial conoun—in constructions that utilize the verb of existence, *yang⁴*—it easily serves as a source for the extension to a marker of the POSSESSOR in predicative possessive constructions, which appropriate the same existence verb, *yang⁴*. This extension was established in this chapter as a metaphorical inference on the LOCATIVE schema, which is a common pattern cross-linguistically (Langacker 1991: 172-173; Heine 1997: 50-51). The LOCATIVE construction, likewise, leads a path of development into a marker of an ABLATIVE construction. The context for this line of development includes the preposition *luk¹* 'from' because *mai²*, in and of itself, does not signal an ABLATIVE reading.

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In Khamti, *mai²* extends in function from a spatial LOCATIVE to an ALLATIVE construction in the context of motion verbs. From this point, the pathway from ALLATIVE leads to several constructions that concern a social domain—RECIPIENT, ADDRESSEE, BENEFICIARY and CAUSEE. First, ALLATIVES exhibit a GOAL which can be characterized as a spatial endpoint. The pathway to a RECIPIENT construction involves an archetypal person-based endpoint. Moreover, the RECIPIENT construction employs the main transfer verb, *haeu²* 'give', which expands to a set of constructions that adopt *haeu²* as an applicative coverb; a common diachronic process for GIVE-verbs. This is shown at the far right in Figure 5.1 with a vertical APPLICATIVE line. The extensions arising directly from the RECIPIENT construction include the ADDRESSEE, BENEFICIARY, and CAUSEE constructions, which all encode other person-based or animate *endpoints*. For the CAUSEE construction in Figure 5.1, I try to reflect the much lower percentage of cohort senses for causatives (7% in Rice and Kabata 2007: 480-481) by showing the extension from RECIPIENT to CAUSEE with a longer grammaticalization arrow.

The final domain of extension is the logical domain, which primarily pertains to comparison and assessment of objects (Rice and Kabata 2007: 462). The LOCATIVE construction extends to a STANDARD OF COMPARISON construction, as shown in Figure 5.1. The *mai²*-marked standard [STD] can refer to a person (cf. (209) with *kuun⁴* 'person') or be inanimate (cf. (210) with *tsuang⁴pik⁵maan⁵* 'temple') and reflects a stationary measure. The subject nominal "moves" in relation to the *mai²*-marked STANDARD OF COMPARISON.

The final construction, FOREGROUNDED OBJECT, is an interesting one because it is specific to (Tai) Khamti in relation to language contact with Tibeto-Burman languages. A marked preverbal object is rare, if not completely unique, in Tai languages, generally. However, in many Tibeto-Burman languages, the object of monotransitive clauses is often marked on semantic/pragmatic grounds. Khamti, too, marks monotransitive objects pragmatically as expressing a clausal object referent as highly important in the mind of the speaker. This sort of pragmatic marking is specific to Khamti, in that no other Tai or Tibeto-Burman language pragmatically marks objects on this particular speaker-oriented basis. Khamti, indeed, seems to

have adopted a common Tibeto-Burman strategy for indicating pragmatic information, but adapted it for its own, highly specific and unique purpose—indicating speaker contrastive perspective (detailed in Section 5.8). In Figure 5.1, I show this unusual situation for object marking in Khamti with an arrow leading from the RECIPIENT construction and a double-headed arrow leading directly from the lexical source deictic. An extension leads from the RECIPIENT to the fOREGROUNDED OBJECT due to the well-understood function of a single marker being used to signal a *ditransitive* GOAL and *monotransitive* PATIENT. The motivation for this extension was evidenced in Section 5.8 as one of discourse/pragmatic generalization. The highly topical status of RECIPIENTS in ditransitives allows for the marking of topical-like objects in monotransitives. With the FOREGROUNDED OBJECT construction, the inference is that of *speaker* perspective. An extension leads form the locational deictic to the foregrounded object (a double-headed arrow) due to the fact that the speaker is part of the overall meaning. Because this construction entails an assessment or evaluation of a textual object, I have included it as part of a logical domain of experience. With the FOREGROUNDED OBJECT function of *mai²*, Khamti nicely portrays an evolutionary development that takes a general pragmatic object-marking strategy—as found in many Tibeto-Burman languages—and exploits it for purposes suited to expressing Khamti-specific *prominence*.

In Chapter 5, I have attempted to show that the syncretism surrounding a deictic morpheme is much more than meets the eye. The diachronic analysis conveys a more unified account of *mai²* in the face of robust cross-linguistic evidence. Investigating polyfunctional patterns using a synchronic-diachronic typological approach results in more defensible analyses and yields better hypotheses for ongoing research (Rice and Kabata 2007: 48). In Chapter 6, I revisit the constructions surrounding the grammaticalization of the three target morphemes, *an³*, *nai¹*, and *mai²* from Chapters 3-5. Each of these constructions that exhibit a noun-conoun juxtaposition, [NOUN][CONOUN] will be described as reference-point constructions. This schema will then be promoted as a cognitive underpinning motivating the grammaticalization patterns thus observed.

Chapter Six

An³, *nai¹*, and *mai²* in reference-point constructions

6.1 Introduction

The descriptive analysis of the Tai Khamti morphemes *an³*, *nai¹*, and *mai²*, presented in Chapters 3-5, resulted in diachronic maps specific for each morpheme. The individual maps, found in the summary section of each of those chapters, outlined an array of constructions associated with each morpheme and demonstrated possible grammaticalization pathways that motivate them each as representing a network of constructions. In this chapter, I will attempt to unite the three separate networks of constructions into a single, coherent analysis by showing how each construction is an example of a single overarching cognitive schema. Specifically, I want to show that *an³*, *nai¹*, and *mai²* each behave as central components in a *reference-point construction* (RPC) by serving as *conceptual specifiers* that (a) trigger a conceptually asymmetrical relationship between two entities: a reference-point and a target, (b) identify the full target, which comprises new information, and (c) point the target back to its reference point for interpretation, in effect, shining a mental spotlight on the reference point. The relationship between a reference point and a target is necessarily asymmetrical because the apprehension of a target *relies on* the interpretive context provided by its reference point. The reference point, then, acts as a local topic for the target and the target functions as a kind of comment about the topic. In other words, the reference point provides the background or encyclopedic knowledge necessary to interpret an associated target expression for the particular construction under consideration.

The Tai Khamti constructions discussed in relation to *an³*, *nai¹*, and *mai²* in Chapters 3-5 will be analyzed here as RPCs. The original constructions were each described as juxtaposed entities, [NOUN][CONOUN]. The examples that were formerly described as cases of juxtaposition are, in this chapter, analyzed as *relational* constructions with an imposed asymmetrical (embedded) bracketing, [NOUN [CONOUN]]. With this kind of conceptual bracketing, the NOUN is construed as a reference point and the CONOUN as a nested target. The NOUN, then, provides the

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context for interpreting an associated (embedded) target. The relational bracketing corresponds to a general reference point template, [R [T]]$_D$ in which R exhibits a dominion (subscript D) within which T is associated and hence understood. In this arrangement, the NOUN (topic) first comes into conceptual awareness *in order to* mentally access the new information (comment) contained in the CONOUN. The goal of this chapter is to demonstrate that *an³*, *nai¹*, and *mai²* can be construed as RPCs and that all of the constructions that have evolved from *an³*, *nai¹*, and *mai²* can also be construed as RPCs. If successful, this will strongly point towards the cognitive reference-point schema as an important conceptual underpinning to the grammaticalization exhibited in Chapters 3-5. My hope is that an analysis that treats *an³*, *nai¹*, and *mai²* as conceptual specifiers within reference-point constructions—as *triggers* of relationships, as *identifiers* of targets, and as *pointers* to a reference point —will provide convincing evidence for unifying all of the constructions previously described in this dissertation.

Langacker has posited the notion *cognitive reference-point* which has subsequently been used in a number of linguistic descriptions (Langacker 1991: 171, 1993, 1996: 355ff, 2009: 45ff, 2013: 83-85; van Hoek 1995, 1997; Smith 2006; Tribushinina 2011). A cognitive reference point is a particular kind of conceptual grouping that features a *reference point*, its *dominion*, and an associated *target*. The reference point, itself, is a conceptual entity that carries a certain degree of prominence or accessibility that a conceptualizer (speaker, hearer, reader, thinker, and so forth) invokes for purposes of establishing mental contact with a less salient entity, called the target (Langacker 1996: 355). The *grouping* of two entities in this conceptually embedded fashion is accommodated by the dominion of the reference point. For example, Figure 6.1 diagrams the sentence [*next to the house* [*is the car*]] and shows that, in attempting to locate the car, one first needs to know where the house is. The house, then, becomes a reference point (R) in order to arrive at the car, which is its immediate target (T).

[*next to the house* [*is the car*]]
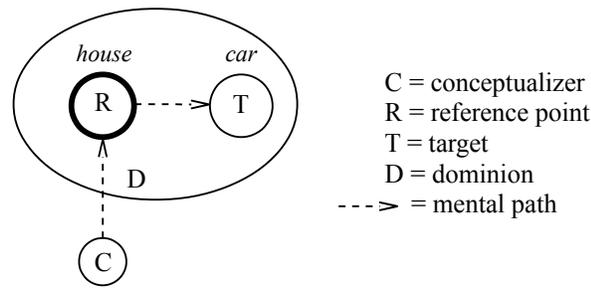
Figure 6.1. The basic *locative* reference-point relationship

Furthermore, the *search area* invoked by the mention of *house* is identical with the house itself; that is, its perceived proximity. This search area becomes the house's dominion (D) or region of control. In other words, the reference point, *house*, establishes a conceived area or dominion within which a target, *car*, is considered to exist. In the reference-point relationship, a conceptualizer's (C) mental scanning proceeds from R to T (the dashed arrows). T, then, is considered to be *a part of* R when it is found *within* D, the oval in Figure 6.1. D is the reference point's conceptual extent. Put another way, D is the house's locational context (commensurate with R) for pinpointing the target car. The diagram in Figure 6.1 is meant to reflect the reference-point template found in the data example, [R [T]]$_D$, in such a way that T— by virtue of being inside D or embedded within the outer brackets—is apprehended as "belonging to" R. A target, then, is always construed as being located within the scope or dominion of the reference point. The Khamti data that will be presented in this chapter will feature embedded relational bracketing which will then be illustrated with CG diagrams similar to Figure 6.1.

An important observation of reference-point schemas is that they are dynamic in nature, reflecting the conceptual interplay between foregrounding and backgrounding. This action takes into account varying levels of prominence, in the sense of focal spotlights, from a reference point to a target. When mentally scanned, the reference point is initially salient but then recedes in salience and is backgrounded as it gives way to a secondary focal prominence in the target. A backgrounded

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reference point, however, remains in the background for a certain amount of processing time as a context for interpreting any upcoming target in the construction.

A common type of construction that is typically used to illustrate the reference-point model is a POSSESSIVE. Because the reference-point model is independent of any specific semantic content, it is general enough to account for a wide range of meanings associated with the English inflectional possessive construction as described by Langacker (2013: 84), shown here in (220a). Conceptual asymmetry explains why possessives are usually not reversible as evident in the ungrammatical examples shown in (220b). As a fully general schematic description, a possessor serves as a reference point and a possessee serves as a target.

(220) a. *the boy's shoe*, *Jeff's uncle*, *the cat's paw*, *their lice*, *the baby's diaper*, *my train*, *Sally's job*, *our problem*, *her enthusiasm*, *its location*, *your candidate*, *the city's destruction*

   b. **the shoe's boy, *the paw's cat, *the diaper's baby, *the destruction's city*

The abstract and dynamic nature of the relationship between a reference point and a target is observed generally in cognition. This can be seen in such figure/ground phenomena as a salient voice against background noise, a focal color recognized against a background spectrum, a comparison between two objects (a large and small painting or a fast and slow motorcycle). More specifically, in language, the figure/ground configuration can be identified in linguistic prototypes (a central sense of a word against peripheral or extended senses), metaphor (using one experiential domain to talk about a different experiential domain), metonymy (using part of one experiential domain to talk about the whole domain), and other more grammatical relationships (possessor and possessee, subject and object, noun and verb, topic and comment, old information and new information). Because of the pervasiveness of the figure/ground configuration, one objection in positing a reference-point analysis is that the schema is perhaps too general to be of any real descriptive benefit, let alone explanatory value. However, a model so general and widespread as the reference-point schema does seem to hold some value for Khamti in uniting otherwise discrete and isolated sets of constructions (i.e. the wide range of an^3, nai^1, and mai^2 constructions) and providing an underlying motivation for these grammaticalized

networks.

In this chapter I argue that *nai¹* and *mai²* (as deictics) are inherently lexical reference-point constructions. On the other hand, *an³*, while it is not an inherent reference-point construction like the two deictics, becomes a conceptual specifier in *an³*-based appositional constructions. For *an³*, the resulting reference-point schema shows up in constructions in which *an³* functions as a schematic noun *standing in for* a more semantically specific head noun. It is the conceptual basis of each individual morpheme—the two deictics *nai¹* 'this' and *mai²* 'here', along with schematic *an³* 'thing' when it functions appositionally—that influences all of the constructions described in this dissertation to be reference-point constructions. In their capacity as conceptual specifiers, *nai¹*, *mai²*, and *an³* are neither reference points nor targets *per se*. Instead they are the relational go-betweens. They initiate a relationship between two linguistic entities and they identify (conceptually link with) the target entity for the expressed purpose of associating the target with the reference point. The description of *nai¹*, *mai²*, and *an³* serving as conceptual specifiers is shown in Figure 6.2. For *nai¹* and *mai²* in (a) and (b), they establish a relationship between R and T (i.e. become the go-betweens), they make up part of the T entity, and they take T and relate it back to its R, which is shown with dotted correspondence lines. For *nai¹* and *mai²*, the dotted correspondence lines represent *deixis* because *nai¹* and *mai²* are pointers to the speaker. When the R (speaker) and T are linked by way of a back-referencing correspondence, T is then considered to be *associated with* R and as a result resides inside its D.

(a) deictic *nai¹* 'this'   (b) deictic *mai²* 'here'   (c) reifier *an³* 'thing'
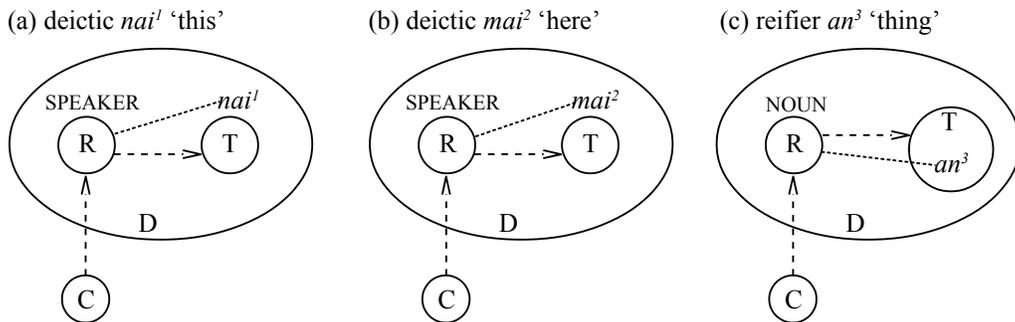
Figure 6.2. Reference-point schema for Khamti specifying morphemes *nai¹*, *mai²*, and *an³*

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For *an³* in Figure 6.2(c), on the other hand, when it triggers a relationship between R and T (i.e. becomes the go-between), it identifies T by virtue of being conceptually intrinsic to T (i.e. diagrammed inside T). Furthermore, when specifier *an³* takes T and back-references R, the correspondence between T and R is one of *schematicity*, rather than deixis. This is because *an³* is a schematic noun in relation to its more specific head noun, R. *An³*, as shown in (c), differs from *nai¹* and *mai²* because it does not take the speaker as an implied reference point but instead, takes a textual noun as a reference point. I intend for these diagrams to become more apparent when they are described with specific data examples in Sections 6.2-6.4 below.

The main point that I want to illustrate with Figure 6.2 is that a specifier provides a *central* function in regards to three aspects in reference-point constructions: *conceptual access*, *processing access*, and a (back-)*referencing function*. Conceptual access pertains to the composite whole and how a Khamti speaker arrives at its overall interpretation. The reference point construction does not become mentally evident in an expression until the two entities—reference point and the target—are realized as connected. Specifically, words that are aligned in an expression—juxtaposed, as in the Khamti data—do not become components of a reference point construction until one of the specifiers, *nai¹*, *mai²*, or *an³*, is encountered either verbally or mentally. Specifiers *trigger* the overall reference-point schema, devising a conceptual access to the grouping.

Processing access pertains to the asymmetry imposed on the two elements in the juxtaposed relationship. Once triggered, the specifier then identifies what the full target is by being conceptually linked with the target in some way. This is diagrammed in Figure 6.2. with the specifiers, *nai¹*, *mai²*, and *an³*, being aligned either above T, as with the *deictics* in (a) and (b) or inside T, as with the *schematic an³*. Because the specifier identifies the T entity in some fashion, this allows for the conceptual processing of two entities to always proceed from a salient R to a less salient T, as shown with the dashed arrows originating from C.

Finally, a referencing function occurs when the specifier with its identified T looks for R with the purpose of associating to R the new information contained in T. Along these lines, R is a kind of linguistic *topic* and T is its *comment*. The referencing

function is shown in Figure 6.2 with dotted correspondence lines connecting T to R. Furthermore, once a referencing functions occurs, T is understood as *associated with* R. These three dimensions of the specifier—conceptual access, processing access, and a referencing function—construe two juxtaposed items as a grouping, D, within which one of the items, T, is associated with the other, R, and together they express a more fulsome composite meaning.

Reference points can be thought of as conceptual starting points (cf. Chafe 1987, 1994 as cited in van Hoek 1997: 47), comparable to local topics, which are chosen in the processing of an overall referent situation—the reference-point construction as a whole—on the basis of several factors: *relative prominence*, *linear order*, and a conceptual semantic *interconnectivity* of linguistic elements inside each dominion (van Hoek 1997: 47-59). Relative prominence ensures that the reference point is more salient than the target in the relationship. Being more salient, the reference point remains part of the background as the target is accessed. A backgrounded reference point can then be called upon for the interpretation of a given target. Linear order suggests that a reference point is more likely to occur as the first element in an expression with the target following; this being the case with almost all of the Khamti constructions in this dissertation. With the few constructions in which this linear alignment is reversed (T > R) a pragmatic effect ensues (to be further discussed below). Finally, interconnectivity is established between two linguistic components—nominals, clauses, or other elements—when they occur juxtaposed in an expression. It is important to point out, however, that while they are juxtaposed paratactically, they are nested conceptually. These aspects of the selection of the reference point will become more apparent when describing the specific reference-point constructions in the following sections.

In sum, I contend that the grammaticalization processes at work in the Khamti description, Chapters 3-5, are motivated by an underlying reference-point schema. In this chapter, these grammatical constructions are described as reference-point constructions and include canonical conceptual relationships that have received a reference-point treatment (possessives, locationals), but also non-canonical ones (numeral-classifiers, relative and complement clauses, focus particles, and so forth).

The elegance of the reference-point model in accounting for the canonical constructions warrants its use in unifying the more non-canonical, but nevertheless grammaticalized constructions. With this in mind, I follow Langacker's (2013: 83) general guidelines for the prudent use of reference-point analyses to best be reserved for constructions in which each element apprehended is individually *prominent*, their mental path is *discrete*, and that the scanning of this path is *purposeful* in primarily relating an initial element with a terminal element to arrive at a coherent composite conception.

The organization of the remainder of this chapter—in which the three target morphemes act as conceptual specifiers in reference-point constructions—is as follows. I first analyze as reference-point constructions the deictic morphemes *nai[1]* 'this' in Section 6.2 and *mai[2]* 'here' in Section 6.3. These two deictics were previously described in Chapters 4 and 5, respectively. I start the cognitive analysis in this chapter with these two deictics because they inherently feature the speaker as a natural *de re* reference point. It will be demonstrated that the ensuing reference-point constructions involving *nai[1]* and *mai[2]* that extend from this initial *de re* usage utilize a textual item as a *de dicto* reference point. In Section 6.4, I analyze the reference-point constructions surrounding *an[3]* 'thing', which was previously described in Chapter 3. I analyze the *an[3]* constructions as reference-point constructions lastly because *an[3]* is not an inherent reference-point construction like its deictic counterparts. Rather, *an[3]* *becomes* a specifier of reference-point constructions only when it occurs in apposition to a *de dicto* head noun. In these three sections, I make astute selective choices of which constructions to demonstrate as reference-point constructions. This selection represents the wide-ranging cross-section of reference-point constructions—some canonical and others less so—that stem from three basic source lexical items. I conclude Section 6.4 with a single EQUATIVE construction which involves two distinct reference-point constructions—one with *nai[1]* and the other with *an[3]*—which work together to form a single complex composite. In Section 6.5, I summarize the findings of the three sets of constructions and suggest that they grammaticalize in part because of the reference-point schema that underlies each one.

6.2 Reference-point constructions with *nai¹*

The grammatical extensions resulting from the grammaticalization of *nai¹* were described schematically in Chapter 4 as juxtaposed constructions, [NOUN][CONOUN]. In this section, these noun-conoun pairings undergo a conceptual analysis and are described as reference-point constructions. As a participant in reference-point constructions, *nai¹* imposes an asymmetrical conceptual relationship between the two juxtaposed R and T entities, [R [*nai¹*-T]]$_D$. In this way, the juxtapositional template is re-construed as a *nai¹*-specific conceptual template in which *nai¹* operates as a conceptual marker of the target that is situated within R's dominion (i.e. the outer brackets, D).

The reference point initiates a context within which a target is associated and supplies additional information about the reference point. While conceptual processing starts with the reference point in order to access a target, the target's interpretation relies on the reference point. Within this back-and-forth arrangement between reference point and target, *nai¹* plays a central role. *Nai¹* is the component that first stipulates that there is indeed a relationship between two juxtaposed entities. *Nai¹* then serves to delimit what the entire target entity is (the embedded brackets) and then looks for (or points back to) a reference entity in order to arrive at a composite interpretation. The dominion is defined as the interpretive context or set of background knowledge or experiential domains specific to the reference point. The target (a modifying expression) is associated with a given reference point by virtue of being nested inside its dominion.

In its basic sense, *nai¹* 'this' makes the speaker an implied reference point. This situation is shown in Figure 6.3 with a dashed circle for R. The dashed circle is intended to mean that there is no explicit mention of the speaker when uttering *nai¹*. To make the speaker explicit in the utterance would require its verbalization or linguistic manifestation in some fashion, such as with an overt 1SG pronoun, *kau³*, somewhere in the sentence. The second element in the figure is *nai¹* and, because it is verbally articulated, is shown as a solid circle, T. T is a construal of a *de re* object, an entity in the speech situation that is located in the speaker's physical *vicinity*, which is construed as as the speaker's D. In essence, D becomes the *search domain* from

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which to locate a T expression. In articulating *nai[1]*, the speaker is referencing herself in looking for a particular target object.
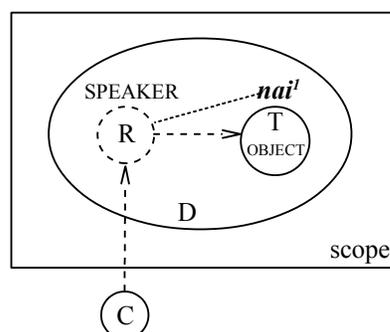
Figure 6.3. The semantic representation of *nai[1]* 'this' as a basic lexical deictic

In Figure 6.3, I also show the back-referencing process as a dotted correspondence line linking the *nai[1]* target object back with R. This particular correspondence between T and R is one of *deixis* because *nai[1]* is a deictic pointer. In this way, *nai[1]*, is considered to be a verbal *pointing device* that references the speaker for a location, D, of an object, T.

Of crucial importance for a semantic representation of *nai[1]*, as described in Figure 6.3, is the understanding that lexical *nai[1]* is deictic. What this means is that *nai[1]* expresses a meaning that has within its overall conception an aspect of the speech situation or the ground—specifically, one of the speech-act participants, the speaker (see also Section 4.1). In Figure 6.3, a "viewing" box labeled *scope* refers to the full semantic content of *nai[1]*, which, in turn, lends itself to the complete meaning of the entire predication. In non-deictic expressions, the conceptualizers are outside this scope field and not part of the meaning. However, with the deictic, *nai[1]*, the speaker is described as an aspect within the scope and, thus, is part of the meaning. In this way, a deictic expression is a *grounding predication* which crucially involves an aspect of the *ground* or speech situation inside its own *scope* of predication (cf. Langacker 2002: 7-10).

One extension of the basic deictic usage of *nai[1]*, a deictic (exophoric) adnominal, was observed in Section 4.3.1. Example (115) from that section is

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repeated here as (221) to illustrate the exophoric adnominal in an embedded relationship. The noun, hin^5 'stone', along with the plural, an^3-***nai***^{1} $khau^5$ are identified as a target, 'these stones'. Likewise, the noun, $heeun^4sing^5$ 'building' combines with an^3-nai^1 $khau^5$ to create another target, 'these buildings'. In (221), I include SPEAKER as an implied reference point because these are exophoric examples.[78]

(221) $tsau^2$ ooi^4 $liam^4$ tii^5khaa^2 ta^4 [(SPEAKER) [hin^5 an^3-***nai***^{1} $khau^5$]] [(SPEAKER)
  sir oh look POL OPT stone thing-this PL

  [$heeun^4sing^5$ an^3-***nai***^{1} $khau^5$]] $yaeu^5luun^5am^4luung^5$ tii^5khaa^2 $njiaa^4$
  building thing-this PL stunning POL Q

  'oh sir, look! aren't these stones, these buildings stunning?'

These two target expressions are exophoric usages, which equate to using the speaker as a reference. The exophoric adnominal is diagrammed as a reference-point construction in Figure 6.4. The deictic root, nai^1, is acting as a conceptual specifier and so it first sets up a relationship between the speaker, R, and the T objects. Next, an^3 identifies the full targets as hin^5 $khau^5$ 'stones', in (a), and $heen^4sing^5$ $khau^5$ 'buildings', in (b). Finally, nai^1 takes each T object and looks for its R, which is the speaker whose location helps to determine exactly which objects are being referred to. As for D, when the T objects are understood as *associated with* the R speaker, then T becomes construed as existing within the reference point's D or spatial proximity.

(a) 'these stones' (near speaker)   (b) 'these buildings' (near speaker)
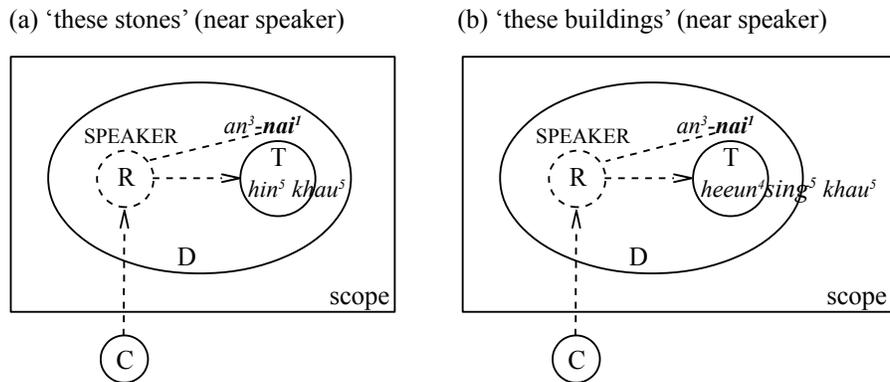
Figure 6.4. The semantic representation of *nai*^{1} in an EXOPHORIC ADNOMINAL RPC

78 Recall from Section 4.3.1 that the exophoric adnominal uses the pronominal form an^3-nai^1. For this reference-point construction, I am focusing on the description of the deictic root, nai. The an^3 component of the pronominal compound coreferences the head nouns, hin^5 'stone' and $heeun^4sing^5$ 'building'.

The exophoric examples in (221) show the speaker seeking to establish joint attention with the hearer in picking out specific stones and buildings in the speech context. The construction's underlying reference-point schema narrows down the search for these objects. One could think of the specific role of the specifier as a hypothetical dialogue between the speaker and hearer, as shown in (222), using 'these stones' from (221).

(222) Speaker: "*These*!" [a (vague) reference-point relationship *initiated*
                                            between speaker and some (plural) object]
          Hearer: "What, exactly?"
          Speaker: "These *stones*!" [T *identified*]
          Hearer: "Which stones?
          Speaker: (points to the stones) [T references R]

The lexical semantic representation of *nai¹* 'this'—a speaker-based deictic root—as an inherent reference point construction seems to be the motivation for *nai¹* to function as a conceptual *specifier* in an exophoric adnominal construction. Moreover, *nai¹* is an exophoric verbal pointer that can be extended for this function in many *endophoric* constructions (e.g. anaphor, discourse deictic and recognitional deictic). In the next section, I describe *nai¹* as a specifier in a select set of RPCs that arise from its anaphoric usage.

6.2.1 Reference-point constructions related to the anaphoric usage

The main difference between an exophoric and an endophoric usage pertains to whether the referent picked out is an object in the real world (*de re*) or one expressed in the discourse (*de dicto*). In this section, I show how the anaphoric adnominal (an endophoric pragmatic usage) is the basis for a set of RP constructions that select a nominal in the discourse as reference point.

In Section 4.3.3, I described the DEFINITE construction in which *nai¹* marks a nominal in the clause and indicates that the nominal was a previously established referent. The three-sentence stretch of discourse in (123) that I described as a DEFINITE construction is shown below as (223), and can be seen as a reference-point construction. The first sentence in this discourse, (223a), introduces the main

participant, *kaa⁴luung⁵* 'bus'. (223b) mentions this participant a second time with the hearer-based demonstrative, *kaa⁴luung⁵ a-maeu⁴* 'that bus'. The construction of immediate concern is the third mention in (223c) that uses *nai¹* to signal a reference-point relationship with the first mention in (223a). In this way, *kaa⁴luung⁵* 'bus' in (223a) is related to *kaa⁴luung⁵ nai¹* 'the bus', in (223c). I have tried to represent this conceptual situation with the relational bracketing in (223). I describe the relational bracketing of the DEFINITE construction of (223) as a reference-point construction in Figure 6.5. *Nai¹* serves as a specifier that sets up a relationship between two instances of *kaa⁴luung⁵* 'bus' and identifies the *nai¹*-marked instance in (223c) as T. The first mention is anchored to the current discourse space (CDS), which has the construction operating at the discourse level as a participant-tracking device. Conceptual processing proceeds from R to T, while back-referencing moves from T to R.

(223) a. [**Kaa⁴luung⁵** *an³* *leeung³* *yang⁴* *uu⁵* .
           bus   CLF   INDEF   be   IMPF
           'There is a bus.'

       b. *Kaa⁴luung⁵* *amaeu⁴* *yaa¹ kaa⁴* *an³ pai³* *meeung⁴ tii⁵* *kai³* *nam⁵* .
           bus   that   TOP vehicle   REL travel   city   IRR far   CONT
           'That bus is a vehicle that might travel far in the city.'

       c. *Kan²naeu⁴* [*kaa⁴luung⁵* **nai¹**]] *mai²* *kuun⁴* *nam⁵* *khii⁵* *kan³* *sii⁵* *kan²neeu⁵*
           inside   bus   DEF   LOC   person   plenty   ride   PROG   CONJ   above

           kaa⁴luung⁵ *mai²* *kaw¹* *kheeung³*   *nam⁵*   *taang⁵* *kan³* *uu⁵* .
           bus   LOC   also   belongings   plenty   place   PROG   IMPF
           'Plenty of people are riding inside the bus and plenty of belongings are also being placed above (the) bus.'
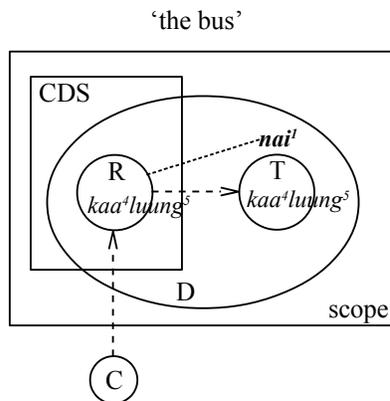
'the bus'

Figure 6.5. The semantic representation of *nai¹* in a DEFINITE RPC

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The composite interpretation of this reference-point construction features T, *kaa⁴luung⁵ nai¹* 'the bus', being understood as coreferential with R, *kaa⁴luung⁵* 'bus', which, by virtue of being a first mention in the text anchors it to the CDS. Any subsequent mention of *kaa⁴luung⁵* can be interpreted by R so long as R is maintained as a topic in the discourse. The extent of R being a discourse topic is commensurate with D (the reference point's dominion). The subsequent mention of *kaa⁴luung⁵* in (223c) uses *nai¹* to identify it as T and to point it back towards R for its interpretation. Because T is understood as associated with R it therefore becomes construed as existing within D. In this way, *kaa⁴luung⁵ nai¹* 'the bus' in (223c) "belongs to" *kaa⁴luung⁵* 'bus' in (223a). Moreover, because these two instances of *kaa⁴luung⁵*, in (223a and c), share the same referent—an anaphoric relationship—their interconnection is a strong one and the mental path highly discrete.

An important observation in the representation given in Figure 6.5 is the fact that instead of the speaker being accessed as an implied reference point, a nominal in the construction, *kaa⁴luung⁵*, is referenced. This shift in reference point within the *scope of predication* from a subjective speaker to a discourse nominal accounts for the demonstrative *nai¹* grammaticalizing as an endophoric construction. From here on out, I will simplify the diagrams by not showing the conceptualizers, C, or the scope of predication (as in the figures above). These descriptive elements are now assumed to part of the ongoing semantic diagrams of these *nai¹* grammaticalized constructions. What remains in the diagrams is the sequential arrangement between R and T, represented as a dashed arrow and the association or correspondence process from T to R, represented with the dotted correspondence line.

The next construction selected for exemplification as a reference-point construction is the Interrogative, which was exemplified in Section 4.3.6 with (137). Here it is repeated with relational bracketing in (224) which is intended to correspond with the diagram in Figure 6.6. The outer brackets concern R and its conceptual extent, D. The embedded brackets identify the *nai¹*-marked T. As a reference-point construction, the Interrogative was described as featuring two instances of *nai¹*. The first instance is a high-toned *nai⁵* that here becomes a conceptual specifier that construes *phaeu⁵* 'who' as R. This R is construed in relation

to an interrogative proposition, T, *khian*^{4} *yaeu*^{5} 'be.most big', that is identified by the specifier, *nai*^{1}. In this description, *nai*^{1} associates the T interrogative proposition with the R interrogative question word.

(224) [*phaeu*^{5}-***nai***^{5} [*khian*^{4} *yaeu*^{5} ***nai***^{1}]]
      who-Q   most   be.old Q
      lit. 'who-*this* be most big *this*?'
      'who is the oldest?'

'who is the oldest?'
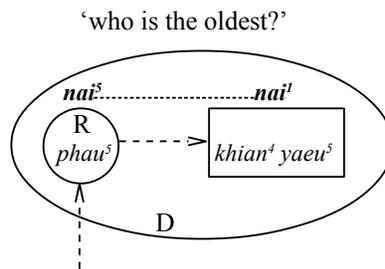
Figure 6.6. The semantic representation of *nai*^{1} in an INTERROGATIVE RPC

In Figure 6.6, the two instances of *nai* initiate an interrogative frame, represented with the dashed correspondence line between the two instances of *nai*. In this way, the interpretation of T, *khian*^{4} *yaeu*^{5} 'be.most big', is understandable only as it looks back to R, *phaeu*^{5} 'who'. Along these lines, the information T encodes *belongs to* the R interrogative and so, the diagram represents this as the T proposition residing inside the reference point's D.

      The final construction under consideration here that utilizes *nai*^{1} as an anaphoric demonstrative—one that refers to a textual *nominal*—is the BINARY COORDINATION construction which joins two nominals within a clause as a single compound argument of the verb. In this construction, the compound marker, *n-khaa*^{5}, features a reduced and highly grammaticalized *nai*^{1} component, *n-*, along with the dual pronoun, *khaa*^{5} '2DU'. In (225), which was previously mentioned as (145), a reduced *nai*^{1} acts as a connector between two nominals by linking the second nominal, *yaa*^{5} 'grandma' *in reference to* the first, *puu*^{5} 'grandpa'. This relational situation is conveyed in the literal translation, 'grandpa, *this* and grandma, *you two*'. I diagram the relational configuration in (225) as Figure 6.7.

(225) [*puu⁵* [*n-khaa⁵* *yaa⁵*]] *nai¹* *kaw¹* *man⁴* *mai²* *haak¹* *luung⁵* *nai¹sii⁵*
grandpa CRD.BIN grandma DEF also 3SG F.OBJ love big REAS.and

see⁴khaam⁵ *sii⁵uu⁵* *uu⁵*
patient PROG IMPF

lit. 'grandpa, *this* and grandma, *you two'*
'because *both* the grandpa and grandma also really love him, (they) are being patient'

'grandpa *and* grandma'
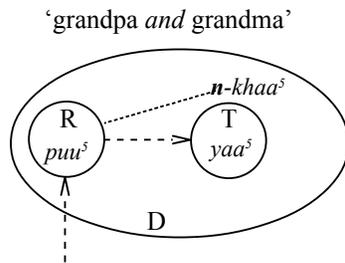
Figure 6.7. The semantic representation of *nai¹* in a BINARY COORDINATION RPC

In Figure 6.7, *nai¹* first triggers a relationship between two nominals, *puu⁵* 'grandpa' and *yaa⁵* 'grandma'. Then, *nai¹* identifies *yaa⁵* as T, while pointing to R, *puu⁵*. As part of T, the second dual pronoun, *khaa⁵* 'you two', adds a notion of the compounding being delimited to two and only two participants.

In this section, certain endophoric constructions with an anaphoric force have been described as reference-point constructions. In these reference-point constructions, *nai¹* is observed as the central linking component. Moreover, it seems to be the case that *nai¹* takes its pointing function from its use as a speaker-based deictic and uses it to (anaphorically) reference nominals within the discourse.

In Chapter 4, *nai¹* was also described as a pointer to a *proposition* in a discourse in its role as a discourse deictic. I show how *nai¹*, as a discourse deictic, is also a specifier for reference-point constructions pertaining to propositions next.

6.2.2 Reference-point constructions related to the discourse deictic usage

In the previous section, I discussed a set of reference-point constructions that are centered around an *anaphoric* usage of *nai¹* as a conceptual specifier. The central idea of an anaphoric usage is that *nai¹* becomes an indicator of a *nominal* in the text, rather than a pointer towards an object in the real world. In this section, I provide a semantic

description of the conceptual specifier *nai¹* when it occurs in reference-point constructions that follow its *discourse deictic* usage, as presented in Sections 4.4 – 4.10.

Section 4.4 advanced the analysis of an entire set of Khamti constructions that stem from a discourse deictic usage of *nai¹*. A discourse deictic points to a *proposition*, rather than a nominal. When two linguistic items (either a noun or a proposition) are juxtaposed, they can become relational constructions. The majority of constructions that I describe in this dissertation can be categorized as noun-conoun constructions with the template, [NOUN][CONOUN]. However, the discourse deictic usage of *nai¹* concerns constructions that extend beyond the noun-conoun complex and include juxtaposed propositions, as well. These paratactic constructions were analyzed in Chapter 4 as proposition-proposition groupings. In the cases to be described in this section, the juxtaposition grouping is realized conceptually as an embedded template, [PROPOSITION [PROPOSITION]] in which the first proposition is a reference point and the second proposition is a nested target that aligns with the reference-point schema, [R [T]]_D. When two linguistic items (noun or proposition) are juxtaposed there is a potential to make an inference from the arrangement. In other words, when the grammar brings together two propositions, they sometimes can be seen as forming a relationship that results in a composite meaning. The kinds of constructional meanings that arise at a propositional level from a demonstrative might be expected to involve complement clauses, adverbial clauses, quotations, sentential pragmatic markers, and various sentence connectives. These are the *nai¹*-based constructions that have been analyzed in Sections 4.4 to 4.10 that will now be described as reference point constructions.

There are two DISCOURSE DEICTIC constructions that invite explicit semantic description as reference-point constructions. The first one functions in the normal manner with *nai¹* marking the target and looking back for a reference point. This is shown relationally with the discourse deictic example in (149), which is rewritten here as (226). The discourse deictic, *an³-nai¹* 'this', in the sentence in (226), identifies the proposition of the entire sentence as an embedded target. The outer brackets in (226) are meant to convey the reference point, which is a set of previous propositions

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(not shown in the example, but represented with the ellipsis. ...).[79] The embedded target sentence, which is the sentence in (226), relates to the previous reference paragraph, (...).

(226) [... [*an³-**nai¹** yaa¹ wuung³kaang³ man⁴ nakhaa⁵ kau³ mai² lak¹ nai¹ nam⁵*]]
        one-DISC TOP between   3SG and   1SG STD different DEF COP
        'this (lit. 'this one') is the difference between she and me'

This construction is described as a reference-point construction in Figure 6.8 in which the deictic root, *nai¹*, functions as a conceptual specifier that establishes a relationship between two juxtaposed entities (propositions encoded by sentences). In the diagram, *nai¹* identifies the T proposition and looks for an R proposition (or paragraph) as a kind of discourse topic. Once T "finds" the R proposition it can then be interpreted in light of it. This R proposition is anchored to the CDS and provides an interpretive context, domain, or dominion, D, in which to associate and comprehend a T proposition.

… 'this is the difference between she and me'
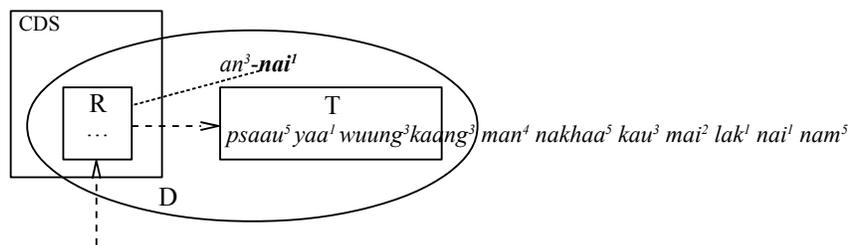
Figure 6.8. The representation of *nai¹* in a back-referencing DISCOURSE DEICTIC RPC

What is important to notice regarding a *back-referencing* DISCOURSE DEICTIC RPC is that referencing is a function of *nai¹* as a *pointer* to a previously mentioned reference point. In this way, the back-referencing function of the DISCOURSE DEICTIC RPC is diagrammed in Figure 6.8 as the dotted correspondence line that associates a *nai¹* T with R. This is not to be confused with the processing access which always traces a

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79 Specifically, the preceding sentences express how a sister is lazier, less intelligent, and more dependent on Mother than the speaker.

mental path from the prominent entity R to the less prominent entity T (cf. Section 6.1). This is an important point because the discourse deictic has a second manifestation as a *forward-referencing* pointer, as well.

The forward-referencing DISCOURSE DEICTIC RPC concerns the reverse situation for a discourse deictic and is shown with (150), rewritten here as (227). In this two-sentence discourse span, the initial sentence expresses the embedded target proposition, as indicated with the initial embedded brackets. However, this is then followed by the proposition encoded by the second sentence, which becomes the reference point resulting in a reversed T > R linear alignment. In this construction, the target comes first followed by the reference point.

(227) [[*sin⁵   an³   khian⁴   yaeu⁵   nai¹   yaa¹   an³-**nai¹**   nam⁵*] . *tsau²   thaa⁵wa⁵ra⁵*
       precept   ADJ   most   big   DEF   TOP   one-this   COP   lord   eternal

       pha⁵raa⁴   yaa¹   tsau²   pha⁵raa⁴   suu⁵   liau³   nam⁵]
       god   TOP   lord   god   2PL   only   EQU

       'The most important precept is this. The lord eternal God is your only god.'

The forward-referencing DISCOURSE DEICTIC RPC in (227) is diagrammed in Figure 6.9 in which *nai¹* first sets up a potential relationship with another juxtaposed —in this case, postposed—element in the discourse. However, T, in this construction, is the first item grounded to the CDS by virtue of coming first in the sequence of related sentences. *Nai¹*, then, identifies the T proposition as such. In this construction, however, as *nai¹* looks for R with which to be interpreted, it finds it in the subsequent, rather than previous, proposition in the discourse. This is an unusual situation, but the postposed proposition is still construed as R because it provides a reasonable context for T's felicity. In this scenario, T, which is the relational entity first anchored to the CDS, gives way to R, creating an *anticipation* for it. At a pragmatic level, the hearer awaits the R proposition and therefore infers its content as suspenseful. In Figure 6.9, I show the pragmatic effect of suspense by profiling R.[80] The forward-referencing function is still accomplished with *nai¹*, because *nai¹* is the pointer to R. This is

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80 In CG diagrams, profiling is a convention used to make *prominent* a certain facet of the overall meaning (i.e. a *thing* or *relation*). In Figure 6.9, I am using the profiling convention in a non-standard way to establish a degree of overall pragmatic effect, which happens also to be a degree of prominence, though a *pragmatic* rather than a *semantic* one.

represented, once again, with the same dotted correspondence line between the *nai¹*-marked T and its R. What distinguishes the back-referencing DISCOURSE DEICTIC in Figure 6.8 above with the forward-referencing DISCOURSE DEICTIC here in Figure 6.9 is the direction of processing access. Processing access always proceeds from the more prominent entity R to the less prominent T (cf. Section 6.1). This is shown in Figure 6.9 with the mental path dashed arrows leading from R to T, suggesting that R is a necessary context—and thus, more conceptually salient and enduring—for interpreting T, regardless of their sequential arrangement.

'The precept that is most important is this. The lord eternal God is your only god.'
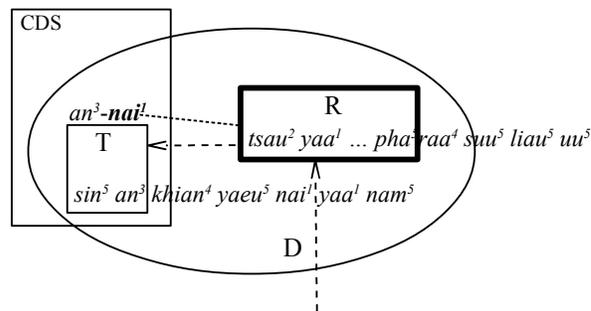
Figure 6.9. The representation of *nai¹* in a forward-referencing DISCOURSE DEICTIC RPC

The pragmatic effect that is achieved with the forward-referencing DISCOURSE DEICTIC RPC is mirrored with the conceptual effect in the T-R relationship. In other words, the reversed reference-point configuration that underlies the syntactic arrangement motivates the emphatic effect of anticipation that is placed on the R proposition.

A similar conclusion is provided by Karen van Hoek for reference-point constructions pertaining to English backward anaphora in which the antecedent actually follows its pronoun in a sentence such as *Even **his** admirers admit that **Mandela** is no miracle worker.* Van Hoek suggests that with the reverse reference-point configuration, a conception of *Mandela* is actually foregrounded in the overall construction, providing this antecedent with a more prominent construal than the backgrounded conception containing the pronoun *his* (van Hoek 1997: 118-119; see

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also Mittwoch 1983). The predominant situation for English anaphora, with the antecedent usually preceding the pronoun (i.e. *Even **Mandela's** admirers admit that **he** is no miracle worker*), obtains no prominence construal (i.e. no anticipatory effect) within the overall reference-point construction, whereas backwards anaphora does.

Proceeding from the discourse deictic construction is a grouping of extensions that describe dependent clauses, namely the COMPLEMENT, QUOTATIVE, and ADVERBIAL constructions. These constructions were previously analyzed in Sections 4.5-4.7 and are described as reference-point constructions in what follows.

An example of the COMPLEMENT reference-point construction is shown in (228), presented previously as (152). The initial clause, *tang⁴ man⁴ uu⁵* '(I) live with her' is the complement of the main clause, *kau³ piuu⁵ uu⁵* 'I am happy'. Descriptively, as a COMPLEMENT construction, *nai¹* serves as a morphosyntactic marker of the complement. However, as a COMPLEMENT reference-point construction, *nai¹* follows a different role as a conceptual specifier. This is shown with the re-bracketing of the sentence from a COMPLEMENT juxtapositional arrangement in (152) to that of a relational construction in (228). *Nai¹* first activates a relationship between a reference (subordinate) clause and an embedded target (main) clause. The relational bracketing in (228) mirrors the representation in Figure 6.10.

(228) [*tang⁴   man⁴ uu⁵* [***nai¹***   *kau³ piuu⁵*   *uu⁵*]]
     with   3SG live COMPL 1SG be.happy IMPF
     lit' 'I live with her, this I am happy (about)'
     '(I) am happy that (I) live with her'

'I'm happy *that* I live with her'
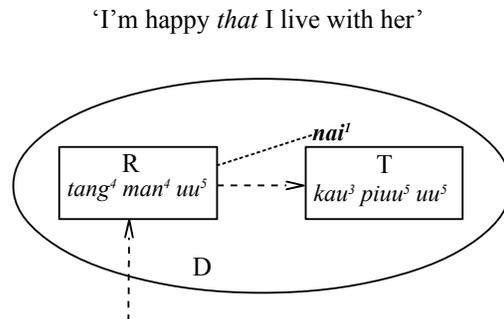
Figure 6.10. The semantic representation of *nai¹* in a COMPLEMENT RPC

The initial clause, *tang⁴ man⁴ uu⁵* '(I) live with her' is construed as R and the subsequent clause, *kau³ piuu⁵ uu⁵* 'I am happy' is construed as T. The specifier, *nai¹*, identifies T and looks for R in order to interpret '(I) am happy *about*'. *Nai¹*, then, is the central component that links T with R. Apart from R, the T proposition, with the literal *nai¹* 'this', is conceptually inaccessible and syntactically odd. The complement reference-point construction in Figure 6.10 is intended to reflect the literal translation of (228): '(I) live with her, *this* I am happy about'.

　　Next, I describe as a reference-point construction the simple direct QUOTATIVE in which *nai¹* functions as the crucial component of a compound quotation marker (see Section 4.6). For the simple direct QUOTATIVE, I take example (160) that was discussed previously and show it here as a relational construction in (229). The quotative marker, *n-wan¹* '*this* (he) says', is embedded within an initial reference quotation. The nested quotation marker, *n-wan¹*, is construed as T and the quotation itself is construed as R. This relational arrangement is diagrammed in Figure 6.11. The T predication, *n-wan¹* '*this* (he) says', is infelicitous on its own and requires an R quotation in order to interpret what 'this' refers to.

(229) [“*maeu⁴　kuun⁴　　an³　nii³　　　nam⁵　nnai¹　kau³　nuu³naa²nuu³taa³　sii⁵　naai³*
　　　　2SG　　person　REL　be.good　EMPH　COMPL　1SG　appearance　　　　CONJ　only

　　　kau³　tuang⁴　uu⁵ ” [***n-wan¹***]]
　　　1SG　know　IMPF　QT-say

　　lit. ' “I also know that you are a good person, only of your appearance,” *this* (he) says.'
　　'(He) says, “I also know that you are a good person, only (because) of your appearance.”'

　　' (He says, “I also know that you are a good person …,” '
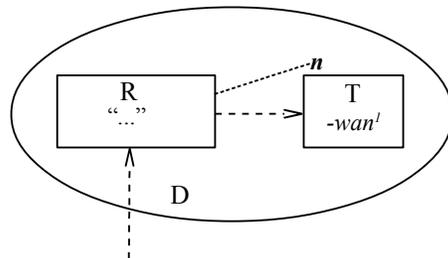
Figure 6.11. The semantic representation of *nai¹* in a simple direct QUOTATIVE RPC

The ADVERBIAL constructions that utilize *nai¹* as an adverbial marker were analyzed in Section 4.7. Here, I analyze two of these constructions, the TEMPORAL and REASON constructions as reference-point constructions. The first includes an overt adverbial marker of the reference point, while the second one does not.

The description of the TEMPORAL construction centered around example (166). This example is rewritten here with conceptual bracketing as (230). Generally speaking, *nai¹* is seen as establishing a relationship between two entities: an initial *subordinate* state of affairs (SoA) and a subsequent *nai¹*-marked *main* SoA. In relational terms, the main SoA is the embedded target located within the reference subordinate SoA.[81] Conceptually, when two SoAs are juxtaposed, the second SoA (the main clause) is considered to be a proposition that requires an initial reference SoA (a subordinate clause) for its interpretation. Specifically, in (230), the subsequent SoA, *nai¹ paan³ leeung³ wai¹ uu⁵* 'this, plow the field for the first time', becomes the target and is asking for a reference *time* (the adverbial SoA) in which to carry out the main event of plowing. The reference time is explicitly signaled by the adverbial, *meeu³* 'time'. In (230) the initial reference SoA provides the appropriate interpretive context for understanding the embedded target SoA.

(230) [***meeu³*** *neeun³ saam⁵ phuun⁵ tuuk⁵* [***nai¹*** *paan³ leeung³ pheeun⁵ wai¹ uu⁵*]]
　　　 time　 month　three　 rain　 fall　 ADV　 interval　one　 plow　　DUR　 IMPF
　　　 lit. 'the time of the third month rains, (at) *this* (time), plow (the field) for the first time.'
　　　 'when the third month rains come, plow (the field) for the first time.

The second adverbial construction that I have chosen to exemplify as a reference-point construction is the REASON construction described previously as (168) and shown here as a conceptual relationship in (231). This adverbial construction does not include an overt marker that signals the reference point. Instead, the meaning is inferred merely from the juxtaposition of a subordinate and main SoA. The compound, *nai¹-sii⁵* 'ADV-and', identifies in the customary fashion the target SoA (a main clause), *see⁴khaam⁵ sii⁵uu⁵ uu⁵* '(they) are being patient'. This main SoA target is embedded within an initial reference SoA, *puu⁵ nkhaa⁵ yaa⁵ nai¹ kaw¹ man⁴*

81　This is the same conceptual configuration as the COMPLEMENT reference-point construction that was just presented in (229) above.

mai² haak¹ luung⁵ 'the grandma and grandpa also really love him'. This asymmetrical arrangement is shown with embedded bracketing.

(231) [*puu⁵ n-khaa⁵ yaa⁵   nai¹ kaw¹ man⁴ mai²   haak¹ luung⁵* [***nai¹-sii⁵***
     grandpa CNT.DU grandma DEF also 3SG F.OBJ love big ADV-and

    see⁴khaam⁵   sii⁵uu⁵ uu⁵]]
    patient   PROG   IMPF
   lit. 'grandpa and grandma also really love him, *this* (reason) *and* (the result is), (they)
     are being patient'
   'because grandpa and grandma also really love him, (they) are being patient'

The compound specifier, *nai¹-sii⁵*, signals that its identified target, '(they) are being patient', expresses a result. This result, then, calls for a reference *reason*, 'the grandma and grandpa also really love him', for its full interpretation.

    The TEMPORAL and REASON constructions are diagrammed as reference-point constructions in Figure 6.12. Primarily, the specifier, *nai¹*, establishes asymmetrical relationships between two juxtaposed entities and identifies any T in those relationships. As a specifier, *nai¹* looks for and points T back to R. In the temporal example in (a), R features its own explicit specifier, *meeu³* 'time', which identifies R and signals it as expressing a temporal context within which to situate a T proposition. In this way, the *nai¹* target specifier corresponds with the *meeu³* reference point specifier and establishes a temporal conception.

(a) TEMPORAL   (b) REASON
   '(at) *this* (time)...'   '*this* (reason) *and* (the result is) ...'
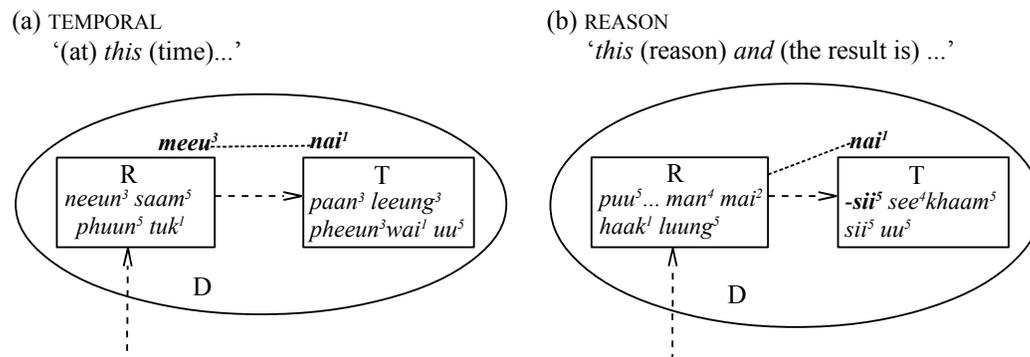
Figure 6.12. The semantic representation of *nai¹* in TEMPORAL and REASON RPCs

With the adverbial construction in (b), the initial subordinate SoA, which is construed as R is not marked with an explicit specifier. Rather, R is inferred as the reason

because the component *sii⁵* 'and' which is associated with the target proposition signals the target as a result, '*and* (they) are being patient'. *Sii⁵* is diagrammed as located inside of the actual proposition (rectangle) because it accounts for T being the result. This *sii⁵*-marked result SoA is infelicitous on its own and so the component *nai¹* directs the full target proposition back to an initial reference proposition as the reason. In other words, the subsequent pronominal *nai¹* proposition is anaphoric with the initial proposition and thus, relates back to it. In each example, R and T correspond (the dotted lines) linking a *nai¹* identified T with an R. The diagrams are intended to illustrate the literal translations, 'the time of the third month rains, (at) *this* (time), plow (the field) for the first time.' and 'grandpa and grandma also really love him, *this* (reason) *and* (the result is), (they) are being patient', respectively.

The next two constructions show *nai¹* functioning as a sentence-final emphatic marker. One of the constructions includes a focused element, a *nam⁵* phrase, within the sentence, while the other construction does not. These two constructions were described in Section 4.9, in which I analyzed *nai¹* as evolving into a sentence-final marker that imposes a pragmatic emphasis over the proposition of the sentence.

The first construction includes a phrase within the sentence that carries an additional level of emphatic focus. The example is from (173) which is rewritten here with conceptual bracketing as (232). In this example, *nai¹* comprises the full target that associates a pragmatic emphasis to the reference sentence. The target is therefore an embedded aspect of the full reference sentence. *Nam⁵* is a marker within the construction that highlights the phrase, *tang⁴ mee⁵ naai³* 'with only mother', with a *particular focus* within the overall emphatic sentence.

(232) [***tang⁴ mee⁵   naai³ nam⁵***   *uu⁵   maa⁴* [***nai¹***]]
       with   mother only FOC   live   PRF   EMPH
       lit. '(she) had lived **with only mother**, *this*'
       '(she) had lived **with only mother** !'

In (233), which was previously (175), *nai¹* is the target that expresses emphasis on the reference sentence. In this example, however, there is no portion of the sentence that is in *particular focus* (i.e. no *nam⁵*-marked phrase). In this case, *nai¹* as a sentence-final marker, sets up a relationship between the complete reference

proposition encoded by the sentence and a pragmatic emphasis imposed on that proposition.

(233) [*amaeu⁴ saa⁴ maeu⁴ mai² au³ sian² [**nai¹**]]
     that   CERT 2SG   CAUS make be.pretty EMPH
     lit. 'that makes you pretty, *this*'
     'that makes you pretty !'

The two emphatic constructions in (232) and (233) are diagrammed in Figure 6.13(a) and (b). As a conceptual specifier, *nai¹* identifies T, which is the sentence-final *nai¹*, by itself. T carries with it a sentence-final pragmatic emphasis which is then referenced with R, the full sentence, for the purpose of making the R proposition emphatic. Emphasis is shown by profiling R.[82] The FOCUSED EMPHATIC SENTENCE construction in diagram (a) has a phrase that obtains further focus by use of the marker, *nam⁵* (shown in boldface type), whereas the EMPHATIC SENTENCE in (b) does not.

(a) FOCUSED EMPHATIC SENTENCE
    '(she) had lived **with only mother**, *this*'

(b) EMPHATIC SENTENCE
    'that makes you pretty, *this*'
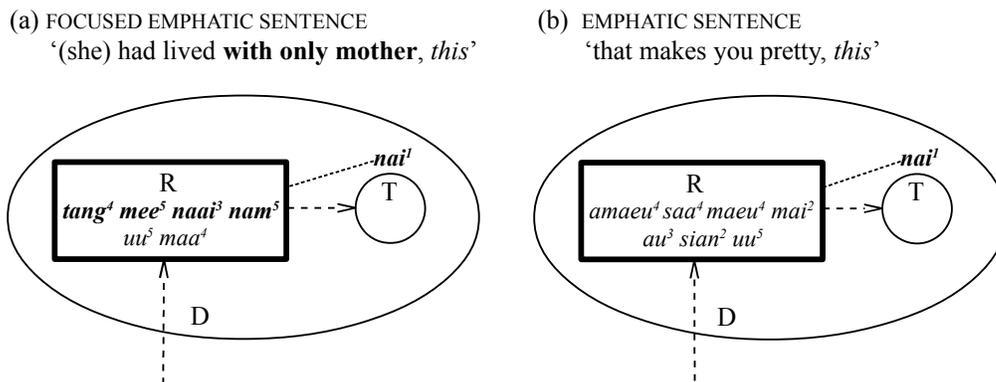
Figure 6.13. The semantic representation of *nai¹* in EMPHATIC SENTENCE RPCs

The constructions in which *nai¹* functions as a sentence-final marker of emphasis lead to a set of sentence CONNECTIVE constructions. The first of these connectives is a SIMPLE TEMPORAL SUCCESSIVE, shown in (234), which was previously seen in (178). The proposition of the first sentence is conceptualized as occurring prior to the proposition of the second sentence. This construction uses a

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82 The profiling of R in Figure 6.13 concerns a pragmatic *prominence* rather than a semantic one, which is the usual profiling convention in CG diagrams.

compound connector, *nai^{1}mai^2* 'CNT.LOC', at the beginning of the second sentence in order to connect it with the preceding sentence. The relational bracketing in (234) shows that the first sentence is construed as the reference point and the second sentence—beginning with the specifier *nai^1-mai^2*—is construed as the embedded target. In this way, two juxtaposed sentences are now shown to relate to each other in an asymmetrical, successive fashion. The relational brackets are intended to show that the second sentence is to be interpreted in light of the first, as following temporally from it.

(234) [*phuu^{2}tsaeu^1 amaeu^4 uak^5 kaa^5 kii^4 phuu^{2}tai^{4}koo^1 man^4 an^3 man^4 mai^2 nii^2*
     servant   that   exit   AND   when   friend   3SG   REL   3SG   F.OBJ   sum

    tsuan^3 tki^5 leeung^3 ma^1 mai^2 nyiaa^4 uu^5 . [**nai^1-mai^2** *man^4 yaa^1 tai^{4}koo^1*
    little   tiny   INDEF   borrow   F.OBJ   meet   IMPF   CNT.LOC   3SG   TOP   friend

    amaeu^4 mip^{5}khoo^4 sii^5 nii^2 kau^3 saai^2 ma^1 n-sii^5 waa^3 uu^5 .]]
    that   choke   and   sum   1SG   pay.back   borrow   QT-thus   say   IMPF

    'When that servant went away, (he) meets his friend who borrowed a tiny little sum. *Then* (lit. *at this*), he choked that friend and thus said, "pay back my sum." '

    The SIMPLE TEMPORAL SUCCESSIVE construction in (234) is described as a reference-point construction in Figure 6.14. The compound specifier, *nai^1-mai^2* 'at this', identifies the second sentence as T and points back to the first sentence, which is construed as R.

'When that servant went away … *Then* (lit. *at this*), he choked that friend ... '
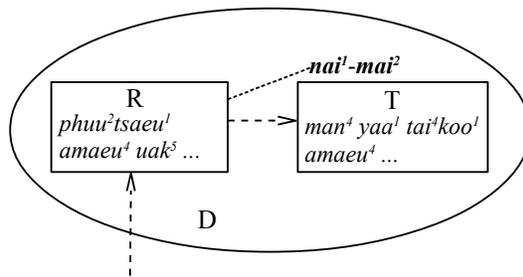
Figure 6.14. The semantic representation of *nai^1* in a SIMPLE TEMPORAL SUCCESSIVE RPC

Specifically, *nai^1* points to R, while *mai^2* 'at' imposes a locative metaphorical inference on R. In this case, the R proposition exhibits a D location, a contextual

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space, within which the T proposition is metaphorically located. The inference is one of temporal succession. *Mai²* is diagrammed outside of T because it references R as a location (and not T).[83]

The INTENTIONAL TEMPORAL SUCCESSIVE construction, described in Section 4.10, features a different connective, *ngai⁴-nai¹* 'and-CNT'. This was first described with example (179), which I show here in (235) as a reference-point construction. In this construction, the specifier, *ngai⁴-nai¹* identifies the initial proposition as the embedded target. However, because the target comes first in the linear sequence of the discourse span, the specifier, *ngai⁴-nai¹*, is conceptually aligned with the preceding target proposition (regardless of the sentential break observed with the final copular particle, *nam⁵*).

(235) [[*paa³sa²njee¹ nai¹ naeu⁴ paa³ mai² an³ khian⁴ kin³nii³ nam⁵ . **ngai⁴-nai¹**]
       eel   DEF   among fish LOC   one most   delicious COP   and.CNT

       tai⁴koo¹ kau³ khaa² wan⁴ leeung³ paa³san²njee¹ amaeu⁴ mai² kaa⁵ siau² uu⁵ .]
       friend   1SG   POL   day   one   eel   that   F.OBJ go   capture IMPF

       'The eel, of all fish, is the most delicious. *And so*, my friend, one day, went to capture that eel'

The INTENTIONAL TEMPORAL SUCCESSIVE RPC is diagrammed in Figure 6.15. The specifier, *ngai⁴-nai¹*, serves to identify T as the initial sentence and point ahead to R as the succeeding sentence. In this way, T anticipates R. This anticipation is inferred as the R proposition being more intentional than the T proposition. R is thus conceptualized as a result of T, rather than as mere temporal succession. The counter-expectation of an initial T followed by its R, in Figure 6.15, achieves a *pragmatic* prominence imposed on the R proposition. I diagram this prominence as a profiled proposition.

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83 This analysis of *mai²* is in keeping with the analysis in Section 6.3.1 in which *mai²* 'at' is analyzed as a conceptual specifier that directly references an R location.

'The eel, of all fish, is the most delicious. *And so*, my friend, one day, went to capture that eel'
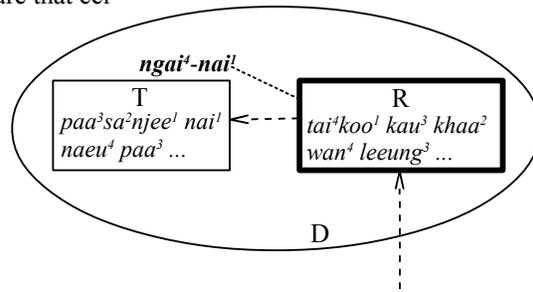
Figure 6.15. The representation of *nai¹* in an INTENTIONAL TEMPORAL SUCCESSIVE RPC

A final point to consider in Figure 6.15 is that the processing access always proceeds from the most salient proposition, R, to the less prominent proposition, T. This is represented in the diagram with the mental pathway shown as dashed arrows proceeding to R and then to T. The referencing function, then, is an aspect of the *nai¹* component which always points to its R. In the case of the INTENTIONAL TEMPORAL SUCCESSIVE, this is a forward-referencing conception in which target proposition looks ahead to a reference proposition (the dotted correspondence line from *nai¹* to R.

This section started with an understanding of the discourse deictic usage of the demonstrative *nai¹*. With this usage, *nai¹* is a pointer to a textual *proposition* which shows up within a single sentence (complements, adverbials, and emphatic sentences) and also with propositions encoded across several sentences (a quotative and sentence connectives). When these constructions—ones which concern a generalized embedded template, [proposition [proposition]]—are described semantically, *nai¹* is seen to function as a specifier that points to a reference proposition and in so doing, creates a nested relationship between juxtaposed propositions.

There is one other endophoric usage that *nai¹* participates in. This is the recognitional usage in which *nai¹* acts as a conceptual specifier that "points to" an aspect of *shared knowledge*. I describe the recognitional deictic as a reference-point construction next.

6.2.3 The recognitional usage of nai[1] *as a reference-point construction*

The final construction described in Chapter 4 was that which uses *nai¹* 'RECG' as a RECOGNITIONAL DEICTIC. This construction, described previously with example (182) in Section 4.11, is shown below as (236). The nominal, *phii⁵hai¹phii⁵huk¹* 'bad spirits', is marked with *nai¹*, but does not refer to any previous instance in the discourse. Instead, *nai¹* acts as a recognitional marker that relates the nominal to an aspect of SHARED KNOWLEDGE between the *speaker* and *hearer*. In (236), SK does not refer to a linguistic item in the sentence but rather to the conceptual notion of SHARED KNOWLEDGE, which is an aspect of cognition that is serving as a reference point.

(236) *ngai⁴-sii⁵ meeu⁴ kii⁴ yaa¹ paa⁵tsa¹ mai² mau⁵ win⁵   puak¹ meeu⁴ nam⁵ .*
     and.then return when TOP grave ALL NEG crane.neck again back EMPH

       *hleu⁵sii⁵nai⁵nkii⁴ paa⁵tsa¹ mai² yaa¹ [SK [phii⁵hai¹phii⁵huk¹ **nai¹** khau⁵]] yang⁴ uu⁵ .*
       because   grave LOC TOP   bad.spirit   RECG PL   be   IMPF

       'And then, when (they) are returning, (they) don't crane (their) necks back again to the grave. Because (they) are afraid there are *the* bad spirits at the grave.'

The example in (236) is described as a reference-point construction in Figure 6.16. I show the nominal, *phii⁵hai¹phii⁵huk¹* 'bad spirits', as T, which is embedded within an R concept (i.e a non-linguistic element) of *phii⁵hai¹phii⁵huk¹*. Because R represents a concept that is not verbalized, it is shown with a dashed circle. The specifier *nai¹*, then, identifies the nominal *phii⁵hai¹phii⁵huk¹* as T and looks for its R concept in order to fully understand it. In this case, the pool of the SHARED KNOWLEDGE surrounding bad spirits is construed as the reference concept's dominion, D.
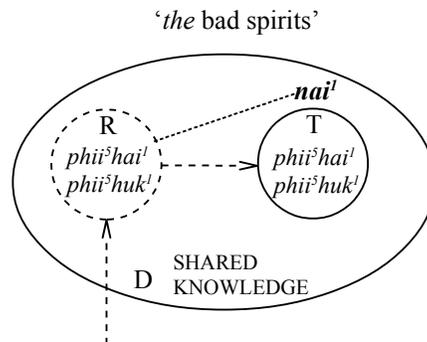
Figure 6.16. The semantic representation of *nai¹* in a RECOGNITIONAL RPC

To summarize Section 6.3, the exophoric and endophoric extensions of the demonstrative, *nai¹* 'this', result in a variety of constructions that are first observed in noun-conoun pairings, but then generalize to proposition-proposition pairings. With noun-conoun constructions, *nai¹* is a conoun that is anaphoric with a previous nominal in the text. With the proposition-proposition constructions, *nai¹* is a marker that is conceptually aligned with the target and then points that target to a reference proposition in the discourse. *Nai¹* also plays a central role as a deictic "pointer" in a RECOGNITIONAL construction. In this construction, *nai¹* serves as a pointer to a referent that is part of the shared knowledge between the speaker and hearer. A semantic description of *nai¹* as a basic morpheme meaning something like, 'this (near speaker)', has been shown to be significant for regarding *nai¹* as a conceptual specifier in all of its extended constructions. Similar to *nai¹*, lexical *mai²* 'here' implies or "points to" the speaker for a reference. This pointing function of *mai²* is exploited in a large cross-section of the previously described noun-conoun constructions in this dissertation. These constructions have been presented in Chapter 5 and, in the next section, are advanced as reference-point constructions.

6.3 Reference-point constructions with *mai²*

In Chapter 5, I listed the many noun-conoun pairings that arise in constructions from the grammaticalization of the spatial deictic, *mai²* 'here'. These nominal constructions were shown to consist of a head noun juxtaposed to the plain conoun, *mai²*, and described with the constructional template, [NOUN][CONOUN]. With this template, the conoun was simply *mai²* and was analyzed as a grammatical marker of the noun. In this section, I analyze these *mai²*-marked constructions as reference-point constructions in which the noun and conoun form a nested conceptual relationship, [NOUN [CONOUN]]. Along these lines, the noun, which is construed as a reference point and the conoun, which is construed as a target, follow the conceptual asymmetry expressed in the reference-point template, $[R [T]]_D$. The outer brackets of R circumscribe its dominion. When T is nested inside D, it is understood as associated with R. In Chapter 5, the conoun, *mai²*, was described as evolving into a

nominal marker for a wide-variety of nominal constructions: LOCATIVE, ALLATIVE, RECIPIENT, BENEFICIARY, and so forth. The analysis showed *mai²* extending in function mostly due to the constructional context. Thus, for example, *mai²* was observed as a LOCATIVE marker in the context of an *existence* verb, but as an ALLATIVE marker with certain verbs of *motion*. In *mai²*-based reference-point constructions, the context that is used to help determine the role of *mai²* as a conceptual specifier is included *as part of the target*. Moreover, *mai²* plays a central role in triggering a relationship between R and T, identifying the target as the *full constructional context* of the construction, and then taking T and pointing it back to R. Along these lines, the target conception receives its interpretation only in respect to the reference nominal.

The basic ostensive use of lexical *mai²* was described in Section 5.2 with the examples of *mai²* as a single response utterance in (185B), which is rewritten here as (237). The ostensive use of *mai²* was also described as the location for an event, in (187), which is given here as (238). In both examples, *mai²* expresses a location using the *speaker* as the reference point.

(237)   [SPEAKER   [**mai²**]]
                              here
          'here' (pointing to a man in a picture)

(238)   [SPEAKER   [**mai²** *pying⁴   nai¹   mau⁵yaan⁵mau⁵yaan⁵   maa⁴   uu⁵*]]
                              here   woman DEF often   come   IMPF
          'the woman often comes here'

In (237), *mai²* 'here' is a locational predication designed to narrow down the search for an object. The role of *mai²*, therefore, is to establish joint attention to a location in the speech situation for the purpose of locating an object. The speaker's location thus offers the initial search region for attending to an object in the speech situation.

The single utterance, *mai²*, in (237), is diagrammed in Figure 6.17(a). *Mai²* establishes a relationship of spatial proximity between a real-world object and the speaker. In this relationship, *mai²* identifies the object which is construed as T, and references the location of T in relation to the speaker, which is construed as R. Additionally, the speaker's spatial vicinity is construed as its dominion, D. In this

arrangement, T can be found to exist within D.[84] In other words, interlocutors want to communicate *about* an object that is *near the speaker*. With this conceptual description, the speaker is construed as a cognitive *ground* and the object as a cognitive *figure*.

(a) as a single, simple utterance   (b) as an adverb
  '*here*' (pointing with a finger)   'the woman often comes *here*'

Figure 6.17. The semantic representation of *mai²* 'here' as a basic ostensive lexical deictic

When *mai²* is used as an adverb, as in (238), the event, *mai² pying⁴ nai¹ mau⁵yaan⁵mau⁵yaan⁵ maa⁴ uu⁵* 'the woman often comes here', becomes the target proposition in relation to the speaker's location. The example in (238) is diagrammed in Figure 6.17(b) in which *mai²* triggers a relationship between the conceived event and its location. *Mai²* identifies the event as T and then references it to the speaker, R. The speaker's *location* is then construed as a *search area*, D, within which the event, T, unfolds.

More generally, the diagrams in Figure 6.17 show the speaker as included in the *scope* of predication because the speaker is an implied part of the meaning. In this case, the speaker is construed as a cognitive reference point and so, lexical *mai²* is a reference-point construction. The following sections, organized according to the semantic domains discussed in Chapter 5, take the *mai²* constructions and analyze them as reference-point constructions based on the characterization of lexical *mai²* that I have proposed here.

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84   A subsequent gesture (finger pointing) can further be used to pinpoint T within the search domain anchored by the speaker who functions as R.

6.3.1 Reference-point constructions in a spatio-temporal domain

In Chapter 5, I demonstrated how *mai²* extends in function as a marker in a variety of nominal constructions. As a nominal marker, *mai²* has pragmatically shifted from identifying a real world, *de re*, location to identifying a discourse, *de dicto*, location. These *de dicto* constructions were analyzed as spatio-temporals and are here described conceptually as reference-point constructions. Instead of using the speaker as a reference point, a nominal in the discourse becomes the reference point. I argue that because *mai²*, as a lexical item, starts out as a reference-point construction, as described in Figure 6.17, it can then extend as a conceptual specifier in *de dicto* reference-point constructions.

I start with the semantic description of *mai²* as a conceptual specifier for a LOCATIVE reference-point construction that subsequently extends to other locative-based constructions. The LOCATIVE construction from (188), in Section 5.3, is shown here as (239) with embedded relational bracketing. The noun-conoun pairing in the original analysis, [*kat⁵*][*mai²*], involves *mai²* as a locative marker, whereas in (239), it is a conceptual *specifier* aligned with a full contextual target proposition, *mai² pying⁴ nai¹ yang⁴ yau¹* 'the woman was *at*'.

(239) [*kat⁵*   [***mai²***   *pying⁴*   *nai¹*   *yang⁴*   *yau¹*]]
      market   LOC   woman   DEF   be   PERF
      'the woman was *at* the market'

Mai² first establishes a relationship between two juxtaposed entities, the head noun, *kat⁵* 'market', and an existence event, *mai² pying⁴ nai¹ yang⁴ yau¹* 'the woman was LOC'. *Mai²* then construes the event as T. Conceptually, *mai²* is part of T with the translation, 'the woman was *at*' in which *mai²* is vague for a location, here translated as 'at'. Because I analyze the T event conceptually as inclusive of *mai²*, it requires a reference location for its full interpretation. As a conceptual specifier, then, *mai²* takes the T proposition and looks for its R location. In this case, the head noun, *kat⁵* 'market', is construed as R and the vicinity associated with R—the conceived boundary that makes up the market—is construed as its dominion, D. In essence, the market becomes the *location* within which the woman exists.

Both the basic spatial deictic, in Figure 6.17 (a) above, and the LOCATIVE construction in (239), portray a spatial location, which is construed as the reference point's dominion. However, with the deictic in Figure 6.17 (a), the speaker is construed as R and so, the speaker is part of the *scope* of predication, whereas with the LOCATIVE in (239), a nominal, *kat⁵* 'market', is construed as R. The inference moves from a *de re* speaker as R to a *de dicto* nominal as R and this, I contend, provides the primary semantic and conceptual motivation for a crucial first stage of nominal (locative) marking.

Once an inference from the speaker to a textual nominal is conventionalized —that is, from DEICTIC to LOCATIVE—the other *de dicto* grammatical constructions involving *mai²* become more straightforward, especially since similar extensions/constructions have been documented across many languages, as I described in Chapter 5. The *mai²* constructions, then, proliferate along expected pathways and the conceptual description of *mai²* continues to pave the way for these extensions as a schematic motivation. This is readily seen with the ALLATIVE and ABLATIVE constructions exemplified in (192) and (193) from Section 5.3. These examples are analyzed as reference-point constructions in (240) and (241). With the ALLATIVE in (240), the head noun, *kat⁵* 'market', becomes the reference point. The event, *mai² pying⁴ nai¹ kaa⁵ yau¹* 'the woman went *LOC*' is conceptually headed with the specifier *mai²*—meaning something akin to a general static location—and includes the entire proposition as the target. In this way, the description of *mai²* as an allative arises from the constructional context of the motion verb, *kaa⁵* 'go'.

(240) [*kat⁵* [***mai²*** *pying⁴* *nai¹* *kaa⁵* *yau¹*]]
      market ALL woman DEF go PERF
      lit. 'the woman went *LOC* the market'
      'the woman went *to* the market'

(241) [***luk¹*** *nuai⁴* *nai¹* [***mai²*** *nam¹nyue²khee⁴* *leeung³* *lai⁵* *uu⁵*]]
      from mountain DEF ABL stream INDEF flow IMPF
      lit. 'the stream flows *LOC from* the mountain'
      'a stream flows *from* the mountain'

In similar fashion, the ABLATIVE in (241), involves the locative predication, *luk¹ nuai⁴ nai¹* 'from the mountain', which is construed as a reference point and the

event, *mai² nam¹nyue²khee⁴ leeung³ lai⁵ uu⁵* 'a stream flowing *LOC*' construed as its embedded target. For *mai²* in this case, its ablative interpretation comes primarily from the preposition, *luk¹* 'from' (but also the motion verb, *lai⁵* 'flow'). I will explain this further with respect to Figure 6.18 (b), shortly.[85]

The ALLATIVE and ABLATIVE are described as reference-point constructions in Figure 6.18 in which *mai²* is observed as the relational specifier between R and T. With the ALLATIVE in diagram (a), *mai²* is part of T, which comprises the motion event context shown with the event arrow moving towards the market location, D. The literal translation of T, 'the woman went *LOC*', suggests that *mai²* is part of T and requires a locative predication, *kat⁵* 'market,' as a reference point in order to achieve its *allative endpoint* or GOAL interpretation. Moreover, in (a), the nominal, *kat⁵* is construed as R and the conceived boundary of the market is construed as D. This boundary of the market makes up the *endpoint* or locative GOAL for the unfolding motion event. The specifier, *mai²*, then, identifies T as the motion event and then references R (the dotted correspondence line) to arrive at the event's endpoint. The solid arrow shows the direction of the event towards an endpoint.

(a) ALLATIVE
   lit. 'the woman went *LOC* the market'
   'the woman went *to* the market'

(b) ABLATIVE
   lit. 'the stream flows *LOC from* the market'
   'the stream flows *from* the mountain'
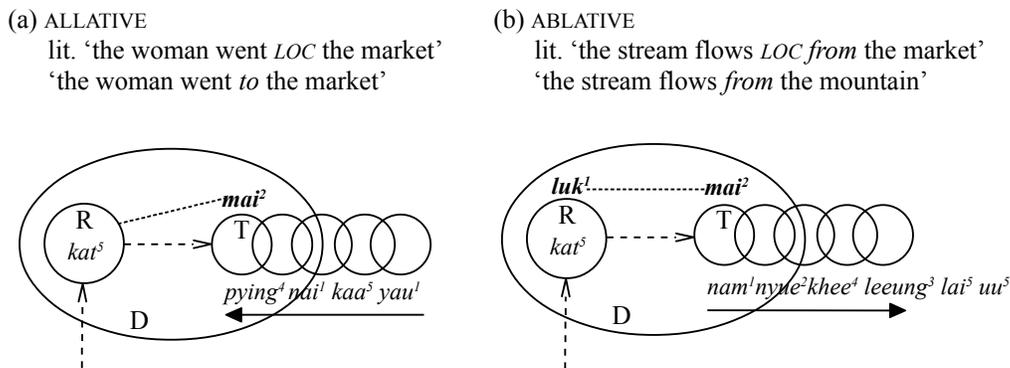
Figure 6.18. The semantic representation of *mai²* in ALLATIVE and ABLATIVE RPCs

With the ABLATIVE in diagram (b), on the other hand, the literal translation alludes to the fact that the target proposition, *mai² nam¹nyue²khee⁴ leeung³ lai⁵ uu⁵* 'a

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85 In Chapter 5, I used *mai²* as ALL and ABL markers because of the sentential context, even though *mai²* itself is vague for these notions. As reference-point constructions in (240) and (241), the context for *mai²* becomes a more explicit part of the target and so I want to maintain their glosses as ALL and ABL, even though their literal translation is more like LOC.

stream flows *LOC*' necessitates a reference location and finds it in the initial locative predication, *luk¹ nuai⁴ nai¹* '*from* the mountain'. The locative predication and *mai²* correspond and conceptually overlap. Furthermore, in (b), the preposition, *luk¹* 'from', is a conceptual specifier that identifies *nuai⁴* 'mountain' as R with the correspondence line drawn between LOC *mai²* and its anaphoric preposition, *luk¹* 'from'. The mountain's boundary is construed as D and becomes a locative *beginning point* or SOURCE for the movement event expressed by the verb, *lai⁵* 'flow'. Diagram (b) illustrates that T back-references R in order to arrive at an ablative *beginning point* or SOURCE reading in the overall construction. *Mai²* identifies T as the motion event and then references R as the event's beginning point. The movement away from a SOURCE is diagrammed with T's directional arrow moving away from D.[86]

In Section 5.3, I showed the *mai²* conoun as a marker of TEMPORALS with examples (196)-(198). These are shown here as relational constructions in (242)-(244). In these examples, the nominal that is marked with *mai²* receives a temporal reading of a *brief point*, *short period*, or *vast expanse* of time, with *mai²* being roughly translated as *at*, *on*, or *in.* This translation is due in part to a well-entrenched metaphorical inference of TIME IS SPACE (Lakoff and Johnson 1980). The time duration specified depends on the semantic make-up of the temporal nominal. For example, the nominal, *phaai⁴kaang⁴wan⁴* 'midday', expresses a brief point in time, as shown in (242), a relatively short period of time, in (243), and a vast expanse of time, in (244).

(242) [*phaai⁴kaang⁴wan⁴*   *saam⁵*   *naa⁵lii⁵* [***mai²***]]   *man⁴ tsaeu² yaa¹* "..."
         midday   three   o'clock   TMP   3SG   POL   TOP   "..."
         'midday, *at* three o'clock, he (royal) said, "..." '

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86 While the ALLATIVE and ABLATIVE reference-point constructions follow the semantic description of the general LOCATIVE in Figure 6.17 (b) with a rectangle proposition box, I describe the reference-point constructions in Figure 6.18 with an animated target (rather than a generalized propositional rectangle) in order to highlight the movement that is entailed in these constructions. This depiction more readily conveys the reference location as an *endpoint* and *beginning point* of movement, as opposed to a more stationary LOC location.
   In this respect, it is helpful to note that CG diagrams are not posited as formal analyses but are heuristic in nature and are used to emphasize certain semantic features central to a given constructional analysis. Therefore, there is a degree of flexibility in formulating the diagrams, which I am exploiting.

(243)   [*wan⁴ an³ tii⁵ au³   saau⁵* [***mai²***]] *heeun⁴ psaau⁵ mai² kaa⁵ ngai⁴sii⁵*
            day   REL IRR take   bride   TMP   house   girl   ALL   go   and.then
            '*on* the day when (he) will take (his) bride, (he) goes to the girl's house, and then'

(244)   [*yau¹kii⁴ neeun³haa⁵* [***mai²***]] *phaai⁵nam¹ naa⁴ hiit⁵   uu⁵*
            after.this April   TMP   water.gate field make IMPF
            'after this, *in* April, make (the) field water gates'

In a reference-point relationship, the temporal nominal becomes the reference point and *mai²* by itself is construed as the embedded target. In each example, *mai²* is identical with the full target, because the temporal reading of *mai²* is inferred from the semantics of the nominal and not the event proposition, as with the spatial locative examples above. In other words, the conceptual scope of the TEMPORAL reference-point constructions is limited to temporal adverbial clauses. This follows from the synchronic description in Section 5.3 in which the event expressed by the predicate in each example is independent of the temporal reading of the adverbial clause.

      Because *mai²* in (242)-(244) is vague for marking temporality, the amount of time conceptualized in the construction is dependent on the *relative* amount of time construed by a given head noun, *phaai⁴kaang⁴wan⁴* 'midday', *wan⁴* 'day', or a full month such as, *neeun³haa²* 'April'. I semantically describe the temporal extent of each reference-point construction as an aspect of R. The size of R is commensurate with a relative temporal duration.

      The final construction that I describe as a spatio-temporal reference-point construction is the PREDICATIVE POSSESSIVE. A POSSESSIVE construction is well-attested cross-linguistically for having extended in function from a LOCATIVE, as described in Section 5.4 for Khamti. The grammaticalization process is one of conceptual metaphor in which an inference is made from a stationary location to a *region of possession*. The PREDICATIVE POSSESSIVE was previously described using example (200), which is shown here with a reference-point construal as (245). The inanimate possessor, *maan² amaeu⁴nai¹* 'that village', is construed as the reference point while the event proposition, *mai² an³yap⁵ aan⁵taan⁵ yang⁴ uu⁵* 'many problems are *LOC*' is construed as the embedded target. I further analyze the verb of existence, *yang⁴* 'be', as a necessary part of the target because it provides the spatial context that undergoes a possessive metaphorical inference. The clausal subject, *an³yap⁵*

aan⁵taan⁵ 'many problems', is conceptualized as the possessee (cf. Langacker 2009: 98) that is found to exist within the control of the possessor reference point.

(245) [*maan²* *amaeu⁴nai¹* [***mai²*** *an³yap⁵* *aan⁵taan⁵* *yang⁴* *uu⁵*]]
      village   that   POSS   problem   many   be   IMPF
      lit. 'many problems are LOC that village'
      'that village has many problems'

Langacker (2009: 98) analyzes POSSESSIVES as potentially extending from LOCATIVES and this seems to be the case for Khamti when comparing the LOCATIVE in (239) above with the PREDICATIVE POSSESSIVE here. The two constructions are linguistically identical in utilizing the verb of existence, *yang⁴* 'be'. With the LOCATIVE, the dominion is conceptualized as a *search domain*, but with the POSSESSIVE, it is construed as a *possessive search domain* (Langacker 1993: 12). Along these lines, a dominion can be thought of as a cognitive ground and the clausal subject as a cognitive figure as part of the target event. More specifically, the target, *an³yap⁵ aan⁵taan⁵* 'many problems', belongs to the reference point, *maan² amaeu⁴nai¹* 'that village', in the general sense that the village controls the problems in some manner: physically, socially, or experientially (Langacker 2009: 84). This is conceptually akin to the way that the cognitive figure, *pying⁴* 'woman', is spatially located *at* the cognitive ground, *kat⁵* 'market', in the LOCATIVE construction of (239). The figure/ground alignment is therefore evidenced in the T-to-R referencing configuration, which is also true for constructions that arise in a social domain that I analyze as reference-point constructions next.

6.3.2 Reference-point constructions in a social domain

The next set of reference-point constructions are described under a social domain in which the *mai²*-marked nominal prototypically pertains to human (animate) interactions (Kabata 2000: 91). These constructions are RECIPIENT, ADDRESSEE, BENEFICIARY, and CAUSEE and are organized around the verb *haeu²* 'give', which grammaticalizes as an applicative coverb in the ADDRESSEE, BENEFICIARY, and CAUSEE constructions.

In Section 5.5, I posited the RECIPIENT construction as central among these

constructions because it uses *haeu²* 'give' as a main verb. I argued that from this basic usage as a main verb, *haeu²* extends in function to an applicative coverb in which *mai²* signals the applied object in the clause. Furthermore, the verb—either ditransitive or causative—provides the context in these constructions which sets the scope for the reference point-target relationship. This scope lies within either the double object grouping (i.e. the two clausal objects relating to each other in the ditransitives) or the subject-object grouping in the causative construction. For the RECIPIENT construction, this was demonstrated in (201) from Section 5.5, which is shown here in (246) as a reference-point relationship. The embedded *mai²*-specified target includes the literal thematic proposition, *mai² paa³ haeu² yau¹* 'gave the fish LOC'. The THEME, *paa³* 'fish', is thus a conceptual figure that moves in relation to a conceptual ground location or human endpoint; the reference point, Lydia.

(246) *kau⁵* [*Lydia* [***mai²***   *paa³* *haeu²* *yau¹*]]
       1SG   Lydia   REC   fish   give   PERF
       lit 'I gave the fish *LOC* Lydia'
       'I gave the fish to Lydia'

The conceptual grouping of the two objects in (246) is reminiscent of the subject and object grouping of the ALLATIVE in Figure 6.18 (a). The allative features the locative, *kat⁵* 'market', which is construed as a reference point that expresses a dominion or spatial boundary. With the RECIPIENT reference-point construction in (246), however, the recipient, Lydia, is construed as a reference point which exhibits a dominion or a conceived *region of control* (or *possessive location/endpoint*). With the ALLATIVE, the dominion is considered a spatial GOAL, whereas with the RECIPIENT, the dominion is inferred as a HUMAN GOAL or ENDPOINT. The verb, *haeu²* 'give', in (246), as part of the target proposition, characterizes a movement or transfer event in which a target figure, a theme, *moves* or *transfers* from being located outside of a dominion ground to being construed as inside it. More generally, *mai²* once again acts as the conceptual arbiter between reference point and target—initiating a relationship between two items, identifying one of the items as target, and referencing that target to its reference point.

In similar fashion to the RECIPIENT construction, the ADDRESSEE and

BENEFICIARY reference-point constructions represent a conceptual grouping between two objects with a particular ditransitive verb included as part of the target proposition. The verb helps to supply an interpretive context for the conceptual relationship involved. The ADDRESSEE construction, in (202), and the BENEFICIARY construction, in (203), from Section 5.5, are shown here with embedded relational bracketing as (247) and (248). In (247), the addressee, *mee⁵tsau²heeun⁴ kau³* 'my wife', becomes the reference point and *peung⁵ pseu¹ nai¹ khai³ haeu² yau¹* 'told the witch story GOAL' is the embedded target. The literal translation suggests how *mai²* identifies the target proposition for the purpose of referencing a goal nominal in the reference-point construction.

(247) [*mee⁵tsau²heeun⁴ kau³* [*mai²* *pung⁵* *pseu⁵* *nai¹* *kau³* *khai³* *haeu²* *yau¹*]]
       wife   1SG   ADD   story   witch   DEF 1SG   tell   APPL   PERF
       lit. 'I told the witch story GOAL my wife'
       'I told the witch story to my wife'

(248) [*man⁴* [*mai²* *yaa¹* *phuu²paeu¹* *taang⁴ptuu³* *nai¹* *taang⁴ptuu³* *puut⁵* *haeu²* *uu⁵*]]
       3SG   BEN   TOP   guard   gate   DEF   gate   open   APPL   IMPF
       lit. 'the gate guard opened the gate GOAL him'
       'the gate guard opened the gate for him'

The example in (248) construes a similar conceptual relationship but with the beneficiary, *man³* '3SG', construed as a reference point. The target proposition, *mai² taang⁴ptuu⁵ puut⁵ haeu² uu⁵* 'opens the gate GOAL' associates with the reference point.[87] In this case, the literal translation suggests that *mai²* functions as a specifier looking for a beneficiary goal.

Finally, the CAUSATIVE construction utilizes a causative verb along with the applicative coverb, *haeu²*. In the CAUSATIVE, *haeu²* references a CAUSEE nominal that is marked with *mai²* in the clause. An CAUSATIVE example is shown here in (249)— previously (206)—as a reference-point relationship. The CAUSEE nominal is seen as the reference point while the nested target is comprised of the causative proposition, *mai² au³ mut⁵saa⁵ haeu² maa⁴ ta¹* 'cause IT to become clean'. The literal conceptualization involves *mai²* 'IT' making vague reference to a causee.

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87   Even though the clausal subjects, *kau³* 'I', in (247) and *phuu²paeu¹ taang⁴ptuu⁵ nai¹* 'the gate guard', in (248), are linearly part of the target, it is not a necessary part of the immediate scope of the conceptual grouping between THEME and HUMAN ENDPOINT or GOAL and so, I have chosen to leave them out of the propositions here.

(249) [*khau⁵* [**mai²** *au³* *mut⁵saa⁵* *haeu²* *maa⁴* *ta¹*]]
　　　 3PL　　CAUS　 cause　 be.clean　 APPL　 VENT　 OPT
　　　 lit. 'them (you) cause *IT* to become clean'
　　　 '(you) cause them to become clean'

The causative reference-point construction in (249) is diagrammed in Figure 6.19. In this construction, the CAUSEE, *khau⁵* 'them', is construed as R and *mai²* identifies T as the full causal proposition. The specifier is included in T and so a literal translation of T would be akin to 'cause *IT* to become clean' in which *mai²* conceptualizes a general *IT* that calls for a more specific CAUSEE R. In addition, the T proposition includes the applicative coverb, *haeu²*, which cross-references an animate CAUSEE.[88] R, being characterized as a semantic *patient*, undergoes a change of state from being unclean to that of being clean. This change of state is shown in Figure 6.19 as a squiggly arrow inside the R nominal (cf. Langacker 1991: 288).[89]

'(you) cause *them* to become clean'
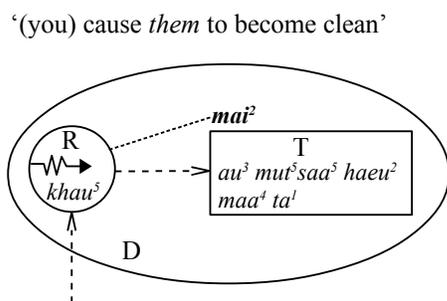
Figure 6.19. The semantic representation of *mai²* in a CAUSATIVE RPC

In the case of the CAUSATIVE reference-point construction, T does not include a figure (secondary clausal object) that moves towards a human endpoint. Instead, a *state* (or imposed change of state) encoded in a causative proposition, T, is associated with a causal endpoint, R. When T is "at" D, the resulting causation is inferred to be undergone or "received" by R.

88　Recall in Section 5.6 that an animate CAUSEE takes the applicative, *haeu²*, while an inanimate CAUSEE does not.

89　Langacker uses the squiggly arrow to specifically identify a semantic *patient*. I am using the convention more broadly to encompass inanimate *patients* as well as animate *experiencers/undergoers*, i.e. the affected downstream participants, as described in Section 5.6.

6.3.3 Reference-point constructions in a logical domain

The final set of reference-point constructions were described in Sections 5.7 and 5.8 under a *logical* domain of experience. A logical domain includes predications such as comparison and assessments of objects (Rice and Kabata 2009: 462). The logical domain, then, concerns the Khamti *mai²*-marked STANDARD OF COMPARISON and FOREGROUNDED OBJECT constructions.

An example of the Khamti COMPARATIVE construction was shown in (209) of Section 5.7. The construction itself is found in an initial adverbial clause and I present it here as (250) with conceptual bracketing. With the COMPARATIVE, there are two verbal arguments: a clausal subject that encodes the entity that is compared and a clausal object that encodes the standard of comparison. These two arguments form the basis of the conceptual reference-point relationship. While it is difficult to clearly bracket the comparative relationship in the example in (250), a sentence-initial subject, that is disjunctive with the remainder of the comparative predicate helps to make up the full target, *paa³sa²njee¹ seung⁵... hiang⁴ saa⁵* 'eel ... be more strong than'. The standard of comparison, *kuun⁴* 'person', is bracketed as the reference point.

(250) *paa³sa²njee¹ seung⁵ ... [kuun⁴ [... **mai²** hiang⁴ saa⁴]] kii⁴ yaa¹ kuun⁴ mai²*
    eel   EMPH   person STD   be.strong more.than if   TOP person F.OBJ

       paa³sa²njee¹ kin³ uu⁵
       eel   eat   IMPF

       'if an eel is stronger than a *person*, the eel eats the person'

I try to represent the bracketing of the reference-point analysis in (250) with Figure 6.20. The specifier, *mai²*, is the central component that triggers a relationship between two entities and identifies the second entity, *paa³sa²njee¹ hiang⁴ saa⁴* 'eel is stronger than' as a T proposition. *Mai²* then references T with the standard of comparison, *kuun⁴* 'person', which is construed as R.

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'an eel is strong-*er than* a person'
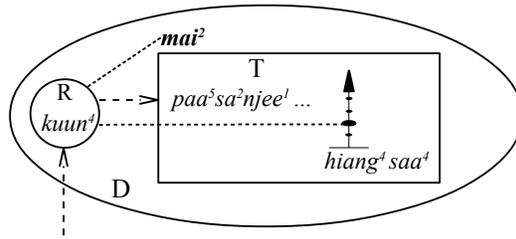
Figure 6.20. The semantic representation of *mai²* as a COMPARATIVE RPC

Moreover, T includes the criterion, *hiang⁴* 'be.strong', on which the two entities are compared. The criterion is shown in Figure 6.20 as a scale of comparison. R, *kuun⁴*, is understood as fixed to a point on the scale (the dashed line) and is hence construed as a standard to which the T entity, *paa³sa²njee¹*, is measured. The index, *saa⁴* 'more than' indicates that the figure found in T, *paa³sa²njee¹* 'eel', is to be measured *in excess to* R, *kuun⁴* 'person', which becomes the cognitive ground.

In Section 5.8, I described a FOREGROUNDED OBJECT construction as one that features a clausal object whose referent is signaled with a high degree of psychological prominence for the speaker. Because the *mai²* marker infers an evaluative assessment of the clausal object referent based on the speaker's psychological state, it is analyzed under a logical domain. The example in (214) from Section 5.8 is shown here in (251) with a reference-point construal. The clausal object, *paa⁵tsa¹* 'cemetery', is the reference point and the embedded target is the specifier, *mai²*. Figure 6.21 diagrams the FOREGROUNDED OBJECT reference-point construction with respect to the relational brackets in (251). *Mai²*, alone, is identified as a pragmatic T and serves to conceptually link to R, *paa³tsa¹* 'cemetery'. When T is associated with R, a pragmatic evaluation of *prominence* is conferred to R. This prominence effect is shown with a profiled R.

(251) *kau³* [*paa⁵tsa¹* [***mai²***]] *kaw¹* *han⁵* *sa⁵sa⁵* *nam⁵*
       1SG cemetery F.OBJ then see clearly CONT
       'I then clearly see a/the *cemetery*'

'I clearly see *the cemetery*'
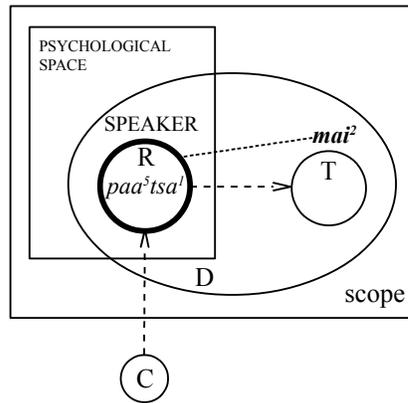
Figure 6.21. The semantic representation of *mai²* in a FOREGROUNDED OBJECT RPC

A critical aspect of this construal is that *mai²* references R, *paa³tsa¹*, with respect to the *speaker*, i.e. the speaker's *assessment*. Because the speaker—as an aspect of the speech situation—is part of the overall meaning, the speaker is shown within the *scope* of predication, in Figure 6.21. Thus, R is anchored to a psychological space of the speaker as a part of the context for the construction. Because the speaker is an aspect of the overall meaning, the construal is subjective and mirrors the subjectivity that is inherent in *mai²* as a deictic.

In this section, I analyzed lexical *mai²* 'here' as a basic reference-point construction that uses the speaker to reference a location within which to associate another entity. This *de re* reference-point relationship between the speaker and an entity was shown to mirror a *de dicto* reference-point relationship between two discourse entities, with one entity, a nominal, construed as a reference point and the other, usually a state of affairs, construed as its target. In all of these reference-point constructions, *mai²* was analyzed as the conceptual link between the two entities.

The conceptual characterization of the deictics *nai¹* and *mai²* shows that, as deictics, they are reference-point constructions because they are inherent pointers. Due to this, the constructions that extend from *nai¹* and *mai²* can potentially also be depicted as reference-point constructions. This is not the same situation for the *an³* constructions because lexical *an³* is not an inherent "pointer", *per se*; i.e. it is not a

deictic. However, once *an³* emerges in noun-conoun constructions, it can be characterized as a conceptual specifier establishing an asymmetrical relationship between noun and conoun. I turn to a cognitive analysis of *an³* constructions next.

6.4 Reference-point constructions with *an³*

In this section, I will select the *an³*-based constructions from Chapter 3—NUMERAL-CLASSIFIER, DEMONSTRATIVE POSSESSIVE, and CLAUSAL NOMINAL—and analyze them as reference-point constructions. As a departure point for this analysis, I will start with the Khamti CLAUSAL NOMINAL construction because it seems more straightforward in light of the fact that Langacker has already posited a reference-point analysis for a similar construction in English—the TOPIC construction. After taking Langacker's English analysis and applying it to the Khamti CLAUSAL NOMINAL construction, I will then proceed with an analysis of the less canonical NUMERAL-CLASSIFIER and DEMONSTRATIVE POSSESSIVE reference-point constructions.

In Chapter 3, I described the constructions that extend from the use of *an³* with the juxtaposition bracketing schema, [NOUN][CONOUN]. In this section, I analyze the noun-conoun juxtaposition found in these constructions by imposing the relational bracketing convention in which the conoun forms an asymmetrical (embedded) conceptual arrangement with a head noun, [NOUN [CONOUN]]. As relational constructions, then, the head noun can be construed as a reference-point and the conoun as a target that is identified by *an³*, $[R [T]]_D$. The outer brackets show R as expressing a dominion that subsumes a *related* T which circumscribes R's dominion (subscript D) and formulates the context in which T is understood. In this way, T is considered to be conceptualized within R's interpretive scope and the outer brackets relate to the oval dominions in the descriptive diagrams to follow.

Reference-point analyses have been deemed helpful in describing certain topic-comment constructions. As such, Langacker (2009: 48) analyzes the English TOPIC construction in (252) as a reference-point construction similar to the diagram in Figure 6.22.[90] The pronoun, *he*, is part of the entire target proposition, *he really should get married*, and relates it to the head noun, *your uncle.* The head noun, *your*

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90   The example in (252) comes from Langacker while relational bracketing is mine.

uncle, and pronoun, *he*, share the same referent, with the pronoun being more *schematic*.

(252) [*Your uncle,* [***he** really should get married*]]

Langacker diagrams this English sentence as a reference-point construction similar to the one I show in Figure 6.22. The head noun is a *topic* predication which serves as R. The initial pronoun, *he*, and the remainder of the proposition make up the *comment*, which is construed as T (propositions are rectangles, nominals are circles in CG diagrams). The dotted correspondence line links the the pronoun, *he*, back to its head noun, *your uncle*, in order to identify these two elements as referring to an identical referent. In other words, the pronoun requires the head NP as its antecedent.
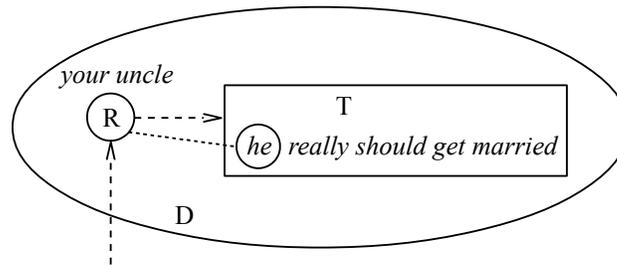
Figure 6.22. The English TOPIC RPC

Returning to Khamti, the basic lexical item, *an³*, is not a reference-point construction in and of itself. That is, *an³*, as a general noun, only refers to an object, 'thing'. However, when *an³* evolves as a conoun in noun-conoun constructions, it also becomes a conceptual specifier of a reference-point construction that back-references a head noun. This is analogous with the pronoun, *he*, in the English TOPIC construction described above. A clear example is the Khamti CLAUSAL NOMINAL construction in (253), which was previously (84) in Chapter 3. In (253), *an³*, first of all, *triggers* a reference-point relationship between two juxtaposed linguistic elements, the noun *an³kin³* and the clause *an³ kau³ thuk⁵tsaeu³ nai¹-khau⁵*.[91] Next, *an³*

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91 *An³-kin³* 'food' is a deverbal nominal with *an³* functioning as the reifier. For simplicity, I have shown it here as a single word *an³kin³* 'food' which merely functions as the head noun of the clausal nominal construction.

identifies the clause as a target, and then takes the target and looks for the reference nominal for its interpretation.[92]

(253) *kau³ mai² yaa¹* [*an³-kin³* [***an³** kau³ thuk⁵tsaeu³ nai¹-khau⁵*]] *seeu¹ haeu² uu⁵*
       1SG F.OBJ TOP NOM-eat REL 1SG like   DEF-PL   buy APPL IMPF
       lit. 'as for me, (he) buys (me) foods, the ones I like'
       'as for me, (he) buys (me) foods that I like'

The CLAUSAL NOMINAL (or relative clause) in (253), *an³kin³ an³ kau³ thuk⁵tsaeu³ nai¹-khau⁵* 'foods that I like', mirrors the English TOPIC construction in a topic-comment configuration. The literal translation, '[foods, [**ones** I like]]', reflects the topic-comment arrangement more clearly. Here, *an³* is translated as 'ones' and is seen to be *anaphoric* with foods. *An³* functions similarly, then, to the English pronoun, *he*, which is anaphoric with its topic, *your uncle*, in (252) above. In other words, *an³* shares the same referent as its head noun or topic, *an³kin³* 'foods', in (253). Figure 6.23 illustrates the Khamti CLAUSAL NOMINAL as a reference-point construction in which *an³* serves as a conceptual specifier that establishes an asymmetrical relationship between R and T.

lit. 'foods, *ones* I like'
'foods *that* I like'
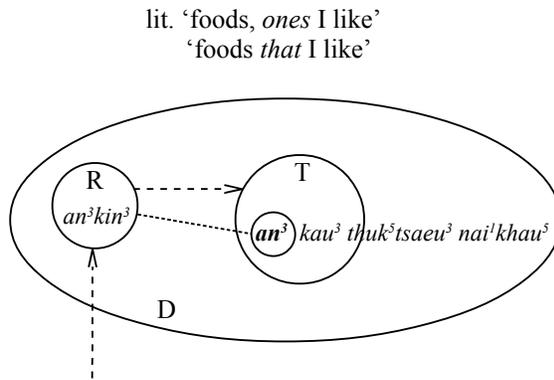
Figure 6.23. The Khamti CLAUSAL NOMINAL RPC

In Figure 6.23, T is a nominal and so is depicted as a circle (in contrast to a rectangle, which describes a proposition in CG diagrams, cf. Figure 6.22 previously). This is an

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92 In standard CG diagrams, an aspect of each component would also be profiled (in bold) to reflect its semantic designation. For simplicity, I am not including a profile in order to focus on the prominence that occurs strictly between R and T. R is initially salient with respect to T, but then fades to the background while T comes into focal awareness for the conceptualizer.

important semantic difference between the English topic construction in Figure 6.22 and the CLAUSAL NOMINAL in Figure 6.23. The T of the English sentence remains a proposition (rectangle) with the pronoun acting as a subject of that proposition whereas, the T in the *an³* construction has been reified as a nominal with *an³* serving as a reifier. The CLAUSAL NOMINAL reference-point construction, then, features two nominals in apposition with the second nominal being interpreted by the first. In other words, T is a nominal that modifies R in a topic-comment fashion.

The linear conceptual processing involved in Figure 6.23 moves from a prominent R to a less prominent T. This sequential mental path is shown with the dashed arrows leading from C. However, referencing proceeds from T to R in which a target is looking for a reference as context for its interpretation. In Figure 6.23, I show the back-referencing process (from T to R) as a dotted correspondence line between the component, *an³*, and its reference point, *an³kin³*. This line describes the *interconnection* between T and R as a schematic one with both sharing the same referent.

Compare, then, the *an³* correspondence line of *schematicity* that is drawn between an *an³*-based T and its nominal R, in Figure 6.23, with the correspondence line of *deixis* between T and R that characterizes *nai¹* and *mai²* (in Sections 6.2 and 6.3 above). This correspondence (or the way T associates with R) is a central distinction between *an³* in contrast to *nai¹* and *mai²*. The *an³* target and reference point share the same referent and are *schematic* with each other. *An³*'s correspondence with R is one of *identity*: "R *is* what I am". However, *nai¹* and *mai²* is deictic and so these exhibit an inherent referencing function. The correspondence of *nai¹* and *mai²* with R is one of *pointing*: "*look at* R, and see what I mean".

The next *an³*-based construction that I analyze as a reference-point construction is the *an³* NUMERAL CLASSIFIER, shown in (254). This construction was previously described as (63) in Chapter 3. As a reference-point construction, the numeral and classifier, *suang⁵ an³* 'two things', becomes an embedded target which is associated with its head noun, *tiang⁴lik⁵* 'grate'. The head noun is construed as a reference point and serves as the context for interpreting the referent of *an³*. In this way, *an³* is anaphoric with *tiang⁴lik⁵*, and also reifies the numeral relation, *suang⁵*

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'two', as a nominal, *suang⁵ an³* 'two things'.

(254)   *Yee²* [*tiang⁴liik⁵* [*suang⁵* **an³**]]   *mai²*   *han⁵*   *uu⁵*
         Yee   grate   two   CLF   F.OBJ   see   IMPF
         lit. 'Yee sees a grate, two things-instances'
         'Yee sees two grates'

The resulting NUMERAL-CLASSIFIER reference-point construction features two nominals in apposition. This situation, diagrammed in Figure 6.24 below, is similar to the CLAUSAL NOMINAL construction described above. *An³* takes the relational proposition, *suang⁵* 'two', and reifies it into a nominal, *suang⁵ an³* 'two things', and then identifies this nominal as T. Then *an³* takes T and references it with R, *tiang⁴lik⁵* 'grate'. The correspondence is one of schematicity, R being specific and T being general for the same referent. In essence, the CLAUSAL NOMINAL analysis of Figure 6.23 above is the same as that for the NUMERAL CLASSIFIER in Figure 6.24 here.

lit. 'a grate, two *things-instances*'
'two grates'
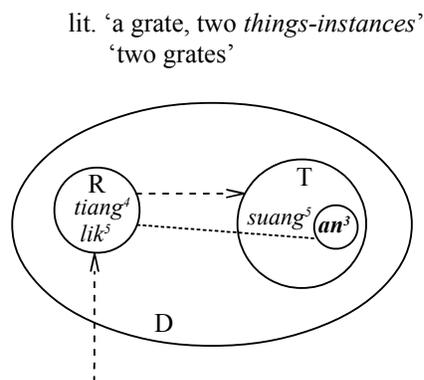
Figure 6.24. The Khamti NUMERAL-CLASSIFIER RPC

A numeral classifier construction, to my knowledge, has never been analyzed as a reference-point construction. This is not surprising because as an individual construction there is hardly any revelatory need to do so. However, I deem it important to analyze it here as a reference-point construction because of the central role that *an³* plays in the grammaticalization of a set of reifying constructions. In this respect, if the *an³* numeral-classifier also engenders a viable reference-point analysis,

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it serves to motivate the reference-point schema itself as a cognitive motivation for the very *network* of grammaticalized *an³* constructions.

The final *an³* construction that I show as a reference-point construction is the DEMONSTRATIVE POSSESSIVE. In Chapter 3, I described a DEMONSTRATIVE POSSESSIVE as a compound consisting of *an³* and any personal pronoun, such as *an³-maeu³* 'you-thing'. This appositional configuration of *an³* + PERSONAL PRONOUN follows basic genitival constructions in Khamti, in which a head noun is followed by any modifying noun. An example would be *Lwin kai¹* 'Lwin's chicken' in which two nominals are in apposition with the second nominal acting as the genitival modifier of the first. Moreover, I previously described the DEMONSTRATIVE POSSESSIVE as being *demonstrative* because it presupposes and therefore *points to* an object that is either in the real or discourse world. In this way, *an³-maeu³*, which is literally, 'you-thing' can be better translated as 'your-*one*' with *an³* 'one' being in an appositional and anaphoric relationship with a presupposed object—either a *de re* object in the speech situation or a *de dicto* nominal in the discourse. This anaphoric situation is considered demonstrative in the sense that the *an³* nominal points back to a presupposed object, as diagrammed in Figure 6.25. The presupposition that surrounds the DEMONSTRATIVE POSSESSIVE can be readily characterized as a reference-point construction in which *an³* acts as the relational go-between with a personal pronoun and its presupposed OBJECT. First, *an³* reifies the personal pronoun, *maeu⁴* 'you', as a genitival, *an³-maeu⁴* 'your one', and then, identifies the genitival as T and relates it back to the R OBJECT.
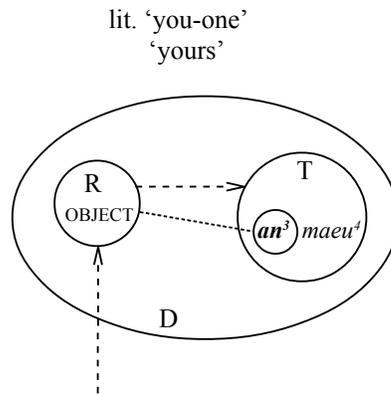
Figure 6.25. The Khamti DEMONSTRATIVE POSSESSIVE RPC

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Figure 6.25 merely illustrates the DEMONSTRATIVE POSSESSIVE reference-point construction with no reference to a specific corpus example. However, in Figure 6.26 below, I analyze the DEMONSTRATIVE POSSESSIVE, *an³-maeu⁴* 'yours', as it occurs in the EQUATIVE construction in (255), which was previously described as (70). The example in (255), then, displays two separate RPCs, a *nai¹*-based DEMONSTRATIVE, *kai¹ nai¹* 'this chicken', that makes up the clausal subject and an *an³*-based DEMONSTRATIVE POSSESSIVE, *an³-maeu⁴* 'yours', which comprises the second nominal in the EQUATIVE. As shown with the relational bracketing in (255), the *an³*-based target is embedded inside the dominion of the *nai¹*-based demonstrative subject.

(255) [*kai⁵*   *nai¹*   [***an³-maeu⁴***]]   *naa²*
         chicken   this   DEM.POSS-2SG   DUB
         'lit. this chicken is you-one, eh'
         'this chicken is yours, eh?'

The DEMONSTRATIVE, *kai¹ nai¹*, and the possessive, *an³-amaeu⁴*, are each reference-point constructions. These two reference-point constructions that make up the EQUATIVE construction in (255) are illustrated in Figure 6.26 below. The *an³-maeu⁴* DEMONSTRATIVE POSSESSIVE reference-point construction is here embedded as T on the far right in Figure 6.26. *An³* identifies T and relates to its reference object, *kai¹* 'chicken', as indicated with the dotted correspondence line leading from *an³* to *kai¹*. However, *kai¹* is also part of the initial demonstrative reference-point construction, *kai¹ nai¹* 'this chicken'. In this reference-point construction, *kai¹* is identified by *nai¹* as the target in relation to the speaker, which is its reference point. This is shown with the correspondence line from *nai¹* to the speaker, R, of the EQUATIVE construction on the far left in the figure. Along these lines, then, moving from left to right, the *nai¹* target, *kai¹*, is first apprehended as T that is in proximity to the speaker and then, *kai¹* is construed as a reference point, R, for the possessive, *an³-maeu⁴* 'your one' target.

lit. 'this chicken is *you-one*, eh?'
'this chicken is *yours*, eh?'
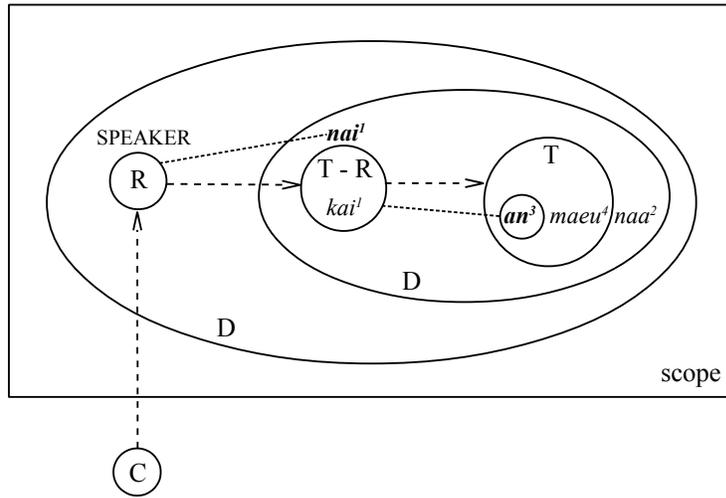
Figure 6.26. The Khamti DEFINITE and DEMONSTRATIVE POSSESSIVE as nested RPCs

Finally, the *an³-maeu⁴* reference-point construction is pictured as embedded within the initial demonstrative reference-point construction, *kai¹ nai¹* 'this chicken'. Along these lines, the first nominal of the EQUATIVE, *kai¹ nai¹*, serves as R for the full equative clause with *an³maeu⁴* acting as an associated T. Finally, because the speaker is part of the overall meaning of (255), she is pictured within the *scope* of predication.

To summarize this section, *an³*, as a basic lexical item, does not start out with any inherent reference-point characterization. Rather, its semantic content is a maximally general noun, 'thing', portrayed as a bounded entity. However, when this general noun is juxtaposed with other linguistic items, it gets recruited as a reifier for numerals, personal pronouns, predicate adjectives, and clauses in order to work in apposition with a head noun. The relational function of *an³*—the fact that it triggers a reference-point relationship—happens as a result of this appositional context with a preceding noun. All of the *an³* extensions reveal a strong semantic *interconnectivity* established between reference point and target because of the schematic relationship between them. The reference noun and the *an³*-based target noun share the same referent, with the difference being one of semantic specificity. The head noun is

specific and *an³* is schematic for the same referent. R and T, then, are each individually prominent and their mental path of schematization is discrete and highly purposeful for modifying a head noun.

6.5 A summary of reference-point constructions involving *an³*, *nai¹*, and *mai²*

This chapter took the individual morphemes *nai¹*, *mai²*, and *an³* and described how each are found in reference-point constructions. For *nai¹* 'this', it identifies an object and then references that object as being near the speaker. Likewise for *mai²*, its basic conceptualization references the speaker in order to narrow the search for a particular target that is located near the speaker. The speaker's physical location, then, is construed as the search domain in which a particular entity is found. The conceptual asymmetry between a target object and the speaker is one of *deixis*. The object target points to the speaker as its locative reference point. As for the general noun, *an³* 'thing', it is seen as a reference-point construction when it is juxtaposed with an initial head noun. In this capacity, *an³* serves as a reifier for a modifying predication in reference to that initial head noun. The head noun is construed as a reference nominal while the *an³* predication is construed as the target nominal. The conceptual asymmetry is one of *schematicity* due to the fact that the reference noun is semantically fine-grained, while the modifyer head, *an³*, is semantically course-grained. In each reference-point construction, the conceptual specifiers, *nai¹*, *mai²*, and *an³*, act as triggers for the relationship between two entities. They then identify what the target entity is. Finally, they take the target entity and relate it back to the reference entity.

I have tried to demonstrate in this chapter that all of the constructions arising from *nai¹*, *mai²*, and *an³* can be described as reference-point constructions. To the extent that this is indeed the case, then, it seems that the reference-point schema, itself, conceptually underlies the pervasive grammaticalization described in this dissertation. With each of the reference-point analyses described in this chapter, the individual components, R and T, are sequentially accessed, individually prominent and include a clear and asymmetrical mental interconnection facilitated by *nai¹*, *mai²*, and *an³*; an interconnection that is purposeful in specifying a conceptual whole.

Indeed, a reference-point schema is seen to be the conceptual capstone that holds together the thirty-five or so discrete grammatical construction pieces laid out in this dissertation. Reference-point structure is unavoidably abstract, yet its plasticity ensures its usefulness as a mental model important for capturing a wide range of Khamti nominal reference situations.

Chapter Seven

Conclusion

The nominal system of any Tai language seems, at first glance, as if it would be straightforward. Given the isolating morphosyntax of most Tai languages, there is little expectation for any phenomenon more complex morphosyntactically than juxtaposition or fixed constituent order, because functional marking is scarce at best. However, in looking at connected text and conversation in Tai Khamti, the landscape quickly changes, because the morphemes *an³* 'thing', *nai¹* 'this', and *mai²* 'here' constantly recur in many guises. It soon becomes apparent to a typologically and diachronically minded linguist that these morphemes have meandered off on numerous grammaticalization pathways.[93] Taking them seriously means analyzing their instantiating constructions from both a synchronic and diachronic typological perspective. Moreover, in understanding the essential lexical character of *an³*, *nai¹*, and *mai²* as "pointers" leads one to suspect a unifying explanation for the abundance of constructions that they amass.

For *an³*, a general all-purpose noun, the synchronic distribution reveals an elaborate *nominalization* network, encompassing POSSESSIVE, ADJECTIVAL, and RELATIVE CLAUSE constructions. Diachronically, these constructions are seen as branching out from a semantically *event reifying* feature found in the all-purpose, general noun. The synchronic distribution of *nai¹* involves constructions that mark DEFINITE, COMPLEMENT, QUOTATIVE, along with many others. From a diachronic perspective, all of these functions arise according to familiar grammaticalization pathways described in other languages. With the morpheme, *mai²*, its attendant constructions include its use as a marker of LOCATIVE, POSSESSOR, RECIPIENT, and so forth. With a diachronic analysis, these constructions are shown to engage several cross-domain spatio-temporal extensions.

By taking a synchronic/diachronic approach to language description, one realizes that *an³*, *nai¹*, and *mai²* are grammatical powerhouses in the language. In addition to this approach, a cognitive explanation for *an³*, *nai¹*, and *mai²* reveals how

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93 I have used the term *diachronic* throughout this dissertation to reference grammaticalization processes and not to allude to any historical data.

they each act as conceptual *specifiers* that involve a reference-point construal on each construction that arises in their respective grammatical networks. In this dissertation, a synchronic/diachronic description joined forces with a cognitive reference-point analysis. When I transpose grammaticalization theory from synchronic description to conceptual description—the topics in Chapters 3-5 to the ones in Chapter 6—the results are astonishing. Each individual construction is consonant with a single underlying conceptual motivation. There is a common type of mental scanning that moves from reference to target. There is a back-referencing that moves from target to reference. And, there is a coherent semantic whole that becomes evident. Because the basic phenomena—the items *an³*, *nai¹*, and *mai²*—are indeed singularly relational, the more complex constructions they help to forge are likewise relational. This inherent reference-point configuration conceptually motivates all of the extensions resulting in a dynamic—and not merely a static—characterization of the Khamti language.

In this chapter, I summarize each morpheme under two general headings—a synchronic/diachronic typological description and a cognitive description, highlighting insights from Matisoff (1972), Diessel (1999, 2006), Traugott and König (1991), and Langacker (2013).

7.1 Synchronic and diachronic description

From a typological perspective, both a synchronic and diachronic description provide an answer for why it is *an³*, *nai¹*, and *mai²* and not some other candidate morphemes that extend in grammatical function, found so prolifically in Khamti.

7.1.1 The *an³* grammatical network

The general concept *thing*, encoded by *an³* in Khamti, is found in every language and references objects in their most general sense. Synchronically, *an³* functions in Khamti as a deverbal nominalizer which—through a process I define as THING-based reification—turns a verbal *relation* into a *thing*. This reifying function of *an³* ends up being the semantically-based strategy in which to express more complex phenomena such as numeral classifier and clausal relativization constructions. These are more complex because they are modification constructs that require a head noun. However,

Khamti goes further with this *an³*-nominalizer to derive more idiosyncratic constructions such as demonstrative possessives (which turns basic personal pronouns into demonstrative possessive conouns) and predicate adjective nominalization (which turns predicate adjectives into nominal adjective conouns). The range of *an³* constructions is summarized in Table 7.1, which identifies the construction, along with a literal and free English translation from sentences that are analyzed in Chapter 3. The literal translations, here, which are described in detail in Chapter 3, are meant as a summary showing how *an³* 'thing' functions in each construction. Table 7.1 can be divided into two sets of constructions with the first set, *a-c*, functioning as nominals. The second set, *d-h*, are more complex because they are co-referential conouns that require a head noun.

Table 7.1. Summary of synchronic extensions of an³ 'thing'

	CONSTRUCTION	LITERAL RENDERING	FREE TRANSLATION
a.	BASIC NOUN	Why not be doing the **thing** I ask?	[same as literal]
b.	INDEFINITE PRONOUN	Do [(the) **thing**] you want to do.	Do [**anything**/**what**] you want to do.
		Go to [(the) **thing]** you want to go to.	Go [**anywhere**/**where**] you want to go.
c.	DEVERBAL NOMINALIZATION [NOM]	When will you go to the [to_dance **thing**]?	When will you go to the [**dance**]?
d.	NUMERAL CLASSIFIER [CLF]	Yee sees bamboo house [two **things**]	Yee sees [**two**] bamboo house[**s**].
e.	INDEFINITE DETERMINER [INDEF]	There is tiny small house [a **thing**].	There is [**a**] tiny small house.
f.	DEMONSTRATIVE POSSESSIVE [DEM.POSS]	The chicken is [your **thing**], eh?	The chicken is [**your's**], eh?
g.	PREDICATE ADJECTIVE NOMINALIZATION [ADJ]	(They) put fishes [the good **things**] in the basket.	(They) put [**the good**] fishes in the basket.
h.	CLAUSAL NOMINALIZATION [REL]	(They) had buried the dead body in a grave [the Ii bought **thing**].	(They) had buried the dead body in a grave [**that Ii bought**].

One can draw three important descriptive conclusions from the analysis of *an³*: one synchronic, one diachronic (i.e. grammaticalized), and one areal. First, the semantic characteristic of the basic morpheme as a general thing allows *an³* to be schematic—and therefore anaphoric—to any other noun or nominalized entity. This

is not surprising as all languages have nouns and probably all have a noun that means something akin to 'thing'. However, for Khamti, the inherent schematic relationship between *an³* and any other noun gets exploited morphosyntactically for extension to other grammatical constructions. Second, the maximally schematic nature of *an³* is frequently harnessed to turn verbs into nouns. *An³* functions as a nominal head when it immediately precedes a verb. The semantic grammaticalization process that occurs for deverbal nominalization is that of a *relation* (verb) being construed as an *an³*-marked thing. *An³* can reify a relation as a thing—a crucial conceptual process. The individual states that comprise a verb's semantic content change from being conceptually viewed as a sequence of successive states through time to being construed as a single atemporal conceptual whole (the difference between *sequential* and *summary scanning* in CG). Because *an³* is semantically general, it places conceptual boundaries over verbal content in order to construe verbs as nouns. Third, the innovation of *an³* as a deverbal nominal gives the nominalizing function of *an³* more latitude to extend to other nominalized constructions in the language. The Khamti nominalizations, *d-h*, work in cohort with head nouns. The relationship of a noun to a conoun is one of apposition based on the schematic relationship that a noun has to the conoun *an³*. Appositional (and nominalized) structures are well-documented in neighboring Tibeto-Burman languages and might possibly have influenced Tai Khamti to adopt these strategies for its own grammatical functions.

Of considerable importance is the fact that such an extensive nominalization strategy is quite common to the Tibeto-Burman linguistic area, but not necessarily to the Tai language family, to which Khamti belongs. Many Tibeto-Burman languages are well-documented as displaying an assortment of nominalized constructions. The language contact that Khamti has with neighboring Tibeto-Burman languages strongly suggests that Khamti has adapted an extensive nominalization strategy for common (and a few not so common) constructions. Within the Tibeto-Burman context, the common constructions include NUMERAL and INDEFINITE CLASSIFIERS, as well as CLAUSAL NOMINALIZATION. Khamti, however, uniquely uses a nominalization strategy for DEMONSTRATIVE POSSESSIVE and PREDICATE ADJECTIVE NOMINALIZATION constructions, as well.

DEMONSTRATIVE POSSESSIVE takes a personal pronoun and conceptualizes it into a possessive pronominal conoun with the use of *an³*. They are considered demonstrative because they point to either an entity in the speech situation (deictic) or another nominal in the text. The possessive conoun is in apposition to a coreferential noun, being schematic to it. A possessive understanding of the head noun is inferred from the appositional relationship between noun and conoun. For PREDICATE ADJECTIVE NOMINALIZATION, *an³* changes an adjectival relation (predicate adjective) into a nominal thing (nominal adjective) in similar fashion to the deverbal nominalization function. An adjectival relation is construed as a nominal thing. The derived nominal adjective is therefore a nominalized structure because of the schematic properties of *an³*. The difference, then, between a predicate adjective and a nominalized adjective is one of pragmatic inference. A nominalized adjective (with *an³*) implies that the state of quality is being expressed emphatically, whereas a predicate adjective (without *an³*) does not. Despite their uniqueness to Khamti, the innovative constructions of POSSESSIVE NOMINALIZATION and PREDICATE ADJECTIVE NOMINALIZATION are quite in keeping with the general "*thing*-izing" capacity that *an³* engenders. Khamti yields to Tibeto-Burman pressure in adopting an extensive nominalizing function, but innovates it in such as way to apply to constructions unique to Khamti.

It has been known since the 1890s that Khamti is not a typical Tai language because it exhibits a basic SOV word order rather than the usual Tai-like SVO. This shift in word order has been credited to language contact with SOV Tibeto-Burman languages. Beyond the basic observation of word order shift, not much has been documented for Khamti, until now, pertaining to potential language contact phenomena. It would be surprising for Khamti, however, that in adopting the word order from its Tibeto-Burman neighbors, it would not also adopt other Tibeto-Burman features. In this dissertation, I have shown that Khamti also borrows a rather extensive nominalization design from its immediate neighbors. The seminal insight into the Tibeto-Burman feature of nominalization structures comes from James Matisoff, in his documentation of the Lahu language:

The most intriguing and exasperating word in Lahu is the particle *ve*,

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which serves not only as the marker of genitive constructions and relative clauses, but also as a clause nominalizer. These are construction types that may not at first seem to be particularly closely related in languages like English. However, once the connection has been pointed out for a language in which it is obvious and overt, parallel phenomena can be discovered in other languages... and we are challenged to find some theoretical basis for the relationship. (1972: 237-238)

Matisoff's early nominalization observations have led to the description of many other nominalization insights found in Tibeto-Burman languages. Khamti, a Tai language, is observed to have borrowed the strategy. Moreover, Khamti has uniquely adapted the Tibeto-Burman nominalization blueprint for several unique usages such as the POSSESSIVE NOMINALIZATION and the PREDICATE ADJECTIVE NOMINALIZATION phenomena. In finding a theoretical basis for this same nominalizing strategy in Khamti, this dissertation has hopefully made a contribution to our understanding of an^3: a *thing*-maker that construes relations as things.

7.1.2 The nai[1] *grammatical network*

Synchronically, the universal concept, *this*, is captured with the Khamti deictic root, *nai[1]*, and serves as a verbal joint "attention-getter" that points to objects which are located with reference to the speaker's location. When *nai[1]* grammaticalizes, however, it points to linguistic items inside the discourse—referents and propositions—by invoking another entity in the discourse. It is the general pointing function of demonstratives that causes *nai[1]* to be seen as a central component in many well-documented grammatical extensions. *Nai[1]* licenses many constructions, as shown in Table 7.2. The table identifies each functional extension and the concomitant construction, along with a literal and free translation from sentences that are analyzed in Chapter 4. The literal translations serve merely as a summary as to how *nai[1]* functions in each construct.

The table is divided into four sections. The first set of constructs, *a-b*, pick out an entity in the *real world* of the speech situation. Extensions *c-h* select an entity, specifically a *nominal*, in the discourse world, whereas extensions *i-p* choose a *proposition* in the discourse world. Finally, extension *q* points to an entity that is part

of the *knowledge that is shared* between the speaker and hearer. In each of these constructions, *nai¹* maintains its essence as a *pointer*.

Table 7.2. Summary of synchronic extensions of *nai¹* 'this'

	CONSTRUCTION	LITERAL RENDERING	FREE TRANSLATION
a.	SPEAKER-ORIENTED PRONOUN	[**This**] is the place where they keep his corpse. (pointing)	[same as literal]
b.	ADNOMINAL PRONOUN	Aren't [**these stones**] and [**these buildings**] stunning? (pointing)	[same as literal]
c.	DEFINITE [DEF]	People are riding inside [**this** bus].	People are riding inside [**the** bus].
d.	SPECIFIC INDEFINITE [SP.INDEF]	There's [**this** one poor man] who begs.	[same as literal]
e.	PLURAL [PL]	(They) speak nicely to [shopper-**this**].	(They) speak nicely to [shopper-**s**].
f.	ASSOCIATIVE PLURAL [A.PL]	(They) also make [coffin-**this**].	(They) also make [a coffin **and associated items**].
g.	INTERROGATIVE [Q]	[Who **this**] [**this**: is the oldest]?	[**Who**'s] the [**oldest**]?
h.	BINARY COORDINATION [CRD.BIN]	'[Grandpa, **this**] and *second*, Grandma'	[Grandpa **and** Grandma].
i.	DISCOURSE DEICTIC (back referencing) [DISC]	PROPOSITION(S). [**This**: is the difference between she and me].	[same as literal]
j.	DISCOURSE DEICTIC (forward referencing) [DISC]	The precept most important precept is [**this**. The lord eternal God is your only god].	[same as literal]
k.	COMPLEMENT [COMPL]	I live with her: [**this** I am happy (about)].	I am happy [**that** (I) live with her].
l.	SPECIFIC DIRECT QUOTATIVE [QT]	' "No one is able to accept (it)," **this** they, *thus*, grumble to each other.'	' ["No one is able to accept (it),"] they grumble to each other.'
m.	ADVERBIAL [ADV]	The three-month rains falling, [**this** *time*: plow for the first time].	Plow for the first time,[**when** the three-month rains come].
n.	FOCUSED SENTENCE EMPHATIC [EMPH]	[**This**: she had lived with only MOTHER emph].	She had lived with only MOTHER[**!**]
o.	SIMPLE TEMPORAL SUCCESSIVE [CNT.LOC]	His friend borrowed a tiny sum. [*At* **this**: he choked that friend].	His friend borrowed a tiny sum. [**Then** he choked that friend].
p.	INTENTIONAL TEMPORAL SUCCESSIVE [and.CNT]	'The eel, of all fish, is the most delicious. [*And* **this**: my friend, one day, went to capture that eel].'	'The eel, of all fish, is the most delicious. [*And* **so**, my friend, one day, went to capture that eel].'
q.	RECOGNITIONAL [RECG]	(They) are afraid there is [**these**: bad spirits] at the grave.	(They) are afraid there are [**these** bad spirits] at the grave.

Many of the constructions summarized in Table 7.2 correspond to well-documented extensions of demonstratives in other languages. The analysis of *nai¹* in Chapter 4 follows Holger Diessel's grammaticalization, shown in Figure 7.1. At the top of the figure, the GRAMMATICAL usages on the far right arise from an intermediate stage of grammaticalization (ENDOPHORIC usages). The ENDOPHORIC stage of grammaticalization is a necessary go-between for GRAMMATICAL usages to arise, because the GRAMMATICAL usages are not observed to extend directly from the EXOPHORIC (ostensive) function of a demonstrative in any language (Diessel 1999: 112).

EXOPHORIC	ENDOPHORIC	GRAMMATICAL
	anaphoric ———————————→	e.g. 3rd person pronoun
ostensive ← ———→	discourse deictic ————→	e.g. sentence connective
	recognitional ————→	e.g. determinitive
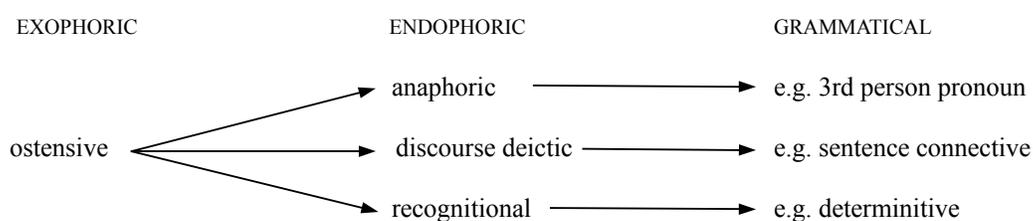
Figure 7.1. The grammaticalization cline of demonstratives (Diessel 1999: 112)

Constructions with *nai¹* in Khamti are observed for all three stages in Figure 7.1. The exophoric usages correspond to Table 7.2 *a-b*. The endophoric usages comprise three sets of constructions. The anaphoric constructions are summarized in *c-h* and function by pointing to a textual *nominal*. The discourse deictic constructions are shown in *j-p* and function by pointing to a textual *proposition*. The recognitional construction is shown in *q* and functions by pointing to a non-textual entity that is found within the shared knowledge of the interlocutors, rather than within the text. In each of these extensions, the synchronic fact of a demonstrative being a pointer is what motivates the grammaticalization processes at play.

While many of the constructions arising from *nai¹* follow the common grammaticalization pathways (definites, plurals, complementizers, adverbials, and sentence connectives), several of them are either less common cross-linguistically or completely unique to Khamti. Two of the less common constructions are the SPECIFIC INDEFINITE and the ASSOCIATIVE PLURAL.

The SPECIFIC INDEFINITE, *d*, sees *nai¹* juxtaposed with an indefinite-classifier. This use of *nai¹* is observed in narrative discourse and identifies ("points to") a particular participant as a major antagonist in the story. Moreover, this antagonist is usually characterized as an underdog (low in societal status) that becomes the hero by the end of the story. With the ASSOCIATIVE PLURAL, *f*, *nai¹* does not actually pluralize the noun referent but rather identifies stuff that is known to be naturally or culturally associated with that referent. The example in *f* serves to associate accompanying artifacts (ornamental cultural objects) that are known to go hand-in-hand with the construction of a coffin. The ASSOCIATIVE PLURAL does not refer to there being more than one coffin, but rather that a single coffin is being invoked along with the typical items that accompany it.

The concept of *nai¹* also captures several unique extensions that are not commonly covered in the literature—the INTERROGATIVE, BINARY COORDINATION, SPECIFIC DIRECT QUOTATIVE, FOCUSED SENTENCE EMPHATIC, SIMPLE TEMPORAL SUCCESSIVE, and the INTENTIONAL TEMPORAL SUCCESSIVE constructions. The INTERROGATIVE, *g*, grammaticalizes two instances of *nai¹* in order to create a question frame. The first instance highlights the question word, while the second instance is positioned sentence-finally to mark specific information that is requested. The BINARY COORDINATION, *h*, sees *nai¹* functioning with the dual pronoun to set up a binary arrangement between two nominals, *Grandpa* and *Grandma*. The SPECIFIC DIRECT QUOTATIVE, *l*, uses *nai¹* to point to the quotation while specifying the speech act elements (the speech act participant and kind of verb—request, demand, promise, and so forth). The FOCUSED SENTENCE EMPHATIC, *n* , has *nai¹* unusually positioned as a sentence-final particle. In this position, *nai¹* serves to emphasize the entire sentence (which contrasts with a non-emphatic counterpart that does not include *nai¹* at all). The SIMPLE TEMPORAL SUCCESSIVE, *o*, uses demonstrative *nai¹* and deictic *mai²* as a compound that unifies two propositions. Conceptual metaphor has the first proposition as a location (signaled by locative *mai²*) and a subsequent proposition (signaled by *nai¹*) as an entity found in the first proposition's "location". Finally, an INTENTIONAL TEMPORAL SUCCESSIVE, *p*, uses a compound word (*nai¹* with a coordinating conjunction) that functions to link two propositions. The second

proposition is signaled by *nai[1]* in a forward referencing fashion. The forward referencing function creates a pragmatic effect in which the second proposition is viewed as a *consequence* of the first, rather than a mere temporal succession of events.

While these constructions are distinctive to Khamti, they are not out of character with the elemental pointing function of a demonstrative and follow in suit with the more well-documented extensions attributed to demonstratives. In other words, the more particular *nai[1]*-based constructions found in Khamti make sense when examined from a semantic/pragmatic perspective. Diessel encapsulates the grammaticalization of demonstratives in this way:

> Across languages, demonstratives provide a common historical source for definite articles, relative and third person pronouns, copulas, sentence connectives, directional preverbs, and many other grammatical items...the evolution of grammatical markers from demonstratives is crucially distinct from other cases of grammaticalization. (1999: 1)

Demonstratives are distinct from other basic lexical categories (nouns, verbs, adjectives) because of their original exophoric function of verbally pointing to objects in the speech situation. Because of this immediate and contextualized deictic origin, they arise as expressive pointers to a diversity of objects within the internal speech context. From humans earliest days to warn others about a predator or an infant's early months of identifying objects in their new-found surroundings, the need to establish joint attention has ballooned into a complex referencing system, as displayed in languages such as Khamti with its simple morpheme *nai[1]* and the attendant complex of "pointing" constructions that it participates in.

7.1.3 The mai[2] *grammatical network*

The universal concept *here* is encoded in Khamti by the morpheme *mai[2]*. At the synchronic level of description, *mai[2]* acts as a verbal pointer to a *location* in reference to the speaker. In this way, *mai[2]* is an attention-getting morpheme for the interlocutors. The *mai[2]* constructions analyzed here are summarized in Table 7.3. Both a literal and free English translation are provided from sentences that were first analyzed in Chapter 5. The first set of constructions, *a-c*, represent the lexical usages.

The lexical ostensive usages are the basis for the remaining grammatical extensions, *d-q*, which are grouped in subsections that are based on general domains of human experience.

First, the lexical set of constructions represented by *a* and *b* in Table 7.3 subsume the ostensive locative and and adverbial usages. In both of these constructions, *mai²* functions as a verbal pointer to a location that is identical with the speaker's perceived location. The second set of constructions, *c-g*, pertain to the spatio-temporal domain in which *mai²* is described as a conoun that indicates that a co-occurring noun is either a spatial or temporal location.

Table 7.3. Summary of synchronic extensions of *mai²* 'here'

	CONSTRUCTION	LITERAL RENDERING	FREE TRANSLATION
a.	SPEAKER-ORIENTED LOCATION	[**Here.**] (accompanied by a pointing gesture)	[same as literal]
b.	ADVERB	The woman often comes [**here**].	[same as literal]
c.	LOCATIVE *at* [LOC]	The woman was [**here** the market].	The woman was [**at** the market].
d.	ALLATIVE *to* [ALL]	The woman went [**here** the market].	The woman went [**to** the market].
e.	ABLATIVE *from* [ABL]	'A stream flows [*from* **here** the mountain].'	'A stream flows [**from** the mountain].'
f.	TEMPORAL [TMP]	Midday, [**here** three o'clock],	Midday, [**at** three o'clock],
g.	POSSESSOR *at* [POSS]	'Many problems are [**here** that village].'	'[That village **has**] many problems.'
h.	RECIPIENT [REC]	I gave the fish [**here** Lydia].	I gave the fish [**to** Lydia].
i.	ADDRESSEE [ADD]	I told the witch story [**here** my wife].	I told the witch story [**to** my wife].
j.	BENEFICIARY [BEN]	The guard opened the gate [**here** him].	The guard opened the gate [**for** him].
k.	CAUSEE [CAUS]	Make [**here** them] be clean.	Make [**them**] be clean.
l.	STANDARD OF COMPARISON [STD]	If an eel is stronger [**here** a person]...	If an eel is stronger [**than** a person]...
m.	FOREGROUNDED OBJECT [F.OBJ]	I clearly see a [cemetery **here**].	I clearly see a [**CEMETERY**].

The third set of constructions, *h-k*, are construed against a social domain involving the interaction between animate participants, while the final set of constructions, *l-m*,

involves a logical domain. All of the extended deictic/locative constructions, in Table 7.3, with the exception of the final one, *m*, are widespread in other languages.

From a diachronic perspective, *mai²* is seen as a locative marker that confers a special type of semantic relationship on a co-occurring noun in each of the constructions in Table 7.3. Describing *mai²* under a variety of experiential domains is helpful in showing regular and common typological diachronic patterns that *mai²* constructions exhibit. These patterns do not emanate from a single pathway. Instead, a locative marker in the process of grammatical extension may have multiple pathways available to it, as demonstrated in a recent typological study of ALLATIVES (Rice and Kabata 2007).

All of the LOCATIVE/ALLATIVE-based constructions in Table 7.3 (except for the Khamti-specific FOREGROUNDED OBJECT, in *m*) are commonly found in other languages. Nevertheless, to have this degree of abundance of constructions emerging from a single gram is less common. For Khamti, the lexical characterization of *mai²* as a pointer to a speech-act-based location provides the semantic basis from which it extends as a locative marker and then as a grammatical marker in all of the other attested constructions. With the FOREGROUNDED OBJECT, however, the diachronic pathway is particular to Khamti. The foregrounded object marker, *mai²*, imputes a degree of psychological importance that a speaker places on a referent that is encoded as a clausal object. The referent of a *mai²*-marked clausal object is considered *highly important* to the speaker, whereas the referent of a plain object has no special importance. The FOREGROUNDED OBJECT uses the basic deictic characterization of *mai²*—specifying a physical location (relative to the speaker)—to extend to a characterization of specifying a speaker's "psychological location" and to mark that space as a context for highly important information. The morphological marking of clausal objects for the purpose of signaling pragmatic information is not unique to Khamti, though it seems to be unique within the Tai language family. Few Tai language morphologically marks clausal objects. It is more common for Tai languages to use syntax (juxtaposition and word order) to mark grammatical relations. However, in Tibeto-Burman languages, the pragmatic marking of objects is widespread. An important conclusion that this dissertation draws is that with the

FOREGROUNDED OBJECT, Khamti has quite plausibly adopted a Tibeto-Burman feature of pragmatic object marking, but has adapted it for a Khamti-specific purpose of inferring psychological importance onto a referent encoded as a clausal object.[94]

The typologically supported description of Khamti *mai²* nominals presented in this dissertation helps to confirm what others have described for LOCATIVES and ALLATIVES in many other languages. What seems indisputable is the fact that, taken from a diachronic perspective, the semantic/pragmatic value of a locative pointer such as *mai²* is the primary motivation that drives its constructional proliferation.

In conclusion, the early 1980s engendered a grammaticalization perspective in descriptive linguistics at a time when the primary mechanism of linguistic change under consideration was bleaching (or semantic weakening and reanalysis). Thirty years ago, Elizabeth Traugott was observing that bleaching (the loss of morphological boundaries, phonological reduction, and freezing of syntactic position) is actually found in the latter stages of grammaticalization (Traugott 1988: 407). The processes occurring in earlier stages of grammaticalization had more to do with pragmatic inferencing and strengthening.

Pragmatic inferencing mostly deals with metaphor in the development of meanings that cross domains of usage, as from spatial to temporal. *Pragmatic strengthening* operates as a kind of metonymy to highlight aspects of speaker informativeness, including epistemic auxiliaries that express speaker beliefs about the truth or probability of a proposition (e.g. concessives and conditionals) found in sentence connectives. Around this time, it was posited that in grammaticalization processes, meaning initially shifted from extralinguistic to textual entities and then to expressive notions. The grammaticalization observed with Khamti *an³*, *nai¹*, and *mai²* show that these grams are in *early* stages of grammaticalization.

The changes observed in this dissertation start from meanings in the objectively identifiable extralinguistic situation (deictic objects and places) to ones grounded in text-marking (anaphors, complements, connectives), leading eventually to those constituted in the speaker's belief about what was said (concessive/causal

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94 In this dissertation, Khamti has been shown to exhibit certain grammatical structures due to language contact with Tibeto-Burman. These include an SOV basic word order, a set of nominalization constructions with *an³* discussed above, and a pragmatic marking of clausal objects with *mai²*, discussed here.

adverbials and emphatic/importance-highlighting epistemic beliefs). This juncture of grammaticalization involves specification achieved through inferencing, which is primarily of two kinds, *conceptual metaphor* and *metonymy*. Metaphor primarily correlates with shifts of meanings found in the external communicative situation to those positioned in the textual and cognitively recognitional domains. Metonymy is primarily associated with shifts of meanings to the subjective belief-state or attitude toward a situation. Traugott and König describe such inferencing as a type of problem solving.

> [S]emantic change in general, not just grammaticalization, can be interpreted as problem-solving. The authors identify one principal problem: That of representing members of one semantic domain in terms of another, in other words, metaphor. But in semantic change (including the process of grammaticalization) there is a second problem: The search for ways to regulate communication and negotiate speaker-hearer interaction. We have suggested that this is a kind of metonymic change, indexing or pointing to meanings that might otherwise be only covert. The main direction of both types of problem-solving is toward specification. (1991: 212)

The Khamti language has taken the morphemes, an^3, nai^1, and mai^2, and extended their functions across experiential domains, in a direction "toward specification". The result is a rather economical system of speaker-hearer indexing devices based on their core lexical meanings. When taking into consideration all of the conoun constructions associated with these grams, one is left with a final question. Is there not something even more basic and unifying going on? The answer this dissertation hoped to provide is a resounding "yes"—something evident at the level of general human cognition.

7.2 Cognitive structure

The phenomena encountered in this dissertation arise from grammaticalization processes acting on three simple and independent morphemes in Khamti. Still, some similarities among the morphemes encourage one to take a closer look at them as a unified whole. They all operate, for the most part, on the nominal side of the language. They are conouns that work in relationship with co-occurring nouns or nominals. They each operate as pointers to or specifiers of other entities, which

individually and unambiguously signal one of the two entities within the relationship as conceptually more *prominent*. These main points as developed in this dissertation foreshadow a much larger picture; that of "moving (or locating) for thinking" (cf. Slobin 1987; see also Rice 2005). If language is truly symbolic—as I certainly have maintained throughout this study—and grammar is imagistic by nature, then the expected situation should be that attentional skewing (prominence asymmetries) and specific imagery effects (inferences) should be found at the processing level. There must be something at this level of analysis, prompting the proliferation of constructions. The probable broader schema I propose is that of a *cognitive reference point*.

As it turns out, a reference-point schema, though a pervasive processing routine, provides an analytical, but more importantly, a conceptual underpinning which can unify all of the constructions associated with *an³*, *nai¹*, and *mai²*. Each morpheme, when encountered in an expression, triggers a relationship between a reference point and a target. This relational schema is sequentially processed starting with a reference entity followed by a target entity. The reference point > target relationship is asymmetrical in the sense that the reference is *prominent* in relation to the target. A reference point exhibits a dominion or *region of control* that provides a linguistic context for the purpose of interpreting targets. Furthermore, reference point and target each express an individual level of conceptual salience—one greater, one lesser—as determined by conceptual profiling and figure/ground alignment. Their conceptual connection is compact in the sense of the target being construed as belonging to the conceptual scope or dominion of the reference point. The reference point > target alignment most readily mirrors the sequential order of mental processing in which the reference point precedes the target in the linear string. In a few constructions that happen to have a target which precedes a reference point, the skewing leads to an emphatic effect imposed on the construction, such as with the FOCUSED SENTENCE EMPHATIC or the INTENTIONAL TEMPORAL SUCCESSIVE constructions (cf. Table 7.2 *n* and *p*).

The conceptual analysis in Chapter 6 includes classical cases of reference-point description, including LOCATIVES and POSSESSIVES. However, one of the main

contributions this dissertation seeks to achieve is the addition of a wide range of phenomena not yet captured by the reference-point schema. For *an³*, these include the appositional constructs of NUMERAL-CLASSIFIER and POSSESSIVE, PREDICATE ADJECTIVE, and CLAUSAL NOMINALIZATIONS. For *nai¹*, the constructions include DEFINITE, PLURAL, COMPLEMENT, QUOTATIVE, ADVERBIAL, and SENTENCE CONNECTIVES. And for *mai²*, the constructions include the CAUSEE, STANDARD OF COMPARISON, and FOREGROUNDED OBJECT.

　　None of these constructions, individually, is particularly interesting when analyzed as a reference-point construction. It is only when capturing all of these constructions and subsuming them together as evidence of extensive grammaticalization processes that the reference-point analysis becomes insightful. Langacker summarizes the usefulness of a reference-point schema by saying,

> [R]eference-point organization represents so basic a cognitive ability that there may indeed be no linguistic phenomenon that does not involve it in some way. I realize full well that any such notion runs the risk of being vacuous, yet...I feel that something very general and important is going on that we need to explore and come to terms with. I sense an abstract commonality uniting *multitudinous aspects of language and cognition that are normally studied separately...* [and] cannot help but suspect, therefore, that linguistic and cognitive processing rely fundamentally on an ability manifested in all domains and at all levels of organization: the dynamic exploitation of asymmetrically prominent entities to structure the experience that falls within their province. (1993: 35-36) [emphasis mine]

The maximally schematic nature of a cognitive reference-point model should not discourage researchers from exploring its usefulness in linguistic description. This dissertation has taken "multitudinous aspects" of the Khamti language—that are normally studied separately under discrete topic headings in reference grammars— and provided a reasonable cognitive motivation for their connection as constructional networks, which are dynamic in nature and evolving in the grammar. The reference-point model should, therefore, be considered valuable for an analysis that unifies a wide range of seemingly disparate constructions that extend from a sparse set of sources—namely, *an³*, *nai¹*, and *mai²*.

7.3 The Khamti and language prospects

An important, though perhaps secondary contribution of this research supports the very community of people—the Tai Khamti—from which these important linguistic phenomena arise. They are a minority ethnic people who have suffered politically under more dominating language groups. They have resigned themselves to the perception others place on them of their insignificance and have tolerated a dearth of educational opportunities. I hope this dissertation has provided a corpus of natural language examples and description that the Tai Khamti people can use as a foundation for developing a reference grammar and dictionary for their work in literacy and the multilingual education of their own children.

The reference grammar—designed for the speakers of Khamti who want to garnish a deeper understanding of the workings of their own language—might be organized to reflect the forms that the readers already handle fluently, but the same speakers may not be aware of the full significance of these forms as far as grammar is concerned. Taking the constructions analyzed in this dissertation as central examples, the grammatical topics could be arranged following more traditional outlines—reflecting reference grammars of national and regional languages that the people might be accustomed to, but including cross-references and semantic maps to connect the deeper explanations behind the forms. For an example with *nai¹*, the grammatical topics associated with *anaphoric* usages, such topics as DEFINITES, INTERROGATIVES, and BINARY COORDINATION, could be organized and described as ways of marking *nominals*. Likewise, the *discourse-deictic* topics, i.e. COMPLEMENTS, ADVERBIALS, and QUOTATIVES could be cross-referenced vis-à-vis the marking of *propositions*. Furthermore, a semantic network for *nai¹*, such as the one presented in Figure 4.3, could be shown in a summary format, either for a given sub-section of the grammatical network or for the understanding of the entire network in an appendix. Also, summary tables, similar to the ones presented in this chapter for *an³*, *nai¹*, and *mai²* could be presented as quick references for language usage. The possibility for explanatory value needs to be explored for showing the relatedness of the usages of *nai¹*, making what may very well go unnoticed more apparent for the average speaker.

As for a reference dictionary, certain conventions already common for

presenting related senses at the lexical level (polysemy) can perhaps be adapted for potential related functions at the grammatical level (heterosemy). For example with *mai²* as a main entry, its many nominal-marking constructions could be listed as grammatical sub-headings to reveal an order that at least reflects a proposed historical development. These could be organized according to semantic domains (spatio-temporal, social, logical) and supply explanatory details as to their proposed extensions (metaphor, metonymy, etc). A concise semantic map, such as presented in Figure 5.1 could then be provided to highlight the explanation. By using a reference grammar and dictionary in this fashion, what is probably opaque to most uninitiated Khamti speakers becomes potentially more lucid, with the dynamic nature and complexity of their language more appreciated.

For a minority language, such as Khamti, there will probably not be occasion to write several reference grammars or dictionaries for select audiences. The need becomes one of practicality and balance in presenting enough information, at several levels of accessibility—ordinary user, teachers, linguists—within a single volume. These levels could be presented in a multilevel reference grammar as suggested by Anne-Marie Baraby (2012: 86). Explanatory information, cross-referencing of usages, and providing maps seems a practical and reasonable way to accomplish this applied goal so that *levels of information* can be realistically integrated using a variety of formatting strategies (ibid.).

In the end, a better knowledge of their own language—how it works and why it works that way—may instill in the Tai Khamti a sense of self-worth as individuals and as a speech community. Along these lines, the people can better meet the challenge of their cultural survival in a linguistically-shrinking world.

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